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PREFACE.

In the preface to the first issue of the Indian Year Book, the Editor appealed to the public continuously to edit it, for only in this manner could it assume and retain the qualities requisite in a current handbook to the Indian Empire. The appeal met with a very welcome response. Whilst the proverbial kindness of the English reading public induced many grateful words of appreciation, many valuable suggestions were offered, which have been incorporated in the second issue so far as possible. If the response has not in all cases been as adequate as we desired, I hope that the critics will appreciate the difficulties of editing the Year Book during a great war. Not only did the war throw a heavy burden of work upon every journalist during the months when the work of revision was most active, but it also impaired the capacity for help of those valued colleagues to whose co-operation so much of the success which has been attained by the Indian Year Book is due.

Amongst the new features introduced in response to these suggestions is a review of the work of the Legislative Councils. The summary of the proceedings of the Imperial Legislative Council has been made as complete as possible, those of the Provincial Councils are naturally shorter. Another feature is an analysis of the systems of Local Government in India, though this must necessarily be incomplete where such wide diversity exists and when the promised declaration of Government policy is still awaited. The section dealing with the Peoples of India has also been enlarged from the materials in Mr. Gait's report on the census of 1911, and a special section dealing with manners and customs has been introduced for those who are visiting India for the first time. The important events of an exceptional year have been recorded with greater fullness, and the part which India has played in the war is described in a separate article.

The Editor would gladly have accepted the suggestion to express all values in sterling, but as long as Indian official literature jumps from rupees to sterling and from millions to crores and lakhs, this is impracticable. An explanatory statement is given on page 314. The Army Commands have been omitted from the present volume, because, owing to the war, any list is out of date by the time it is printed.

In other respects the second issue of the Indian Year Book, with additions and improvements, closely follows the plan pursued in the first volume. The public then evidenced their approval of the work by exhausting a large edition within three months of publication. Whilst gratefully acknowledging this valued support, and once more offering his thanks to the contributors whose assistance has made the Indian Year Book what it is, the Editor would repeat his appeal for continuous editing by the public, and his assurance that every practicable suggestion will be embodied in future issues.

CALENDAR FOR 1915.

January.

S.	M	Tu	W	Th	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

February.

S.	M.	Tu.	W.	Th	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

March

S.	M.	Tu.	W.	Th	F	S.
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

April.

S.	M.	Tu.	W.	Th	F.	S.
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

May.

S.	M	Tu.	W.	Th.	F.	S.
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

June.

S.	M.	Tu.	W.	Th.	F.	S.
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

July.

S.	M	Tu.	W.	Th.	F.	S.
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August

S.	M.	Tu.	W	Th.	F	S.
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

September

S.	M.	Tu.	W.	Th.	F	S.
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

October

S.	M.	Tu.	W.	Th.	F.	S.
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

November.

S.	M.	Tu.	W.	Th.	F.	S.
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

December.

S.	M.	Tu.	W.	Th.	F.	S.
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Phases of the Moon—JANUARY 31 Days.

○ Full Moon .... .1st, 5h. 50·5m. P.M
☾ Last Quarter . .9th, 2h 42 6m A M
Perigee .12th, 7 6h P M

● New Moon 15th, 8h 11 9m P M
☽ First Quarter 23rd, 11h 2 3m A M
○ Full Moon 31st, 10h 11 3m A M
Apogee . . .24th, 2 2h P M

Day of the Week	Day of the Month	Day of the Year	Mean Time: Sunrise A M		Sunset P M		True Noon		Moon's Age at Noon	Sun's Declination at Mean Noon
			H	M	H	M	H P M	M	D	° S ′
Friday	1	1	7	12	6	12	0	42	15 2	23 6
Saturday	2	2	7	12	6	13	0	42	16 2	23 1
Sunday	3	3	7	13	6	13	0	43	17 2	22 56
Monday	4	4	7	13	6	14	0	43	18 2	22 50
Tuesday	5	5	7	13	6	15	0	44	19 2	22 44
Wednesday	6	6	7	13	6	15	0	44	20·2	22 37
Thursday	7	7	7	14	6	16	0	45	21 2	22 30
Friday ..	8	8	7	14	6	17	0	45	22 2	22 23
Saturday .	9	9	7	14	6	17	0	46	☾ 23 2	22 15
Sunday .	10	10	7	14	6	18	0	46	24 2	22 7
Monday	11	11	7	14	6	18	0	46	25 2	21 58
Tuesday	12	12	7	15	6	19	0	47	26 2	21 49
Wednesday	13	13	7	15	6	20	0	47	27 2	21 39
Thursday .	14	14	7	15	6	21	0	48	28 2	21 29
Friday ..	15	15	7	15	6	22	0	48	● 29·2	21 19
Saturday	16	16	7	15	6	22	0	48	0 7	21 8
Sunday ..	17	17	7	15	6	23	0	49	1·7	20 57
Monday	18	18	7	15	6	24	0	49	2·7	20 45
Tuesday .	19	19	7	15	6	24	0	49	3 7	20 33
Wednesday	20	20	7	15	6	25	0	50	4 7	20 21
Thursday	21	21	7	15	6	25	0	50	5·7	20 8
Friday	22	22	7	15	6	26	0	50	6·7	19 55
Saturday	23	23	7	15	6	27	0	50	☽ 7·7	19 41
Sunday	24	24	7	15	6	27	0	51	8·7	19 27
Monday	25	25	7	15	6	28	0	51	9·7	19 13
Tuesday	26	26	7	15	6	29	0	51	10·7	18 58
Wednesday	27	27	7	15	6	29	0	51	11·7	18 43
Thursday ..	28	28	7	14	6	29	0	52	12 7	18 28
Friday ..	29	29	7	14	6	30	0	52	13 7	18 12
Saturday ..	30	30	7	14	6	30	0	52	14·7	17 56
Sunday ..	31	31	7	14	6	31	0	52	○ 15 7	17 40

Phases of the Moon—FEBRUARY 28 Days.

☾ Last Quarter	7th, 10h 40 9m A M	☽ First Quarter	22nd, 8h 28 3m A M
● New Moon	14th, 10h 1 0m A M	Apogee	21st, 11 4h A M
Perigee	7th, 6 8h P M		

Day of the Week	Day of the Month.	Day of the Year	Mean Time Sunrise A M		Mean Time Sunset P M		True Noon		Moon's Age at Noon	Sun's Declination at Mean Noon
			H	M	H	M	H	M P M	D	° ′ S
Monday	1	32	7	13	6	31	0	52	16 7	17 23
Tuesday	2	33	7	13	6	32	0	52	17 7	17 7
Wednesday	3	34	7	13	6	32	0	53	18 7	16 49
Thursday	4	35	7	12	6	33	0	53	19 7	16 32
Friday	5	36	7	12	6	34	0	53	20 7	16 14
Saturday	6	37	7	12	6	34	0	53	21 7	15 56
Sunday	7	38	7	11	6	35	0	53	☾ 22 7	15 38
Monday	8	39	7	11	6	35	0	53	23 7	15 19
Tuesday	9	40	7	10	6	36	0	53	24 7	15 0
Wednesday	10	41	7	10	6	36	0	53	25 7	14 41
Thursday	11	42	7	10	6	37	0	53	26 7	14 22
Friday	12	43	7	9	6	37	0	53	27 7	14 2
Saturday	13	44	7	9	6	38	0	53	28 7	13 42
Sunday	14	45	7	8	6	38	0	53	● 0 1	13 22
Monday	15	46	7	7	6	39	0	53	1 1	13 2
Tuesday	16	47	7	7	6	39	0	53	2 1	12 41
Wednesday	17	48	7	6	6	40	0	53	3 1	12 21
Thursday	18	49	7	5	6	40	0	53	4 1	12 0
Friday	19	50	7	5	6	40	0	53	5 1	11 39
Saturday	20	51	7	4	6	41	0	53	6 1	11 17
Sunday	21	52	7	4	6	41	0	53	7 1	10 56
Monday	22	53	7	3	6	41	0	53	☽ 8 1	10 34
Tuesday	23	54	7	2	6	42	0	52	9 1	10 12
Wednesday	24	55	7	2	6	42	0	52	10·1	9 51
Thursday	25	56	7	1	6	42	0	52	11·1	9 28
Friday	26	57	7	1	6	43	0	52	12 1	9 6
Saturday	27	58	7	0	6	43	0	52	13 1	8 44
Sunday	28	59	7	0	6	44	0	52	14 1	8 21

Phases of the Moon—MARCH 31 Days.

○ Full Moon	2nd, 0h. 2 6m A M	● New Moon	16th, 1h 12·3m A M
☾ Last Quarter	8th, 5h 57 6m P M	☽ First Quarter	24th 4h 18·0m. A.M.
Perigee	5th, 8 5h P M	Apogee	21st, 6 7h. A M

Day of the Week	Day of the Month	Day of the Year	Mean Time Sunrise A M		Mean Time Sunset P M		Mean Time True Noon		Moon's Age at Noon	Sun's Declination at Mean Noon
			H	M	H	M	P H	M M	D	S ° ′
Monday	1	60	6	59	6	44	0	51	15 1	7 59
Tuesday	2	61	6	58	6	45	0	51	○ 16 1	7 36
Wednesday	3	62	6	57	6	45	0	51	17 1	7 13
Thursday	4	63	6	56	6	45	0	51	18 1	6 50
Friday	5	64	6	56	6	46	0	51	19 1	6 27
Saturday	6	65	6	55	6	46	0	50	20 1	6 4
Sunday	7	66	6	54	6	47	0	50	21 1	5 41
Monday	8	67	6	53	6	47	0	50	☾ 22 1	5 17
Tuesday	9	68	6	53	6	47	0	50	23 1	4 54
Wednesday	10	69	6	52	6	48	0	49	24 1	4 31
Thursday	11	70	6	51	6	48	0	49	25 1	4 7
Friday	12	71	6	50	6	48	0	49	26·1	3 44
Saturday	13	72	6	49	6	48	0	49	27·0	3 20
Sunday	14	73	6	49	6	49	0	48	28 1	2 56
Monday	15	74	6	48	6	49	0	48	29·1	2 33
Tuesday	16	75	6	47	6	49	0	48	● 0 5	2 9
Wednesday	17	76	6	46	6	49	0	48	1 5	1 45
Thursday	18	77	6	45	6	49	0	47	2·5	1 22
Friday	19	78	6	44	6	50	0	47	3·5	0 58
Saturday	20	79	6	43	6	50	0	47	4·5	0 34
Sunday	21	80	6	42	6	50	0	46	5·5	0 11 N
Monday	22	81	6	41	6	50	0	46	6·5	0 13
Tuesday	23	82	6	40	6	51	0	46	7·5	0 37
Wednesday	24	83	6	39	6	51	0	45	☽ 8 5	1 0
Thursday	25	84	6	39	6	51	0	45	9 5	1 24
Friday	26	85	6	39	6	51	0	45	10·5	1 48
Saturday	27	86	6	38	6	51	0	45	11·5	2 11
Sunday	28	87	6	37	6	52	0	44	12·5	2 35
Monday	29	88	6	36	6	52	0	44	13 5	2 58
Tuesday	30	89	6	35	6	52	0	44	14·5	3 22
Wednesday	31	90	6	34	6	52	0	43	15·5	3 45

Phases of the Moon—APRIL 30 Days.

☾ Last Quarter	...7th, 1h 42·4m A M.	☽ First Quarter	.. 22nd, 6h. 9·1m. P M
● New Moon	..... 14th, 5h 5 7m P M	○ Full Moon	. . 29th, 7h. 49·3m P.M.
Perigee	....2nd, 5 1h A M	Apogee	17th, 9·1h ..P M

Day of the Week.	Day of the Month	Day of the Year	Mean Time Sunrise A M		Sunset P M		True Noon		Moon's Age at Noon	Sun's Declination at Mean Noon
			H	M	H	M	H	M P M	D	° ′ N
Thursday ..	1	91	6	33	6	53	0	43	16 5	4 8
Friday .	2	92	6	33	6	53	0	43	17·5	4 31
Saturday	3	93	6	32	6	53	0	42	18 5	4 54
Sunday	4	94	6	31	6	53	0	42	19 5	5 17
Monday .	5	95	6	30	6	54	0	42	20·5	5 41
Tuesday	6	96	6	29	6	54	0	42	21 5	6 3
Wednesday	7	97	6	28	6	54	0	41	☾ 22 5	6 26
Thursday ..	8	98	6	28	6	54	0	41	23 5	6 49
Friday .	9	99	6	27	6	54	0	41	24 5	7 11
Saturday .	10	100	6	26	6	55	0	40	25 5	7 33
Sunday .	11	101	6	25	6	55	0	40	26 5	7 56
Monday	12	102	6	24	6	55	0	40	27 5	8 18
Tuesday ..	13	103	6	24	6	56	0	40	28 5	8 40
Wednesday	14	104	6	23	6	56	0	39	● 29 5	9 2
Thursday	15	105	6	22	6	56	0	39	0 8	9 23
Friday .	16	106	6	21	6	56	0	39	1 8	9 45
Saturday ..	17	107	6	21	6	57	0	39	2 8	10 6
Sunday .	18	108	6	20	6	57	0	38	3 8	10 27
Monday	19	109	6	19	6	57	0	38	4·8	10 49
Tuesday	20	110	6	19	6	57	0	38	5·8	11 9
Wednesday	21	111	6	18	6	57	0	38	6·8	11 30
Thursday	22	112	6	17	6	58	0	37	☽ 7·8	11 50
Friday ..	23	113	6	16	6	58	0	37	8 8	12 11
Saturday	24	114	6	15	6	58	0	37	9·8	12 31
Sunday .	25	115	6	14	6	59	0	37	10 8	12 51
Monday .	26	116	6	14	6	59	0	37	11·8	13 10
Tuesday .	27	117	6	13	6	59	0	37	12·8	13 30
Wednesday	28	118	6	13	7	0	0	36	13·8	13 49
Thursday .	29	119	6	13	7	0	0	36	○ 14·8	14 8
Friday .	30	120	6	12	7	0	0	36	15·8	14 27

Phases of the Moon—MAY 31 Days.

☾ Last Quarter	6th, 10h 52 6m A M	☽ First Quarter	22nd, 10h 20 0m A M
● New Moon	14th, 9h 1 0m A M	○ Full Moon	29th, 3h 2 9m A M
Perigee	28th, 11 1h P M	Apogee	15th, 2 9h A M

Day of the Week	Day of the Month	Day of the Year	Mean Time Sunrise A M		Mean Time Sunset P M		Mean Time True Noon		Moon's Age at Noon	Sun's Declination at Mean Noon
			H	M	H	M	H P M	M	D.	° ′ N
Saturday	1	121	6	11	7	1	0	36	16 8	14 45
Sunday	2	122	6	11	7	1	0	36	17 8	15 4
Monday	3	123	6	10	7	1	0	36	18 8	15 22
Tuesday	4	124	6	10	7	2	0	36	19 8	15 40
Wednesday	5	125	6	9	7	2	0	35	20 8	15 57
Thursday	6	126	6	9	7	2	0	35	☾ 21 8	16 14
Friday	7	127	6	8	7	3	0	35	22 8	16 31
Saturday	8	128	6	8	7	3	0	35	23 8	16 48
Sunday	9	129	6	7	7	3	0	35	24 8	17 5
Monday	10	130	6	7	7	4	0	35	25 8	17 21
Tuesday	11	131	6	6	7	4	0	35	26 8	17 37
Wednesday	12	132	6	6	7	4	0	35	27 8	17 52
Thursday	13	133	6	5	7	5	0	35	28 8	18 7
Friday	14	134	6	5	7	5	0	35	● 0 2	18 22
Saturday	15	135	6	5	7	6	0	35	1 2	18 37
Sunday	16	136	6	4	7	6	0	35	2 2	18 51
Monday	17	137	6	4	7	6	0	35	3 2	19 5
Tuesday	18	138	6	4	7	7	0	35	4 2	19 19
Wednesday	19	139	6	3	7	7	0	35	5 2	19 32
Thursday	20	140	6	3	7	7	0	35	6 2	19 46
Friday	21	141	6	3	7	8	0	35	7 2	19 58
Saturday	22	142	6	2	7	8	0	35	☽ 8 2	20 11
Sunday	23	143	6	2	7	9	0	35	9 2	20 23
Monday	24	144	6	2	7	9	0	35	10 2	20 34
Tuesday	25	145	6	2	7	9	0	35	11 2	20 46
Wednesday	26	146	6	2	7	10	0	35	12 2	20 57
Thursday	27	147	6	2	7	10	0	36	13 2	21 7
Friday	28	148	6	1	7	11	0	36	14 2	21 17
Saturday	29	149	6	1	7	11	0	36	○ 15 2	21 27
Sunday	30	150	6	1	7	11	0	36	16 2	21 37
Monday	31	151	6	1	7	12	0	36	17 2	21 46

Phases of the Moon—JUNE 30 Days.

☾ Last Quarter	4th, 10h 2 1m P M	☽ First Quarter	20th, 7h 54 3m P M
● New Moon	13th, 0h 27 3m A M	○ Full Moon	27th, 9h 57 4m A M
Perigee	26th 7 6h A M	Apogee	11th, 5 9l. A M

Day of the Week	Day of the Month	Day of the Year	Mean Time Sunrise A M H	M	Sunset P M H	M	True Noon H	M P M	Moon's Age at Noon D	Sun's Declination at Mean Noon N °	′
Tuesday	1	152	6	1	7	12	0	36	18 2	21	55
Wednesday	2	153	6	1	7	12	0	36	19 2	22	3
Thursday	3	154	6	1	7	13	0	36	20 2	22	12
Friday	4	55	6	1	7	13	0	37	☾ 21 2	22	19
Saturday	5	156	6	1	7	14	0	37	22 2	22	26
Sunday	6	157	6	1	7	14	0	37	23 2	22	33
Monday	7	158	6	1	7	14	0	37	24 2	22	39
Tuesday	8	159	6	1	7	15	0	37	25 2	22	45
Wednesday	9	160	6	1	7	15	0	38	26 2	22	51
Thursday	10	161	6	1	7	15	0	38	27 2	22	56
Friday	11	162	6	1	7	16	0	38	28 2	23	1
Saturday	12	163	6	1	7	16	0	38	29 2	23	5
Sunday	13	164	6	1	7	16	0	38	● 0 5	23	9
Monday	14	165	6	1	7	17	0	39	1 5	23	13
Tuesday	15	166	6	1	7	17	0	39	2 5	23	16
Wednesday	16	167	6	1	7	17	0	39	3 5	23	19
Thursday .	17	168	6	1	7	17	0	39	4 5	23	21
Friday	18	169	6	2	7	18	0	39	5 5	23	23
Saturday .	19	170	6	2	7	18	0	40	6 5	23	25
Sunday	20	171	6	2	7	18	0	40	☽ 7·5	23	26
Monday .	21	172	6	2	7	18	0	40	8 5	23	27
Tuesday .	22	173	6	3	7	19	0	40	9 5	23	27
Wednesday .	23	174	6	3	7	19	0	40	10 5	23	27
Thursday .	24	175	6	3	7	19	0	41	11 5	23	27
Friday .	25	176	6	3	7	19	0	41	12 5	23	26
Saturday .	26	177	6	3	7	19	0	41	13 5	23	25
Sunday ..	27	178	6	4	7	19	0	41	○ 14·5	23	23
Monday ..	28	179	6	4	7	20	0	42	15·5	23	20
Tuesday ..	29	180	6	4	7	20	0	42	16·5	23	18
Wednesday ..	30	181	6	5	7	20	0	42	17·5	23	15

Phases of the Moon—JULY 31 Days.

☾ Last Quarter 4th, 11h 24 2m A M
● New Moon 12th, 3h 0 8m P M
Perigee 24th, 10 9h A M

☽ First Quarter 20th, 2h 38 8m A M
○ Full Moon 26th, 5h 41 0m P M
Apogee 8th, 4 3h P M

Day of the Week	Day of the Month	Day of the Year	Mean Time Sunrise A M		Mean Time Sunset P M		Mean Time True Noon P M		Moon's Age at Noon	Sun's Declination at Mean Noon
			H	M	H	M	H	M	D	N
Thursday	1	182	6	5	7	20	0	42	18 5	23 11
Friday	2	183	6	5	7	20	0	42	19 5	23 8
Saturday	3	184	6	6	7	20	0	43	20 5	23 3
Sunday	4	185	6	6	7	20	0	43	☾ 21 5	22 59
Monday	5	186	6	6	7	20	0	43	22 5	22 54
Tuesday	6	187	6	7	7	20	0	43	23 5	22 48
Wednesday	7	188	6	7	7	20	0	43	24 5	22 43
Thursday	8	189	6	7	7	20	0	43	25 5	22 36
Friday	9	190	6	8	7	20	0	44	26 5	22 30
Saturday	10	191	6	8	7	20	0	44	27 8	22 23
Sunday	11	192	6	8	7	20	0	44	28 5	22 16
Monday	12	193	6	8	7	20	0	44	● 29 5	22 8
Tuesday	13	194	6	8	7	20	0	44	0 9	22 0
Wednesday	14	195	6	9	7	20	0	44	1 9	21 51
Thursday	15	196	6	9	7	19	0	44	2 9	21 42
Friday	16	197	6	9	7	19	0	44	3 9	21 33
Saturday	17	198	6	10	7	19	0	45	4 9	21 23
Sunday	18	199	6	10	7	19	0	45	5 9	21 14
Monday	19	200	6	10	7	19	0	45	6 9	21 3
Tuesday	20	201	6	11	7	18	0	45	☽ 7 9	20 53
Wednesday	21	202	6	11	7	18	0	45	8 9	20 41
Thursday	22	203	6	12	7	18	0	45	9 9	20 30
Friday	23	204	6	12	7	18	0	45	10 9	20 17
Saturday	24	205	6	12	7	17	0	45	11 9	20 6
Sunday	25	206	6	13	7	17	0	45	12 9	19 54
Monday	26	207	6	13	7	17	0	45	○ 13 9	19 41
Tuesday	27	208	6	13	7	17	0	45	14 9	19 28
Wednesday	28	209	6	14	7	16	0	45	15 9	19 15
Thursday	29	210	6	14	7	16	0	45	16 9	19 1
Friday	30	211	6	14	7	16	0	45	17 9	18 47
Saturday	31	212	6	15	7	15	0	45	18·9	18 33

Phases of the Moon—AUGUST 31 Days.

☾ Last Quarter . . .3rd, 2h 57 3m A M
● New Moon . 11th, 4h 22 4m P M
Perigee . . . . .20th, 7 7h P M

☽ First Quarter 18th, 7h. 47·4m A M
○ Full Moon . . 25th, 3h 10·5m. A M
Apogee 5th, 8 1h . P M

Day of the Week	Day of the Month	Day of the Year	Mean Time Sunrise A M		Mean Time Sunset P M		Mean Time True Noon		Moon's Age at Noon	Sun's Declination at Mean Noon	
			H	M	H	M	P H	M	D	°	′ N
Sunday	1	213	6	15	7	15	0	45	19 9	18	18
Monday	2	214	6	15	7	14	0	45	20 9	18	3
Tuesday	3	215	6	16	7	14	0	45	☾ 21 9	17	48
Wednesday	4	216	6	16	7	13	0	45	22 9	17	32
Thursday	5	217	6	16	7	13	0	45	23 9	17	16
Friday	6	218	6	17	7	12	0	45	24 9	17	0
Saturday	7	219	6	17	7	12	0	44	25 9	16	44
Sunday	8	220	6	17	7	11	0	44	26 9	16	27
Monday	9	221	6	18	7	11	0	44	27 9	16	11
Tuesday	10	222	6	18	7	10	0	44	28 9	15	53
Wednesday	11	223	6	18	7	9	0	44	● 0 3	15	36
Thursday	12	224	6	19	7	9	0	44	1 3	15	18
Friday	13	225	6	19	7	8	0	44	2 3	15	0
Saturday	14	226	6	19	7	8	0	43	3 3	14	42
Sunday	15	227	6	20	7	7	0	43	4 3	14	24
Monday	16	228	6	20	7	6	0	43	5 3	14	5
Tuesday	17	229	6	20	7	6	0	43	6 3	13	46
Wednesday	18	230	6	20	7	5	0	43	☽ 7 3	13	27
Thursday	19	231	6	21	7	4	0	43	8 3	13	8
Friday	20	232	6	21	7	4	0	42	9 3	12	48
Saturday	21	233	6	21	7	3	0	42	10 3	12	29
Sunday	22	234	6	21	7	2	0	42	11 3	12	9
Monday	23	235	6	21	7	1	0	42	12·3	11	49
Tuesday	24	236	6	22	7	1	0	41	13 3	11	29
Wednesday	25	237	6	22	7	0	0	41	○ 14 3	11	8
Thursday	26	238	6	12	6	59	0	41	15 3	10	48
Friday	27	239	6	22	6	59	0	40	16·3	10	27
Saturday	28	240	6	22	6	58	0	40	17·3	10	6
Sunday	29	241	6	23	6	57	0	40	18·3	9	45
Monday	30	242	6	23	6	56	0	39	19·3	9	24
Tuesday	31	243	6	23	6	55	0	39	20·3	9	2

Phases of the Moon—SEPTEMBER 30 Days.

☾ Last Quarter .. 1st, 8h 26 6m P M
● New Moon 9th, 4h 22 7m P M
Perigee . . 14th, 8 8h P M

☽ First Quarter 16th, 0h 51·3m P M
○ Full Moon 23rd, 3h 5 2m P M
Apogee 2nd, 2·7lh A M
,, 30th, 10 3h P M

Day of the Week	Day of the Month	Day of the Year	Mean Time. Sunrise A M		Sunset P M		True Noon		Moon's Age at Noon.		Sun's Declination at Mean Noon	
			H	M	H	M	P H	M	D		°	′
Wednesday	1	244	6	24	6	55	0	39	☾	21 3	8	41
Thursday	2	245	6	24	6	54	0	39		22 3	8	19
Friday	3	246	6	24	6	53	0	38		23 3	7	57
Saturday	4	247	6	24	6	52	0	38		24 3	5	35
Sunday	5	248	6	24	6	51	0	38		25 3	7	1
Monday	6	249	6	24	6	50	0	37		26 3	6	51
Tuesday	7	250	6	25	6	50	0	37		27 3	6	28
Wednesday .	8	251	6	25	6	49	0	37		28 3	6	6
Thursday ..	9	252	6	25	6	48	0	36	●	29 3	5	44
Friday	10	253	6	25	6	47	0	36		0 7	5	21
Saturday	11	254	6	25	6	46	0	36		1 7	4	38
Sunday .	12	255	6	25	6	45	0	35		2 7	4	35
Monday .	13	256	6	26	6	44	0	35		3 7	4	13
Tuesday	14	257	6	26	6	43	0	35		4 7	3	50
Wednesday .	15	258	6	26	6	43	0	34		5 7	3	27
Thursday	16	259	6	26	6	42	0	34	☽	6 7	3	4
Friday	17	260	6	26	6	41	0	34		7 7	2	40
Saturday .	18	261	6	27	6	40	0	33		8 7	2	17
Sunday .	19	262	6	27	6	39	0	33		9 7	1	54
Monday	20	263	6	27	6	38	0	33		10·7	1	31
Tuesday	21	264	6	27	6	37	0	32		11·7	1	7
Wednesday .	22	265	6	27	6	36	0	31		12 7	0	44
Thursday	23	266	6	27	6	36	0	31	○	13 7	0	21
Friday	24	267	6	28	6	35	0	31		14 7	0	12
Saturday	25	268	6	28	6	34	0	31		15·7	0	S 26
Sunday ..	26	269	6	28	6	33	0	31		16 7	0	49
Monday .	27	270	6	28	6	32	0	30		17 7	1	13
Tuesday	28	271	6	28	6	31	0	30		18 7	1	36
Wednesday	29	272	6	29	6	30	0	29		19·7	2	0
Thursday .	30	273	6	29	6	29	0	29		20 7	2	23

Phases of the Moon—OCTOBER 31 Days.

☾ Last Quarter	1st, 3h 14 3m P M	☽ First Quarter	15th, 7h 21 5m P M
● New Moon	9th. 3h 12 1m A M	☽ Full Moon	23rd, 5h 45·5m A M
Perigee	11th, 5 6h P M	☾ Last Quarter	31st, 10h 9 3m A M
		Apogee	27th, 4 6h A M

Day of the Week	Day of the Month	Day of the Year	Mean Time Sunrise A M		Mean Time Sunset P M		Mean Time True Noon P M		Moon's Age at Noon		Sun's Declination at Mean Noon	
			H	M	H	M	H	M		D	°	′
Friday	1	274	6	29	6	29	0	29	☾	21 7	2	53
Saturday	2	275	6	29	6	28	0	28		22 7	3	16
Sunday	3	276	6	29	6	27	0	28		23 7	3	40
Monday	4	277	6	30	6	26	0	28		24 7	4	3
Tuesday	5	278	6	30	6	25	0	28		25 7	4	26
Wednesday	6	279	6	30	6	24	0	27		26 7	4	49
Thursday	7	280	6	30	6	23	0	27		27 7	5	12
Friday	8	281	6	30	6	23	0	27		28 7	5	35
Saturday	9	282	6	31	6	22	0	26	●	0 4	5	58
Sunday	10	283	6	31	6	21	0	26		1 4	6	21
Monday	11	284	6	31	6	20	0	26		2 4	6	44
Tuesday	12	285	6	31	6	19	0	26		3 4	7	6
Wednesday	13	286	6	31	6	19	0	25		4 4	7	29
Thursday	14	287	6	32	6	18	0	25		5 4	7	52
Friday	15	288	6	32	6	17	0	25	☽	6 4	8	14
Saturday	16	289	6	33	6	16	0	25		7 4	8	36
Sunday	17	290	6	33	6	16	0	24		8 4	8	58
Monday	18	291	6	33	6	15	0	24		9 4	9	20
Tuesday	19	292	6	34	6	14	0	24		10 4	9	42
Wednesday	20	293	6	34	6	14	0	24		11 4	10	4
Thursday	21	294	6	34	6	13	0	24		12 4	10	26
Friday	22	295	6	34	6	12	0	23		13 4	10	47
Saturday	23	296	6	35	6	12	0	23	○	14 4	11	7
Sunday	24	297	6	35	6	11	0	23		15 4	11	29
Monday	25	298	6	36	6	10	0	23		16 4	11	50
Tuesday	26	299	6	36	6	10	0	23		17 4	12	11
Wednesday	27	300	6	36	6	9	0	23		18 4	12	32
Thursday	28	301	6	37	6	9	0	23		19 4	12	52
Friday	29	302	6	37	6	8	0	23		20 4	13	12
Saturday	30	303	6	37	6	7	0	23		21 4	13	32
Sunday	31	304	6	38	6	7	0	22	☾	22 4	13	50

Phases of the Moon—NOVEMBER 30 Days.

● New Moon .	7th, 1h 22 3m P M	○ Full Moon	21st, 11h 6 4m P M
☽ First Quarter	14th, 4h 33 0m A M	☾ Last Quarter	30th, 3h 40 5m A M
Perigee .	8th, 7 8h P M	Apogee	24th, 5 2h A M

Day of the Week	Day of the Month	Day of the Year	Mean Time Sunrise A M		Mean Time Sunset P M		Mean Time True Noon P M		Moon's Age at Noon	Sun's Declination at Mean Noon
			H	M	H	M	H	M	D	° ′
Monday	1	305	6	38	6	6	0	22	23 4	14 11
Tuesday	2	306	6	39	6	6	0	22	24 4	14 31
Wednesday	3	307	6	39	6	5	0	22	25 4	14 50
Thursday	4	308	6	40	6	5	0	22	26 4	15 19
Friday	5	309	6	40	6	4	0	22	27 4	15 27
Saturday	6	310	6	41	6	4	0	22	28 4	15 46
Sunday	7	311	6	41	6	4	0	22	● 0 0	16 4
Monday	8	312	6	42	6	4	0	22	1 0	16 21
Tuesday	9	313	6	42	6	3	0	23	2 0	16 39
Wednesday	10	314	6	43	6	3	0	23	3 0	16 56
Thursday	11	315	6	43	6	3	0	23	4 0	17 13
Friday	12	316	6	44	6	2	0	23	5 0	17 30
Saturday	13	317	6	44	6	2	0	23	6 0	17 46
Sunday ..	14	318	6	45	6	1	0	23	☽ 7 0	18 2
Monday	15	319	6	45	6	1	0	23	8 0	18 18
Tuesday	16	320	6	46	6	1	0	23	9 0	18 33
Wednesday	17	321	6	46	6	1	0	24	10 0	18 48
Thursday	18	322	6	47	6	0	0	24	11 0	19 3
Friday	19	323	6	48	6	0	0	24	12 0	19 18
Saturday	20	324	6	48	6	0	0	24	13 0	19 32
Sunday	21	325	6	49	6	0	0	24	○ 14 0	19 45
Monday	22	326	6	49	6	0	0	25	15 0	19 59
Tuesday	23	327	6	50	6	0	0	25	16 0	20 11
Wednesday	24	328	6	51	6	0	0	25	17 0	20 24
Thursday	25	329	6	51	6	0	0	25	18 0	20 37
Friday	26	330	6	52	6	0	0	25	19 0	20 48
Saturday	27	331	6	52	6	0	0	26	20 0	21 0
Sunday	28	332	6	53	6	0	0	26	21 0	21 11
Monday	29	333	6	54	6	0	0	27	22 0	21 22
Tuesday	30	334	6	54	6	0	0	27	☾ 23 0	21 32

Phases of the Moon—DECEMBER 31 Days.

● New Moon	6th, 11h 33 7m. P M	○ Full Moon	21st, 6h 22 3m P M
☽ First Quarter	13th, 5h 8 4m P M	☽ Last Quarter	30th, 6h 28 8m P M
Perigee	7th, 6 8h A M	Apogee	21st, 6 1h A M

Day of the Week	Day of the Month	Day of the Year	Mean Time Sunrise A M		Mean Time Sunset P M		Mean Time True Noon		Moon's Age at Noon	Sun's Declination at Mean Noon
			H	M	H	M	H	M P M	D	S ,
Wednesday	1	335	6	55	6	0	0	27	24 0	21 39
Thursday	2	336	6	55	6	0	0	28	25 0	21 49
Friday	3	337	6	56	6	0	0	28	26 0	21 58
Saturday	4	338	6	57	6	0	0	29	27 0	22 6
Sunday	5	339	6	57	6	0	0	29	28 0	22 11
Monday	6	340	6	58	6	1	0	29	● 29 0	22 2.
Tuesday	7	341	6	59	6	1	0	29	0 5	22 3
Wednesday	8	342	6	59	6	1	0	30	1 5	22 37
Thursday	9	343	7	0	6	1	0	30	2 5	22 44
Friday	10	344	7	0	6	2	0	31	3 5	22 50
Saturday	11	345	7	1	6	2	0	31	4 5	22 5-
Sunday	12	346	7	2	6	2	0	32	5 5	23 0
Monday	13	347	7	2	6	3	0	32	☽ 6·5	23 5
Tuesday	14	348	7	3	6	3	0	33	7 5	23 10
Wednesday	15	349	7	3	6	3	0	33	8 5	23 15
Thursday	16	350	7	4	6	4	0	34	9 5	23 17
Friday	17	351	7	4	6	4	0	34	10 5	23 20
Saturday	18	352	7	5	6	5	0	35	11·5	23 22
Sunday	19	353	7	5	6	5	0	35	12 5	23 24
Monday	20	354	7	6	6	6	0	36	13 5	23 25
Tuesday	21	355	7	7	6	6	0	36	○ 14 5	23 26
Wednesday	22	356	7	7	6	6	0	37	15 5	23 27
Thursday	23	357	7	8	6	7	0	37	16 5	23 27
Friday	24	358	7	8	6	7	0	38	17 5	23 27
Saturday	25	359	7	9	6	8	0	38	18·5	23 26
Sunday	26	360	7	9	6	9	0	39	19 5	23 25
Monday	27	361	7	10	6	9	0	39	20 5	23 23
Tuesday	28	362	7	10	6	10	0	40	21 5	23 20
Wednesday	29	363	7	11	6	10	0	40	22 5	23 18
Thursday	30	364	7	11	6	11	0	41	☾ 23·5	23 14
Friday	31	365	7	12	6	11	0	41	24 5	23 11

CALENDAR FOR 1916.

January.

S.	2	9	16	23	30	
M.	3	10	17	24	31	
Tu.	4	11	18	25		
W.	5	12	19	26		
Th.	6	13	20	27		
F.	7	14	21	28		
S	1	8	15	22	29	

February.

S		6	13	20	27	
M.		7	14	21	28	
Tu.	1	8	15	22	29	
W.	2	9	16	23		
Th.	3	10	17	24		
F.	4	11	18	25		
S.	5	12	19	26		

March.

S.		5	12	19	26	
M.		6	13	20	27	
Tu.		7	14	21	28	
W.	1	8	15	22	29	
Th.	2	9	16	23	30	
F.	3	10	17	24	31	
S.	4	11	18	25		

April.

S.		2	9	16	23	30
M.		3	10	17	24	
Tu.		4	11	18	25	
W.		5	12	19	26	
Th.		6	13	20	27	
F.		7	14	21	28	
S.	1	8	15	22	29	

May.

S.		7	14	21	28	
M.	1	8	15	22	29	
Tu.	2	9	16	23	30	
W.	3	10	17	24	31	
Th.	4	11	18	25		
F.	5	12	19	26		
S.	6	13	20	27		

June.

S.		4	11	18	25	
M.		5	12	19	26	
Tu.		6	13	20	27	
W.		7	14	21	28	
Th.	1	8	15	22	29	
F.	2	9	16	23	30	
S.	3	10	17	24		

July.

S.		2	9	16	23	30
M.		3	10	17	24	31
Tu.		4	11	18	25	
W.		5	12	19	26	
Th.		6	13	20	27	
F.		7	14	21	28	
S.	1	8	15	22	29	

August.

S.		6	13	20	27	
M.		7	14	21	28	
Tu	1	8	15	22	29	
W.	2	9	16	23	30	
Th.	3	10	17	24	31	
F.	4	11	18	25		
S.	5	12	19	26		

September.

S.		3	10	17	24	
M.		4	11	18	25	
Tu.		5	12	19	26	
W		6	13	20	27	
Th.		7	14	21	28	
F.	1	8	15	22	29	
S.	2	9	16	23	30	

October.

S.	1	8	15	22	29	
M.	2	9	16	23	30	
Tu.	3	10	17	24	31	
W.	4	11	18	25		
Th.	5	12	19	26		
F.	6	13	20	27		
S.	7	14	21	28		

November.

S.		5	12	19	26	
M.		6	13	20	27	
Tu.		7	14	21	28	
W.	1	8	15	22	29	
Th.	2	9	16	23	30	
F.	3	10	17	24		
S.	4	11	18	25		

December.

S.	3	10	17	24	31	
M.	4	11	18	25		
Tu	5	12	19	26		
W.	6	13	20	27		
Th.	7	14	21	28		
F.	1	8	15	22	29	
S.	2	9	16	23	30	

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	Tonnage
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Macedonia	10512
Marmora	10509
Moultan	9713
Mongolia	9505
Mooltan	9500
Kaisar I Hind	9490
Karmala	8983
Khiva	8947
Khyber	8946
Devanha	8932
Delta	8589
Dongola	8536
Persia	7974
Egypt	7941
India	7940
Arabia	7933
China	7931
Peru	7605
Peshawur	7604
Pekin	7602
Poona	7600
Palermo	7597
Caledonia	7570
Assaye	7370
Plassy	7316
Himalaya	6929
Nagpore	6854
Nellore	6855
Nankin	6853
Novara	6850
Somali	6711
Nore	6705
Nile	6702
Sicilia	6701
Nimur	6701
Soudan	6699
Nyanza	6695
Syria	6683
Arcadia	6650
Sardinia	6500
Candia	6482
Malta	6064
Socotra	6009
Bunca	5095
Nubia	5013
Simla	4984
Sabette	5342
Oriental	5184
Isis	1726
Osiris	1728
* * * *	1520
* * * *	1520
Kaiser I Hind	6000
Kaiser I Hind	6000
Bermuda	11137
Lordly	11130
Ballarat	11130
Beltana	11110
Benalla	11118
Celonia	7951
Commonwealth	6016

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India in 1914

In the introduction to the first issue of the Indian Year Book, published last year, the Editor, after calling attention to the new forces which were shaking this age-worn land, said "While India is still quick with new ideas and ambitions, and anarchy will continue to be sporadic, she is confident of the future of the country within the Empire and under the Crown"

This expression of opinion was strongly criticised at the time Ever since the war between Russia and Japan, kindling fresh ideas in the peoples of Asia, and the Viceroyalty of Lord Curzon, which stirred the dry bones of India, the internal situation in the country has been one which baffled all save the most resolute optimists There was the rise in importance of the educated middle class—the class educated on English principles, saturated with English literature and its ideas of liberty, which is inevitably a class nourishing the desire for the expansion of Indian politics, and administration Behind this constitutional agitation there was the malignant spectre of political crime, which first appearing in Bengal really had its origin in the Bombay Deccan, and gradually spread to Madras and the Punjab Confronted by these complexities, and oppressed by the magnitude of the difficulties besetting the course of liberalism in a country like India, it is not perhaps altogether surprising if some whose ideas of Indian polity were based on patriarchical principles confused both sides of this political ferment, and could not distinguish between loyal and disloyal unrest The real answer was given when the great war broke out

At first, seeing these events as through a glass darkly, Indian opinion failed to appreciate the nature of the struggle into which Great Britain was forced But as soon as it was known that Great Britain had decided to make the invasion of Belgium a *casus belli* and to strike a blow for the preservation of the rights of the lesser States and peoples, India flamed with an amazing burst of feeling in support of the Empire The swords of the Indian Princes leapt from their scabbards, and one and all immediately offered their forces, their funds and themselves for the service of the Raj The martial races of the land rejoiced at the prospect of service for the Empire wherever a blow had to be struck, whether in Europe, in Africa, or in the Persian Gulf The educated middle classes responded as generously to the call of Empire, and in public meetings held in every great town pledged themselves to the support of the war and unloosed their purse strings to assist all sufferers The sentiment of all classes in India was summed up in the simple words of one of the Indian Chiefs —"What orders has my King for me and my troops?"

The spectre of internal trouble, which has bemused certain people in and out of India, vanished the moment there was manifest this need for India's co-operation The Viceroy informed His Majesty's Ministers that India would devote the last man and the last gun to his service And it being manifest that the maintenance of order might be left to the ordinary machinery, supported by the goodwill of the overwhelming mass of the people, the finest fighting units of the Indian Army, Horse, Foot and Guns, British and Indian, poured in a steady stream to France, to Egypt and to East Africa. Indian publicists, speaking for their articulate countrymen, asked that India might be allowed to share in the financial burdens of the war, and the Viceroy accepting a motion in the Legislative Council to this effect, agreed so far that the actual pay of the regiments employed will still be borne by the Indian exchequer instead of being paid by the British Treasury Only one thing was needed to seal the universal fervour—it was that the Indian troops should actually take their place in the fighting line on the battlefields of Europe When it was officially announced that these fine regiments would proceed to France, then it was felt that Indeed India was an inseparable part of the British Empire

The causes underlying this rally to the flag demand some little analysis How, it may be asked, is it to be reconciled with the undoubted unrest which existed in India, and with the anarchy, which persists and will persist? There is perhaps no modern movement which has been so grievously misunderstood as that which is generically known as Indian unrest Rightly understood, the unrest is the finest product of British rule, it is standing proof that so far from that rule having imposed on India a stolid barrier to progress, it has implanted and given growth to the divine discontent which is at the root of all human progress Attention has been concentrated too much on the maleficent aspect of the unrest—on the violent political agitation accompanied by political crime Yet close observers have seen that this unrest contains the seed bed of progress, in one of the official reports it is written "No one dare say that the new spirit has not brought to India an amount of good which vastly outweighs the evil" The war has enabled us to see these activities in true perspective Whilst we might have expected the Ruling Princes to rejoice at the prospect of lending their aid to the Raj, and the martial races joyous at drawing the sword which has so long rusted in the scabbard, rightly to understand this wonderful demonstration of solidarity with the Empire we must see too that India's participation in the war is enthusiastically acclaimed by the educated bourgeoisie who, in ordinary circumstances are naturally most critical of the Administration The reason for this is instructive Something no doubt is due to the cause of the war The educated Indian is liberal in his sympathies and the rights of the smaller peoples are very dear to him But the foundation of this sentiment is the conviction that the real progress of India is bound up with its association with the British Empire

The close of the year 1914 then finds us at the opening of a new era in the history of India None dare question that she is loyal to the core and at the core to the British connection Henceforth all Indian questions of polity must be approached from this standpoint None but the blind will maintain that this does not open up questions of the greatest moment—questions which will have to be answered in a spirit of the most courageous statesmanship and with resolute audacity But the answer to be given is one consonant with the British character, which is instinct with enlightened liberalism We stand then on the threshold of a New India, we shall cross that threshold with pride in the patriotism our rule has wrought, more than ever determined to justify it

The History of India in Outline.

No history of India can be proportionate, and the briefest summary must suffer from the same defect Even a wholesale acceptance as history of mythology, tradition, and folklore will not make good, though it makes picturesque, the many gaps that exist in the early history of India and, though the labours of modern geographers and archæologists have been amazingly fruitful, it cannot be expected that these gaps will ever be filled to any appreciable extent Approximate accuracy in chronology and an outline of dynastic facts are all that the student can look for up to the time of Alexander, though the briefest excursion into the by-ways of history will reveal to him many alluring and mysterious fields for speculation There are, for example, to this day castes that believe they sprang originally from the loins of a being who landed "from an impossible boat on the shores of a highly improbable sea", and the great epic poems contain plentiful statements equally difficult of reconciliation with modern notions of history as a science. But from the Jataka stories and the Puranas, much valuable information is to be obtained, and, for the benefit of those unable to go to these and other original sources, it has been distilled by a number of writers

The orthodox Hindu begins the political history of India more than 3000 years before Christ, with the war waged on the banks of the Jumna between the sons of Kuru and the sons of Pandu, but the modern critic prefers to omit several of those remote centuries and to take 600 B C, or thereabouts as his starting point At that time much of the country was covered with forest, but the Aryan races, who had entered India from the north, had established in parts a form of civilization far superior to that of the aboriginal savages, and to this day there survive cities, like Benares founded by those invaders In like manner the Dravidian invaders from an unknown land, who overran the Deccan and the Southern part of the Peninsula, crushed the aborigines and, at a much later period, were themselves subdued by the Aryans Of these two civilizing forces, the Aryan is the better known, and of the Aryan kingdoms the first of which there is authentic record is that of Magadha, or Bihar on the Ganges It was in, or near, this powerful kingdom that Jainism and Buddhism had their origin, and the fifth King of Magadha, Bimbisara by name, was the friend and patron of Gautama Buddha The King mentioned was a contemporary of Darius, autocrat of Persia (521 to 485 B C) who annexed the Indus valley and formed from his conquest an Indian satrapy which paid as tribute the equivalent of about one million sterling Detailed history, however, does not become possible until the invasion of Alexander in 326 B C

Alexander the Great

That great soldier had crossed the Hindu Kush in the previous year and had captured Aornos on the Upper Indus In the spring of 326 he crossed the river at Ohind, received the submission of the King of Taxila, and marched against Porus who ruled the fertile country between the rivers Hydaspes (Jhelum) and Akesines (Chenab). The Macedonian carried all before him, defeating Porus at the battle of the Hydaspes, and crossing the Chenab and Ravi But at the River Hyphasis (Bias) his weary troops mutinied, and Alexander was forced to turn back and retire to the Jhelum where a fleet to sail down the rivers to the sea was nearly ready The wonderful story of Alexander's march through Mekran and Persia to Babylon, and of the voyage of Nearchus up the Persian Gulf is the climax to the narrative of the invasion but is not part of the history of India Alexander had stayed nineteen months in India and left behind him officers to carry on the Government of the kingdoms he had conquered but his death at Babylon, in 323, destroyed the fruits of what has to be regarded as nothing but a brilliant raid, and within two years his successors were obliged to leave the Indian provinces, heavily scarred by war but not hellenized

The leader of the revolt against Alexander's generals was a young Hindu, Chandragupta, who was an illegitimate member of the Royal Family of Magadha. He dethroned the ruler of that kingdom, and became so powerful that he is said to have been able to place 600,000 troops in the field against Seleucus, to whom Babylon had passed on the death of Alexander This was too formidable an opposition to be faced, and a treaty of peace was concluded between the Syrian and Indian monarchs which left the latter the first paramount Sovereign of India (321 B C) with his capital at Pataliputra, the modern Patna and Bankipore Of Chandragupta's court and administration a very full account is preserved in the fragments that remain of the history compiled by Megasthenes, the ambassador sent to India by Seleucus His memorable reign ended in 297 B C when he was succeeded by his son Bindusara, who in his turn was succeeded by Asoka (269—231 B C) who recorded the events of his reign in numerous inscriptions. This king, in an unusually bloody war, added to his dominions the kingdom of Kalinga (the Northern Circars) and then becoming a convert to Buddhism, resolved for the future to abstain from conquest by force of arms The consequences of the conversion of Asoka were amazing He was not intolerant of other religions, and did not endeavour to force his creed on his "children" But he initiated measures for the propagation of his doctrine with the result that "Buddhism, which had hitherto been a merely local sect in the valley of the Ganges, was transformed into one of the greatest religions of the world—the greatest, probably, if measured by the number of adherents This is Asoka's claim to be remembered, this it is which makes his reign an epoch, not only in the history of India, but in that of "the world" The wording of his edicts reveal him as a great king as well as a great missionary, and it is to be hoped that the excavations now being carried on in the ruins of his palace may throw yet more light on his character and times On his death the Maurya kingdom fell to pieces Even during his reign there had been signs of new forces at work on the borderland of India, where the inde-

pendent kingdoms of Bactria and Parthia had been formed, and subsequent to it there were frequent Greek raids into India. The Greeks in Bactria, however, could not withstand the overwhelming force of the westward migration of the Yueh-chi horde, which, in the first century A D, also ousted the Indo-Parthian kings from Afghanistan and North-Western India

The first of these Yueh-chi kings to annex a part of India was Kadphises II (A. D 85—125), who had been defeated in a war with China, but crossed the Indus and consolidated his power eastward as far as Benares His son Kanishka (whose date is much disputed) left a name which to Buddhists stands second only to that of Asoka He greatly extended the boundaries of his empire in the North, and made Peshawar his capital Under him the power of the Kushan clan of the Yueh-chi reached its zenith and did not begin to decay until the end of the second century, concurrently with the rise in middle India of the Andhra dynasty which constructed the Amaravati stupa, "one of the most elaborate and precious monuments of piety ever raised by man"

The Gupta Dynasty.

Early in the fourth century there arose, at Pataliputra, the Gupta dynasty which proved of great importance Its founder was a local chief, his son Samudragupta, who ruled for some fifty years from A D. 326, was a king of the greatest distinction His aim of subduing all India was not indeed fulfilled but he was able to exact tribute from the kingdoms of the South and even from Ceylon, and, in addition to being a warrior, he was a patron of the arts and of Sanskrit literature The rule of his son, Chandragupta, was equally distinguished and is commemorated in an inscription on the famous iron pillar near Delhi, as well as in the writings of the Chinese pilgrim Fa-hien who pays a great tribute to the equitable administration of the country It was not until the middle of the fifth century that the fortunes of the Gupta dynasty began to wane—in face of the onset of the White Huns from Central Asia—and by 480 the dynasty had disappeared The following century all over India was one of great confusion, apparently marked only by the rise and fall of petty kingdoms, until a monarch arose, in A D 606, capable of consolidating an Empire This was the Emperor Harsha who, from Thanasar near Ambala, conquered Northern India and extended his territory South to the Narbudda Imitating Asoka in many ways, this Emperor yet "felt no embarrassment in paying adoration in turn to Siva, the Sun, and Buddha at a great public ceremonial" Of his times a graphic picture has been handed down in the work of a Chinese "Master of the Law," Hiuen Tsiang by name Harsha was the last native paramount sovereign of Northern India, on his death in 648 his throne was usurped by a Minister, whose treacherous conduct towards an embassy from China was quickly avenged, and the kingdom so laboriously established lapsed into a state of internecine strife which lasted for a century and a half.

The Andhras and Rajputs.

In the meantime in Southern India the Andhras had attained to great prosperity and carried on a considerable trade with Greece, Egypt and Rome, as well as with the East. Their domination ended in the fifth century A D and a number of new dynasties, of which the Pallavas were the most important, began to appear The Pallavas made way in turn for the Chalukyas, who for two centuries remained the most important Deccan dynasty, one branch uniting with the Cholas. But the fortunes of the Southern dynasties are so involved, and in many cases so little known, that to recount them briefly is impossible. Few names of note stand out from the record, except those of Vikramaditya (11th century) and a few of the later Hindu rulers who made a stand against the growing power of Islam, of the rise of which an account is given below In fact the history of mediæval India is singularly devoid of unity Northern India was in a state of chaos from about 650 to 950 A D. not unlike that which prevailed in Europe of that time, and materials for the history of these centuries are very scanty In the absence of any powerful rulers the jungle began to gain back what had been wrested from it: ancient capitals fell into ruins from which in some cases they have not even yet been disturbed, and the aborigines and various foreign tribes began to assert themselves so successfully that the Aryan element was chiefly confined to the Doab and the Eastern Punjab. It is not therefore so much for the political as for the religious and social history of this anarchical period that one must look And the greatest event—if a slow process may be called an event—of the middle ages was the transition from tribe to caste, the final disappearance of the old four-fold division of Brahmans, Kshattriyas, Vaisyas, and Sudras, and the formation of the new division of pure and impure largely resting upon a classification of occupations But this social change was only a part of the development of the Hindu religion into a form which would include in its embrace the many barbarians and foreigners in the country who were outside it. The great political event of the period was the rise of the Rajputs as warriors in the place of the Kshattriyas Their origin is obscure but they appeared in the 8th century and spread, from their two original homes in Rajputana and Oudh, into the Punjab, Kashmir, and the Central Himalayas, assimilating a number of fighting clans and binding them together with a common code At this time Kashmir was a small kingdom which exercised an influence on India wholly disproportionate to its size. The only other kingdom of importance was that of Kanauj—in the Doab and Southern Oudh—which still retained some of the power to which it had reached in the days of Harsha, and of which the renown extended to China and Arabia

With the end of the period of anarchy, the political history of India centres round the Rajputs. One clan founded the kingdom of Gujarat, another held Malwa, another (the Chauhans) founded a kingdom of which Ajmer was the capital, and so on Kanauj fell into the hands of the Rathors (c re 1040 A D) and the dynasty then founded by that branch of the Gaharwars of Benares became one of the most famous in India Later in the same century the Chauhans were united, and by

1163 one of them could boast that he had conquered all the country from the Vindhyas to the Himalayas including Delhi already a fortress a hundred years old The son of this conqueror was Prithwi Raj, the champion of the Hindus against the Mahomedans With his death in battle (1192) ends the golden age of the new civilization that had been evolved out of chaos, and of the greatness of that age there is a splendid memorial in the temples and forts of the Rajput states and in the two great philosophical systems of Sankaracharya (ninth century) and Ramanuja (twelfth century) The triumph of Hinduism had been achieved, it must be added, at the expense of Buddhism, which survived only in Magadha at the time of the Mahomedan conquest and speedily disappeared there before the new faith.

Mahomedan India.

The wave of Mahomedan invaders that eventually swept over the country first touched India, in Sind, less than a hundred years after the death of the Prophet in 632 But the first real contact was in the tenth century when a Turkish slave of a Persian ruler founded a kingdom at Ghazni, between Kabul and Kandahar A descendant of his, Mahmud (967-1030) made repeated raids into the heart of India, capturing places so far apart as Multan, Kanauj, Gwalior, and Somnath in Kathiawar, but permanently occupying only a part of the Punjab Enduring Mahomedan rule was not established until the end of the twelfth century, by which time, from the little territory of Ghor, there had arisen one Mahomed Ghori capable of carving out a kingdom stretching from Peshawar to the Bay of Bengal Prithwi Raj, the Chauhan ruler of Delhi and Ajmer, made a brave stand against, and once defeated, one of the armies of this ruler, but was himself defeated in the following year Mahomed Ghori was murdered at Lahore (1206) and his vast kingdom, which had been governed by satraps, was split up into what were practically independent sovereignties Of these satraps, Qutb-ud-din, the slave ruler of Delhi and Lahore, was the most famous, and is remembered by the great mosque he built near the modern Delhi Between his rule and that of the Mughals, which began in 1526, only a few of the many Kings who governed and fought and built beautiful buildings, stand out with distinction One of these was Ala-ud-din (1296-1316), whose many expeditions to the south much weakened the Hindu Kings, and who proved himself to be a capable administrator Another was Firoz Shah, of the house of Tughlaq, whose administration was in many respects admirable, but which ended, on his abdication, in confusion In the reign of his successor, Mahmud (1398-1413), the kingdom of Delhi went to pieces and India was for seven months at the mercy of the Turkish conqueror Taimur It was the end of the fifteenth century before the kingdom, under Sikandar Lodi, began to recover His son Ibrahim, still further extended the kingdom that had been recreated, but was defeated by Babar, King of Kabul, at Panipat, near Delhi, in 1526, and there was then established in India the Mughal dynasty.

The Mahomedan dynasties that had ruled in capitals other than Delhi up to this date were of comparative unimportance, though some great men appeared among them. In Gujarat, for example, Ahmad Shah, the founder of Ahmedabad, showed himself a good ruler and builder as well as a good soldier, though his grandson, Mahmud Shah Begara, was a greater ruler—acquiring fame at sea as well as on land In the South various kings of the Bahmani dynasty made names for themselves, especially in the long wars they waged on the new Hindu kingdom that had arisen which had its capital at Vijayanagar Of importance also was Adil Khan, a Turk, who founded (1490) the Bijapur dynasty of Adil Shahis It was one of his successors who crushed the Vijayanagar dynasty, and built the great mosque for which Bijapur is famous

The Mughal Empire

As one draws near to modern times it becomes impossible to present anything like a coherent and consecutive account of the growth of India as a whole Detached threads in the story have to be picked up one by one and followed to their ending, and although the sixteenth century saw the first European settlements in India, it will be convenient here to continue the narrative of Mahomedan India almost to the end of the Mughal Empire How Babar gained Delhi has already been told His son Humayun, greatly extended his kingdom, but was eventually defeated (1540) and driven into exile by Sher Khan, an Afghan of great capabilities, whose short reign ended in 1545 The Sur dynasty thus founded by Sher Khan lasted another ten years when Humayun having snatched Kabul from one of his brothers, was strong enough to win back part of his old kingdom When Humayun died (1556) his eldest son, Akbar, was only 13 years old and was confronted by many rivals Nor was Akbar well served, but his career of conquest was almost uninterrupted and by 1594 the whole of India North of the Nerbudda had bowed to his authority, and he subsequently entered the Deccan and captured Ahmednagar This great ruler, who was as remarkable for his religious tolerance as for his military prowess, died in 1605, leaving behind him a record that has been surpassed by few His son, Jehangir, who married the Persian lady Nur Jahan, ruled until 1627, bequeathing to an admiring posterity some notable buildings—the tomb of his father at Sikandra, part of the palace at Agra, and the palace and fortress of Lahore His son, Shahjahan, was for many years occupied with wars in the Deccan, but found time to make his court of incredible magnificence and to build the most famous and beautiful of all tombs, the Taj Mahal, as well as the fort, palace and Juma Masjid at Delhi The quarrels of his sons led to the deposition of Shahjahan by one of them, Aurangzeb, in 1658 This Emperor's rule was one of constant intrigue and fighting in every direction, the most important of his wars being a twenty-five years' struggle against the Marathas of the Deccan who, under the leadership of Sivaji became a very powerful faction in Indian politics. His bigoted attitude towards Hinduism made Aurangzeb all the more anxious to establish his Empire on a firm basis in the south, but he was unable to hold his many conquests, and on his death (1707) the

Empire, for which his three sons were fighting, could not be held together Internal disorder and Maratha encroachments continued during the reigns of his successors, and in 1739 a fresh danger appeared in the person of Nadir Shah, the Persian conqueror, who carried all before him. On his withdrawal, leaving Mahomed Shah on the throne, the old intrigues recommenced and the Marathas began to make the most of the opportunity offered to them by puppet rulers at Delhi and by almost universal discord throughout what had been the Mughal Empire There is little to add to the history of Mahomedan India Emperors continued to reign in name at Delhi up to the middle of the 19th century, but their territory and power had long since disappeared, being swallowed up either by the Marathas or by the British

European Settlements.

The voyage of Vasco da Gama to India in 1498 was what turned the thoughts of the Portuguese to the formation of a great Empire in the East That idea was soon realized, for from 1500 onwards, constant expeditions were sent to India and the first two Viceroys in India—Almeida and Albuquerque—laid the foundations of a great Empire and of a great trade monopoly Goa, taken in 1510, became the capital of Portuguese India and remains to this day in the hands of its captors, and the countless ruins of churches and forts on the shores of Western India, as also farther East at Malacca, testify to the zeal with which the Portuguese endeavoured to propagate their religion and to the care they took to defend their settlements There were great soldiers and great missionaries among them—Albuquerque, da Cunha, da Castro in the former class, St Francis Xavier in the latter But the glory of Empire loses something of its lustre when it has to be paid for, and the constant drain of men and money from Portugal, necessitated by the attacks made on their possessions in India and Malaya, was found almost intolerable The junction of Portugal with Spain, which lasted from 1580 to 1640, also tended to the downfall of the Eastern Empire and when Portugal became independent again, it was unequal to the task of competing in the East with the Dutch and English The Dutch had little difficulty in wresting the greater part of their territory from the Portuguese, but the seventeenth century naval wars with England forced them to relax their hold upon the coast of India, and during the French wars between 1795 and 1811 England took all Holland's Eastern possessions, and the Dutch have left in India but few traces of their civilisation and of the once powerful East India Company of the Netherlands

The first English attempts to reach India date from 1496 when Cabot tried to find the North-West passage, and these attempts were repeated all through the sixteenth century The first Englishman to land in India is said to have been one Thomas Stephens (1579) who was followed by a number of merchant adventurers, but trade between the two countries really dates from 1600 when Elizabeth incorporated the East India Company which had been formed in London Factories in India were founded only after Portuguese and Dutch opposition had been overcome, notably in the sea fight off Swally (Suvali) in 1612 The first factory, at Surat, was for many years the most important English foothold in the East Its establishment was followed by others, including Fort St George, Madras, (1640) and Hughli (1651) In the history of these early years of British enterprise in India the cession of Bombay (1661) as part of the dower of Catherine of Braganza stands out as a land-mark it also illustrates the weakness of the Portuguese at that date since in return the King of England undertook to protect the Portuguese in India against their foes—the Marathas and the Dutch Cromwell, by his treaty of 1654, had already obtained from the Portuguese an acknowledgment of England's right to trade in the East, and that right was now threatened, not by the Portuguese, but by Sivaji and by the general disorder prevalent in India Accordingly, in 1686, the Company turned its attention to acquiring territorial power, and announced its intention to establish such a policy of civil and military power, and create and secure such a large revenue as may be the foundation of a large, well-grounded, sure English dominion in India for all time to come Not much came of this announcement for some time, and no stand could be made in Bengal against the depredations of Aurungzeb The foundations of Calcutta (1690) could not be laid by Job Charnock until after a humiliating peace had been concluded with that Emperor, and, owing to the difficulties in which the Company found itself in England, there was little chance of any immediate change for the better The union of the old East India Company with the new one which had been formed in rivalry to it took place in 1708, and for some years peaceful development followed, though Bombay was always exposed by sea to attacks from the pirates, who had many strongholds within easy reach of that port, and on land to attacks from the Marathas The latter danger was felt also in Calcutta Internal dangers were numerous and still more to be feared More than o. mutiny took place among the troops sent out from England, and rebellions like that led by Keigwin in Bombay threatened to stifle the infant settlements The public health was bad and the rate of mortality was at times appalling To cope with such conditions strong men were needed, and the Company was in this respect peculiarly fortunate, the long list of its servants, from Oxenden and Aungier to Hastings and Raffles, contains many names of men who proved themselves good rulers and far-sighted statesmen, the finest Empire-builders the world has known

Attempts to compete with the English were made of course But the schemes of the Emperor Charles VI to secure a share of the Indian trade were not much more successful than those made by Scotland, Denmark, Sweden, and Russia By the French, who founded Pondicherry and Chandernagore towards the end of the 17th century, much more was achieved, as will be seen from the following outline of the development of British rule

The French Wars.

When war broke out between England and France in 1744, the French had acquired a

strong position in Southern India, which had become independent of Delhi and was divided into three large States—Hyderabad, Tanjore, and Mysore—and a number of petty states under local chieftains In the affairs of these States Dupleix, when Governor of Pondicherry, had intervened with success, and when Madras was captured by a French squadron, under La Bourdonnais (1746) Dupleix wished to hand it over to the Nawab of Arcot—a deputy of the Nizam's who ruled in the Carnatic The French, however, kept Madras, repelling an attack by the disappointed Nawab as well as the British attempts to recapture it The treaty of Aix-la-Chapelle restored Madras to the English The fighting had shown the Indian powers the value of European troops, and this was again shown in the next French war (1750-54) when Clive achieved enduring fame by his capture and subsequent defence of Arcot This war arose from Dupleix supporting candidates for the disputed successions at Arcot and Hyderabad while the English at Madras put forward their own nominees One of Dupleix's officers, the Marquis de Bussy, persuaded the Nizam to take into his pay the army which had established his power, and in return the Northern Circars, between Orissa and Madras, was granted to the French This territory, however, was captured by the English in the seven years' war (1756-63) Dupleix had by then been recalled to France Lally, who had been sent to drive the English out of India, captured Fort St David and invested Madras But the victory which Colonel (Sir Eyre) Coote won at Wandiwash (1760) and the surrender of Pondicherry and Gingee put an end to the French ambitions of Empire in Southern India Pondicherry passed more than once from the one nation to the other before settling down to its present existence as a French colony in miniature

Battle of Plassey.

While the English were fighting the third French war in the South they became involved in grave difficulties in Bengal, where Siraj-ud-Daula had acceded to power The headquarters of the English at Calcutta were threatened by that ruler who demanded they should surrender a refugee and should cease building fortifications They refused and he marched against them with a large army Some of the English took to their ships and made off down the river, the rest surrendered and were cast into the jail known as the "Black Hole" From this small and stifling room 23 persons, out of 146, came out alive the next day Clive who was at Madras, immediately sailed for Calcutta with Admiral Watson's squadron, recaptured the town (1757), and, as war with the French had been proclaimed, proceeded to take Chandernagore The Nawab Siraj-ud-Daula then took the side of the French, and Clive, putting forward Mir Jafar as candidate for the Nawab's throne, marched out with an army consisting of 900 Europeans, 2,000 sepoys and 8 pieces of artillery against the Nawab's host of over 50,000 The result was the historic battle of Plassey (June 23) in which Clive, after hesitating on the course to be pursued, routed the Nawab. Mir Jafar was put on the throne at Murshidabad, and the price of this honour was put at £ 2,340,000 in addition to the grant to the Company of the land round Calcutta now known as the District of the Twenty-four Parganas In the year after Plassey, Clive was appointed Governor of Bengal and in that capacity sent troops against the French in Madras and in person led a force against the Oudh army that was threatening Mir Jafar, in each case with success From 1760 to 1765 Clive was in England During his absence the Council at Calcutta deposed Mir Jafar and, for a price, put Mir Kasim in his place This ruler moved his capital to Monghyr, organized an army, and began to intrigue with the Nawab Wazir of Oudh He soon found, in a dispute over customs dues, an opportunity of quarrelling with the English and the first shots fired by his followers were the signal for a general rising in Bengal About 200 Englishmen and a number of sepoys were massacred, but his trained regiments were defeated at Gheria and Oodeynullah, and Mir Kasim sought protection from the Nawab of Oudh But in 1764, after quelling a sepoy mutiny in his own camp by blowing 24 ringleaders from the guns, Major (Sir Hector) Munro defeated the joint forces of Shah Alam, the Mughal Emperor, and the Nawab of Oudh in the battle of Buxar In 1765 Clive (now Baron Clive of Plassey) returned as Governor. "Two landmarks stand out in his policy First, he sought the substance, although not the name, of territorial power, under the fiction of a grant from the Mughal Emperor Second, he desired to purify the Company's service, by prohibiting illicit gains, and by guaranteeing a reasonable pay from honest sources In neither respect were his plans carried out by his immediate successors But our efforts towards a sound administration date from this second Governorship of Clive, as our military supremacy dates from his victory at Plassey" Before Clive left India, in 1767, he had readjusted the divisions of Northern India and had set up a system of Government in Bengal by which the English received the revenues and maintained the army while the criminal jurisdiction was vested in the Nawab The performance of his second task, the purification of the Company's service, was hotly opposed but carried out He died in 1774 by his own hand, the House of Commons having in the previous year censured him, though admitting that he did render "great and meritorious services to his country"

Warren Hastings.

The dual system of government that Clive had set up proved a failure and Warren Hastings was appointed Governor, in 1772, to carry out the reforms settled by the Court of Directors which were to give them the entire care and administration of the revenues Thus Hastings had to undertake the administrative organization of India, and, in spite of the factious attitude of Philip Francis, with whom he fought a duel and of other members of his Council, he reorganized the civil service, reformed the system of revenue collection, greatly improved the financial position of the Company, and created courts of justice and some semblance of a police force From 1772 to 1774 he was Governor of Bengal, and from 1774 to 1775

he was the first Governor-General, nominated under an Act of Parliament passed in the previous year His financial reforms, and the forced contributions he enacted from the rebellious Chet Singh and the Begam of Oudh, were interpreted in England as acts of oppression and formed, together with his action in the trial of Nuncomar for forgery, the basis of his seven years' trial before the House of Lords which ended in a verdict of not guilty on all the charges But there is much more for which his administration is justly famous The recovery of the Marathas from their defeat at Panipat was the cardinal factor that influenced his policy towards the native states One frontier was closed against Maratha invasion by the loan of a British brigade to the Nawab Wazir of Oudh, for his war against the Rohillas, who were intriguing with the Marathas In Western India he found himself committed to the two Maratha wars (1775-82) owing to the ambition of the Bombay Government to place its own nominee on the throne of the Peshwa at Poona, and the Bengal troops that he sent over made amends, by the conquest of Gujrat and the capture of Gwalior, for the disgrace of Wadgaon where the Marathas overpowered a Bombay army. In the South—where interference from Madras had already led (1769) to what is known as the first Mysore war, a disastrous campaign against Hyder Ali and the Nizam—he found the Madras Government again in conflict with those two potentates The Nizam he won over by diplomacy, but against Hyder Ali he had to despatch a Bengal army under Sir Eyre Coote Hyder Ali died in 1782 and two years later a treaty was made with his son Tipu It was in these acts of intervention in distant provinces that Hastings showed to best advantage as a great and courageous man, cautious, but swift in action when required He was succeeded, after an interregnum, by Lord Cornwallis (1786-93) who built on the foundations of civil administration laid by Hastings, by entrusting criminal jurisdiction to Europeans and establishing an Appellate Court of Criminal Judicature at Calcutta In the Civil Service he separated the functions of the District Collector and Judge and organized the "writers" and "merchants" of the Company into an administrative Civil Service This system was subsequently extended to Madras and Bombay Lord Cornwallis is better known for his introduction, on orders from England, of the Permanent Settlement in Bengal (See article on Land Revenue) A third Mysore war was waged during his tenure of office which ended in the submission of Tipu Sultan Sir John Shore (Lord Teignmouth), an experienced Civil Servant, succeeded Lord Cornwallis, and, in 1798, was followed by Lord Wellesley, the friend of Pitt, whose projects were to change the map of India

Lord Wellesley's Policy.

The French in general, and "the Corsican" in particular, were the enemy most to be dreaded for a few years before Lord Wellesley took up his duties in India, and he formed the scheme of definitively ending French schemes in Asia by placing himself at the head of a great Indian confederacy He started by obtaining from the Nawab of Oudh the cession of large tracts of territory in lieu of payments overdue as subsidies for British troops, he then won over the Nizam to the British side, and, after exposing the intrigues of Tipu Sultan with the French, embarked on the fourth Mysore war which ended (1799) in the fall of Seringapatam and the gallant death of Tipu Part of Mysore, the Carnatic, and Tanjore roughly constituting the Madras Presidency of to-day then passed to British rule The five Maratha powers—the Peshwa of Poona, the Gaekwar of Baroda, Sindhia of Gwalior, Holkar of Indore and the Raja of Nagpur—had still to be brought into the British net The Peshwa, after being defeated by Holkar, fled to British territory and signed the Treaty of Bassein which led to the third Maratha war (1802-04) as it was regarded by Sindhia and the Raja of Nagpur as a betrayal of Maratha independence In this, the most successful of British campaigns in India, Sir Arthur Wellesley (the Duke of Wellington) and General (Lord) Lake carried all before them, the one by his victories at Assaye and Argaum and the other at Aligarh and Laswari Later operations, such as Colonel Monson's retreat through Central India, were less fortunate The great acquisitions of territory made under Lord Wellesley proved so expensive that the Court of Directors, becoming impatient, sent out Lord Cornwallis a second time to make peace at any price He, however, died soon after his arrival in India, and Sir George Barlow carried on the government (1805-7) until the arrival of a stronger ruler, Lord Minto He managed to keep the peace in India for six years, and to add to British dominions by the conquest of Java and Mauritius His foreign policy was marked by another new departure, inasmuch as he opened relations with the Punjab, Persia, and Afghanistan, and concluded a treaty with Ranjit Singh, at Lahore, which made that Sikh ruler the loyal ally of the British for life

The successor of Lord Minto was Lord Moira, who found himself obliged almost at once to declare war on the Gurkhas of Nepal, who had been encroaching on British territory After initial reverses, the English, under General Ochterlony, were successful and the Treaty of Sagauli (1816) was drawn up which defines British relations with Nepal to the present day For this success Lord Moira was made Marquis of Hastings In the same year he made preparations for the last Maratha war (1817-18) which was made necessary by the lawless conduct of the Pindaris, gangs of Pathan or Rohilla origin, whose chief patrons were the rulers of Native States The large number of 120,000 that he collected for this purpose destroyed the Pindaris, annexed the dominions of the rebellious Peshwa of Poona, protected the Rajput States, made Sindhia enter upon a new treaty, and compelled Holkar to give up part of his territory Thus Lord Hastings established the British power more firmly than ever and when he resigned, in 1823, all the Native States outside the Punjab had become parts of the political system and British interests were permanently secured from the Persian Gulf to Singapore Lord Amherst followed Lord Hastings, and his five years' rule (1823-28) are memorable for the first Burmese war and the capture of Bharatpur The former opera-

tion was undertaken owing to the insolent demands and raids of the Burmese, and resulted in the Burmese ceding Assam, Aracan, and the coast of Martaban and their claims to the lower provinces The capture of Bharatpur by Lord Combermere (1826) wiped out the repulse which General Lake had received there twenty years earlier A disputed succession on this occasion led to the British intervention

Social Reform.

A former Governor of Madras, Lord William Bentinck, was the next Governor-General His epitaph by Macaulay, says "He abolished cruel rites, he effaced humiliating distinctions, he gave liberty to the expression of public opinion, his constant study was to elevate the intellectual and moral character of the nations committed to his charge"

Some of his financial reforms, forced on him from England, and his widening of the gates by which educated Indians could enter the service of the Company, were most unpopular at the time, but were eclipsed by the acts he took for the abolition of *Sati*, or widow-burning, and the suppression—with the help of Captain Sleeman—of the professional hereditary assassins known as *Thags* In 1832 he annexed Cachar, and, two years later, Coorg The incompetence of the ruler of Mysore forced him to take that State also under British administration—where it remained until 1881 His rule was marked in other ways by the despatch of the first steamship that made the passage from Bombay to Suez, and by his settlement of the long educational controversy in favour of the advocates of instruction in English and the vernaculars Lord William Bentinck left India (1835) with his programme of reforms unfinished The new Charter Act of 1833 had brought to a close the commercial business of the Company and emphasized their position as rulers of an Indian Empire in trust for the Crown By it the whole administration, as well as the legislation of the country, was placed in the hands of the Governor-General in Council, and authority was given to create a Presidency of Agra. Before his retirement Bentinck assumed the statutory title of Governor-General of India (1834), thus marking the progress of consolidation since Warren Hastings in 1774 became the first Governor-General of Fort William. Sir Charles Metcalfe, being senior member of Council, succeeded Lord William Bentinck, and during his short tenure of office carried into execution his predecessor's measure for giving entire liberty to the press

Afghan Wars.

With the appointment of Lord Auckland as Governor-General (1836-42) there began a new era of war and conquest Before leaving London he announced that he looked with exultation to the prospect of "promoting education and knowledge, and of extending the blessings of good Government and happiness to millions in India" but his administration was almost exclusively comprised in a fatal expedition to Afghanistan, which dragged in its train the annexation of Sind, the Sikh wars, and the inclusion of Baluchistan in the protectorate of India The first Afghan war was undertaken partly to counter the Russian advance in Central Asia and partly to place on the throne at Kabul the dethroned ruler Shah Shuja in place of Dost Mahomed The latter object was easily attained (1839) and for two years Afghanistan remained in the military occupation of the British In 1841 Sir Alexander Burnes was assassinated in Kabul and Sir William Macnaghten suffered the same fate in an interview with the son of Dost Mahomed The British commander in Kabul, Gen. Elphinstone, was old and feeble, and after two months' delay he led his army of 4,500 and 12,000 camp followers back towards India in the depth of winter Between Kabul and Jallalabad the whole force perished, either at the hands of the Afghans or from cold, and Dr Brydon was the only survivor who reached the latter city Lord Ellenborough succeeded Lord Auckland and was persuaded to send an army of retribution to relieve Jallalabad One force under Gen Pollock relieved Jallalabad and marched on Kabul, while Gen Nott, advancing from Kandahar, captured Ghazni and joined Pollock at Kabul (1842) The bazaar at Kabul was blown up, the prisoners rescued, and the army returned to India leaving Dost Mahomed to take undisputed possession of his throne The drama ended with a bombastic proclamation from Lord Ellenborough and the parade through the Punjab of the (spurious) gates of Somnath taken from the tomb of Mahmud of Ghazni

Sikh Wars.

Lord Ellenborough's other wars—the conquest of Sind by Sir Charles Napier and the suppression of an outbreak in Gwalior—were followed by his recall, and the appointment of Sir Henry (1st Lord) Hardinge to be Governor-General A soldier Governor-General was not unacceptable, for it was felt that a trial of strength was imminent between the British and the remaining Hindu power in India, the Sikhs Ranjit Singh, the founder of the Sikh Kingdom, had died in 1839, loyal to the end to the treaty he had made with Metcalfe thirty years earlier He left no son capable of ruling, and the *khalsa*, or central council of the Sikh army, was burning to measure its strength with the British sepoys The intrigues of two men, Lal Singh and Tej Singh, to obtain the supreme power led to their crossing the Sutlej and invading British territory Sir Hugh Gough, the Commander-in-Chief, and the Governor-General hurried to the frontier, and within three weeks four pitched battles were fought—at Mudki, Ferozeshah, Aliwal and Sobraon The Sikhs were driven across the Sutlej and Lahore surrendered to the British, but the province was not annexed By the terms of peace the infant Dhuleep Singh was recognized as Rajah, Major Henry Lawrence was appointed Resident, to assist the Sikh Council of Regency, at Lahore, the Jullundur Doab was added to British territory, the Sikh army was limited, and a British force was sent to garrison the Punjab on behalf of the child Rajah. Lord Hardinge returned to England (1848) and was succeeded by Lord Dalhousie the greatest of Indian proconsuls.

Dalhousie had only been in India a few months when the second Sikh war broke out. In the attack on the Sikh position at Chillianwala the British lost 2,400 officers and men

besides four guns and the colours of three regiments but before reinforcements could arrive from England, bringing Sir Charles Napier as Commander-in-Chief, Lord Gough had restored his reputation by the victory of Gujrat which absolutely destroyed the Sikh army As a consequence the Punjab was annexed and became a British province (1849), its pacification being so well carried out, under the two Lawrences that on the out-break of the Mutiny eight years later it remained not only quiet but loyal In 1852 Lord Dalhousie had again to embark on war, this time in Burma, owing to the ill-treatment of British merchants in Rangoon The lower valley of the Irawaddy was occupied from Rangoon to Prome and annexed, under the name of Pegu, to those provinces that had been acquired in the first Burmese war British territories were enlarged in many other directions during Lord Dalhousie's tenure of office His "doctrine of lapse" by which British rule was substituted for Indian in States where continued misrule on the failure of a dynasty made this change possible, came into practice in the cases of Satara, Jhansi, and Nagpur (which last-named State became the Central Provinces) where the rulers died without leaving male heirs Oudh was annexed on account of its misrule Dalhousie left many other marks on India He reformed the administration from top to bottom, founded the Public Works Department, initiated the railways, telegraphs and postal system, and completed the great Ganges canal He also detached the Government of Bengal from the charge of the Governor-General, and summoned representatives of the local Governments to the deliberations of the Government of India Finally, in education he laid down the lines of a department of public instruction and initiated more practical measures than those devised by his predecessors It was his misfortune that the mutiny, which so swiftly followed his resignation, was by many critics in England attributed to his passion for change

The Sepoy Mutiny.

Dalhousie was succeeded by Lord Canning in 1856, and in the following year the sepoys of the Bengal army mutinied and all the valley of the Ganges from Delhi to Patna rose in rebellion The causes of this convulsion are difficult to estimate, but are probably to be found in the unrest which followed the progress of English civilisation, in the spreading of false rumours that the whole of India was to be subdued, in the confidence the sepoy troops had acquired in themselves under British leadership, and in the ambition of the educated classes to take a greater share in the government of the country Added to this, there was in the deposed King of Delhi, Bahadur Shah, a centre of growing disaffection Finally there was the story —not devoid of truth—that the cartridges for the new Enfield rifle were greased with fat that rendered them unclean for both Hindus and Mahomedans And when the mutiny did break out it found the Army without many of its best officers who were employed in civil work, and the British troops reduced, in spite of Lord Dalhousie's warnings, below the number he considered essential for safety On May 10 the sepoys at Meerut rose in mutiny, cut down a few Europeans, and, unchecked by the large European garrison, went off to Delhi where next morning the Mahomedans rose From that centre the mutiny spread through the North-Western Provinces and Oudh into Lower Bengal Risings in the Punjab were put down by Sir John Lawrence and his subordinates, who armed the Sikhs, and with their help reduced the sepoys, and Lawrence was subsequently able to send a strong body of Sikhs to aid in the siege of Delhi The native armies of Madras and Bombay remained for the most part true to their colours. In Central India, the contingents of some of the great chiefs joined the rebels, but Hyderabad was kept loyal by the influence of its minister, Sir Salar Jung

The interest of the war centres round Delhi, Cawnpore and Lucknow, though in other places massacres and fighting occurred The siege of Delhi began on June 8 when Sir Henry Barnard occupied the Ridge outside the town Barnard died of cholera early in July, and Thomas Reed, who took his place, was obliged through illness to hand over the command to Archdale Wilson In August Nicholson arrived with a reinforcement from the Punjab In the meantime the rebel force in Delhi was constantly added to by the arrival of new bodies of mutineers, attacks were frequent and the losses heavy cholera and sunstroke carried off many victims on the Ridge and when the final assault was made in September the Delhi army could only parade 4,720 infantry, of whom 1,960 were Europeans The arrival of siege guns made it possible to advance the batteries on September 8, and by the 13th a breach was made On the following day three columns were led to the assault, a fourth being held in reserve Over the ruins of the Kashmir Gate, blown in by Home and Salkeld, Col Campbell led his men and Nicholson formed up his troops within the walls By nightfall the British, with a loss of nearly 1,200 killed and wounded, had only secured a foothold in the city Six days' street fighting followed and Delhi was won, but the gallant Nicholson was killed at the head of a storming party Bahadur Shah was taken prisoner, and his two sons were shot by Captain Hudson.

Massacre at Cawnpore.

At Cawnpore the sepoys mutinied on June and found in Nana Sahib, the heir of the last Peshwa, a willing leader in spite of his former professions of loyalty There a European force of 240 with six guns had to protect 870 non-combatants, and held out for 22 days, surrendering only on the guarantee of the Nana that they should have a safe conduct as far as Allahabad They were embarking on the boats on the Ganges when fire was opened on them, the men being shot or hacked to pieces before the eyes of their wives and children and the women being mutilated and murdered in Cawnpore to which place they were taken back. Their bodies were thrown down a well just before Havelock, having defeated the Nana's forces, arrived to the relief In Lucknow a small garrison held out in the Residency from July 2 to September 25 against tremendous odds and enduring the most fearful hardships The relieving force, under Havelock and Outram, was itself invested, and the garrison was

not finally delivered until Sir Colin Campbell arrived in November Fighting continued for 18 months in Oudh, which Sir Colin Campbell finally reduced, and in Central India, where Sir Hugh Rose waged a brilliant campaign against the disinherited Rani of Jhansi—who died at the head of her troops—and Tantia Topi

Transfer to the Crown

With the end of the mutiny there began a new era in India, strikingly marked at the outset by the Act for the Better Government of India (1858) which transferred the entire administration from the Company to the Crown By that Act India was to be governed by, and in the name of, the Sovereign through a Secretary of State, assisted by a Council of fifteen members At the same time the Governor-General received the title of Viceroy The European troops of the Company, numbering about 24,000 officers and men were—greatly resenting the transfer—amalgamated with the Royal service, and the Indian Navy was abolished On November 1, 1858, the Viceroy announced in Durbar at Allahabad that Queen Victoria had assumed the government of India, and proclaimed a policy of justice and religious toleration A principle already enunciated in the Charter Act of 1833 was enforced, and all, of every race or creed, were to be admitted as far as possible to those offices in the Queen's service for which they might be qualified The aim of the Government was to be the benefit of all her subjects in India—'In their prosperity will be our strength, in their contentment our security, and in their gratitude our best reward" Peace was proclaimed in July 1859, and in the cold weather Lord Canning went on tour in the northern provinces, to receive the homage of loyal chiefs and to assure them that the "policy of lapse" was at an end A number of other important reforms marked the closing years of Canning's Viceroyalty The India Councils Act (1861) augmented the Governor-General's Council, and the Councils of Madras and Bombay by adding non-official members, European and Indian, for legislative purposes only By another Act of the same year High Courts of Judicature were constituted To deal with the increased debt of India, Mr James Wilson was sent from England to be Financial Member of Council, and to him are due the customs system, income tax, license duty, and State paper currency The cares of office had broken down the Viceroy's health Lady Canning died in 1862 and this hastened his departure for England where he died in June of that year His successor, Lord Elgin, lived only a few months after his arrival in India, and was succeeded by Sir John (afterwards Lord) Lawrence, the "saviour of the Punjab"

Sir John Lawrence

The chief task that fell to Sir John Lawrence was that of reorganising the Indian military system, and of reconstructing the Indian army The latter task was carried out on the principle that in the Bengal army the proportion of Europeans to Indians in the infantry and cavalry should be one to two, and in the Madras and Bombay armies one to three the artillery was to be almost wholly European. The re-organisation was carried out in spite of financial difficulties and the saddling of Indian revenues with the cost of a war in Abyssinia with which India had no direct concern, but operations in Bhutan were all the drain made on the army in India while the re-organising process was being carried on Two severe famines—in Orissa (1866) and Bundelkhand and Upper Hindustan (1868-9)—occurred while Sir John Lawrence was Viceroy, and he laid down the principle for the first time in Indian history, that the officers of the Government would be held personally responsible for taking every possible means to avert death by starvation He also created the Irrigation Department under Col (Sir Richard) Strachey Two commercial crises of the time have to be noted One seriously threatened the tea industry in Bengal The other was the consequence of the wild gambling in shares of every description that took place in Bombay during the years of prosperity for the Indian cotton industry caused by the American Civil War The "Share Mania," however, did no permanent harm to the trade of Bombay, but was, on the other hand, largely responsible for the series of splendid buildings begun in that city during the Governorship of Sir Bartle Frere Sir John Lawrence retired in 1869, having passed through every grade of the service from an Assistant Magistracy to the Viceroyalty Lord Mayo, who succeeded him, created an Agricultural Department and introduced the system of Provincial Finance, thus fostering the impulse to local self-government He also laid the foundation for the reform of the salt duties, thereby enabling his successors to abolish the inter-provincial customs lines Unhappily his vast schemes for the development of the country by extending communications of every kind were not carried out to the full by him, for he was murdered in the convict settlement of the Andaman Islands, in 1872 Lord Northbrook (Viceroy 1872-6) had to exercise his abilities chiefly in the province of finance A severe famine which threatened Lower Bengal in 1874 was successfully warded off by the organization of State relief and the importation of rice from Burma The following year was notable for the deposition of the Gaikwar of Baroda for misgovernment, and for the tour through India of the Prince of Wales (the late King Edward VII) The visit of the Duke of Edinburgh to India when Lord Mayo was Viceroy had given great pleasure to those with whom he had come in touch, and had established a kind of personal link between India and the Crown The Prince of Wales's tour aroused unprecedented enthusiasm for and loyalty to the British Raj, and further encouragement was given to the growth of this spirit when, in a durbar of great magnificence held on January 1st, 1877, on the famous Ridge at Delhi, Queen Victoria was proclaimed Empress of India The Viceroy of that time, Lord Lytton, had, however, to deal with a situation of unusual difficulty. Two successive years of drought produced, in 1877-78, the worst famine India had known The most strenuous exertions were made to mitigate its effects, and eight crores of rupees were spent in importing grain, but the loss of life was estimated at 5½ millions At this time also Afghan affairs once more became prominent

Second Afghan War.

The Amir, Sher Ali, was found to be intriguing with Russia and that fact, coupled with his repulse of a British mission led to the second Afghan War The British forces advanced by three routes—the Khyber, the Kurram, and the Bolan—and gained all the important vantage points of Eastern Afghanistan Sher Ali fled and a treaty was made with his son Yakub Khan, which was promptly broken by the murder of Sir Louis Cavagnari, who had been sent as English envoy to Kabul Further operations were thus necessary, and Sir F (now Lord) Roberts advanced on the capital and defeated the Afghans at Charasia A rising of the tribes followed, in spite of Sir D Stewart's victory at Ahmed Kheyl and his advance from Kabul to Kandahar A pretender, Sirdar Ayub Khan, from Herat prevented the establishment of peace, defeated Gen Burrows' brigade at Maiwand, and invested Kandahar He was routed in turn by Sir F Roberts who made a brilliant march from Kabul to Kandahar After the British withdrawal fighting continued between Ayub Khan and Abdur Rahman, but the latter was left undisputed Amir of Afghanistan until his death in 1901

In the meantime Lord Lytton had resigned (1880) and Lord Ripon was appointed Viceroy by the new Liberal Government Lord Ripon's administration is memorable for the freedom given to the Press by the repeal of the Vernacular Press Act, for his scheme of local self-government which developed municipal institutions, and for the attempt to extend the jurisdiction of the criminal courts in the Districts over European British subjects, independently of the race or nationality of the presiding judge This attempt, which created a feeling among Europeans in India of great hostility to the Viceroy, ended in a compromise in 1884 Other reforms were the re-establishment of the Department of Revenue and Agriculture, the appointment of an Education Commission with a view to the spread of popular instruction on a broader basis, and the abolition by the Finance Minister (Sir Evelyn Baring, now Lord Cromer) of a number of customs duties Lord Dufferin, who succeeded Lord Ripon in 1884, had to give his attention more to external than internal affairs one of his first acts was to hold a durbar at Rawalpindi for the reception of the Amir of Afghanistan which resulted in the strengthening of British relations with that ruler In 1885 a third Burmese war became necessary owing to the truculent attitude of King Thibaw and his intrigues with foreign Powers The expedition, under General Prendergast, occupied Mandalay without difficulty and King Thibaw was exiled to Ratnagiri, where he still lives on a liberal pension His dominions of Upper Burma were annexed to British India on the first of January 1886

The Russian Menace.

Of greater importance at the time were the measures taken to meet a possible, and as it then appeared a probable, attack on India by Russia These preparations, which cost over two million sterling, were hurried on because of a collision which occurred between Russian and Afghan troops at Penjdeh, during the delimitation of the Afghan frontier towards Central Asia, and which seemed likely to lead to a declaration of war by Great Britain War was averted, but the Penjdeh incident had called attention to a menace that was to be felt for nearly a generation more, it had also served to elicit from the Princes of India an unanimous offer of troops and money in case of need That offer bore fruit under the next Viceroy, Lord Lansdowne, when the present system of Imperial Service Troops was organised Under Lord Lansdowne's rule also the defences of the North-Western Frontier were strengthened, on the advice of Sir Frederick (now Earl) Roberts, who was then Commander-in-Chief in India Another form of precautionary measure against the continued aggression of Russia was taken by raising the annual subsidy paid by the Indian Government to the Amir from eight to twelve lakhs.

On the North-Eastern Frontier there occurred (1891) in the small State of Manipur a revolution against the Raja that necessitated an inquiry on the spot by Mr Quinton, the Chief Commissioner of Assam Mr Quinton, the commander of his escort, and others, were treacherously murdered in a conference and the escort ignominously retreated This disgrace to British arms led to several attacks on frontier outposts which were brilliantly defeated Manipur was occupied by British troops and the government of the State was reorganised under a Political Agent Lord Lansdowne's term of office was distinguished by several other events, such as the passing of the Parliamentary Act (Lord Cross's Act, 1892), which increased the size of the Legislative Councils as well as the number of non-officials in them legislation aimed at social and domestic reform among the Hindus' and the closing of the Indian Mints to the free coinage of silver (1893) In Burma great progress was made, under Sir Alexander Mackenzie, as Chief Commissioner comparative order was established, and large schemes for the construction of railways, roads, and irrigation works were put in hand (The Province was made a Lieutenant-Governorship in 1897)

Frontier Campaigns.

Lord Elgin, who succeeded Lord Lansdowne in 1894, was confronted at the outset with a deficit of Rs 2½ crores, due to the fall in exchange (In 1895 the rupee fell as low as 1s 1*d*) To meet this the old five per cent import duties were imposed on a number of commodities, but not on cotton goods and within the year the duty was extended to piece-goods, but not to yarn The reorganisation of the Army, which involved the abolition of the old system of Presidency Armies, had hardly been carried out when a number of risings occurred along the North-West Frontier In 1895 the British Agent in Chitral—which had come under British influence two years previously when Sir H M Durand had demarcated the southern and eastern boundaries of Afghanistan—was besieged and had to be rescued by an expeditionary force Two years later the Wazirs, Swatis, and Mohmands attacked the British positions in Malakand, and the Afridis closed the Khyber Pass Peace was only established after a prolonged campaign (the Tirah campaign) in which 40,000 troops were employed and [illegible]

and men had been lost This was in itself a heavy burden on the finances of India, which was increased by the serious and widespread famine of 1896-97 and by the appearance in India of bubonic plague The methods taken to prevent the spread of that disease led, in Bombay, to rioting, and elsewhere to the appearance in the vernacular press of seditious articles which made it necessary to make more stringent the law dealing with such writings

Lord Curzon's Viceroyalty.

With famine and plague Lord Curzon also, who succeeded Lord Elgin in 1899, had to deal In 1901 the cycle of bad harvests came to an end, but plague increased, and in 1904 deaths from it were returned at over one million Of the many problems to which Lord Curzon directed his attention, only a few can be mentioned here some indeed claim that his greatest work in India was not to be found in any one department but was in fact the general gearing up of the administration which he achieved by his unceasing energy and personal example of strenuous work. He had at once to turn his attention to the North-West Frontier The British garrisons beyond our boundary were gradually withdrawn and replaced by tribal levies, and British forces were concentrated in British territory behind them as a support An attempt was made to check the arms traffic and work on strategic railways was pushed forward The fact that in seven years he only spent a quarter of a million upon repressive measures and only found it necessary to institute one blockade (against the Mahsud Waziris) is the justification of this policy of compromise between the Lawrence and Forward schools of thought In 1901 the trans-Indus districts of the Punjab were separated from that Province, and together with the political charges of the Malakand, the Khyber, Kurram, Tochi, and Wana were formed into the new North-West Frontier Province, under a Chief Commissioner directly responsible to the Government of India That year also witnessed the death of Abdur Rahman, the Amir of Afghanistan, and the establishment of an understanding with his successor Habibullah In 1904 the attitude of the Dalai Lama of Tibet being pro-Russian and anti-British, it became necessary to send an expedition to Lhasa under Colonel (Sir Francis) Younghusband The Dalai Lama abdicated and a treaty was concluded with his successor.

Lord Curzon as Viceroy.

In his first year of office Lord Curzon passed the Act which, in accordance with the recommendations of the Fowler Commission, practically fixed the value of the rupee at 1*s* 4*d*, and in 1900 a Gold Reserve fund was created The educational reforms that marked this Viceroyalty are dealt with elsewhere chief among them was the Act of 1904 reorganising the governing bodies of Indian Universities Under the head of agrarian reform must be mentioned the Punjab Land Alienation Act, designed to free the cultivators of the soil from the clutches of money-lenders, and the institution of Agricultural banks. The efficiency of the Army was increased (Lord Kitchener was Commander-in-Chief) by the re-armament artillery, and the reorganisation of the transport service. In his relations with the Feudatory Chiefs, Lord Curzon emphasized their position as partners in administration, and he founded the Imperial Cadet Corps to give a military education to the sons of ruling and aristocratic families In 1902 the British Government obtained from the Nizam a perpetual lease of the Assigned Districts of Berar in return for an annual payment of 25 lakhs The accession of King Edward VII was proclaimed in a splendid Durbar on January 1, 1903 In 1904 Lord Curzon returned to England for a few months but was re-appointed to a second term of office, Lord Ampthill, Governor of Madras, having acted as Viceroy during his absence The chief act of this second term was the partition of Bengal and the creation of a new Province of Eastern Bengal and Assam—a reform, designed to remove the systematic neglect of the trans-Gangetic areas of Bengal, which evoked bitter and prolonged criticism In 1905 Lord Curzon resigned, being unable to accept the proposals of Lord Kitchener for the re-adjustment of relations between the Army headquarters and the Military Department of the Government, and being unable to obtain the support of the Home Government He was succeeded by Lord Minto, the grandson of a former Governor-General It was a stormy heritage to which Lord Minto succeeded, for the unrest which had long been noticed developed in one direction into open sedition The occasion of the outburst in Bengal was the partition of that province The causes of the flood of seditious writings and speeches, of the many attempts at assassination, and of the boycott of British goods are less easily definable The mainspring of the unrest was "a deep-rooted antagonism to all the principles upon which Western society, especially in a democratic country like England, has been built up"

Political Outrages.

Outside Bengal attempts to quell the disaffection by the ordinary law were fairly successful But scarcely any province was free from disorder of some kind and, though recourse was had to the deportation of persons without reason assigned under an Act of 1818, special Acts had to be passed to meet the situation, *viz* — an Explosives Act, a Prevention of Seditious Meetings Act, and a Criminal Law Amendment Act which provides for a magisterial inquiry in private and a trial before three judges of the High Court without a jury The need for this reinforcement of the law may be shown by a list of the principal political outrages in India while Lord Minto was Viceroy and subsequent to his departure:—

December, 1907—Attempt to wreck the Lieutenant-Governor of Bengal's train at Naraingarh

December, 1907—Attempt on the life of Mr. B C. Allen at Goalundo

March, 1908—Second attempt to wreck Sir Andrew Fraser's train at Chandernagore

March, 1908.—Attempt to shoot Mr. Higginbotham, a missionary, at Kushtea.

April 11th, 1908—Bomb thrown at the Mayor of Chandernagore

April 30th 1908 —Murder of Mrs and Miss Kennedy at Mozaffarpore

August, 1908 —Mr Camsie, Mill-manager, severely injured by a bomb on the E B S Railway

August, 1908 —Murder of Narendra Nath Gossain, the approver in the Alipore case, in Alipore Jail

November 5th, 1908 —Attempt on the life of Sir Andrew Fraser at Overtoun Hall

November 9th, 1908 —Murder of Inspector Nundo Lall Banerjee, who arrested Khudiram Bose, in Serpentine Lane, Calcutta

November, 1908 —Sukumar, alleged informer, murdered at Dacca

February 10th, 1908 —Murder of Babu Ashutosh Biswas in the Courtyard at Alipore

June, 1909 —Prio Mohun Chatterji (brother of an approver) stabbed to death at Katchjangpur

July 1st, 1909 —Assassination of Lieutenant-Colonel Sir William Curzon Wyllie, at the Imperial Institute, London

November 13th, 1909 —Bomb explosion near H E. Lord Minto's carriage at Ahmedabad

December 21st, 1909 —Assassination of Mr A M T Jackson, I C S, Collector of Nasik

January 24th, 1910 —Murder of Khan Bahadur Shams-ul-Alum

February 21st, 1911 —Murder of Head Constable Srish Chakravarty

March 2nd, 1911 —Attempt to murder Mr. Cowley, P W D, with a bomb in Calcutta

April 19th, 1911 —Babu Manmohan Dey, witness in Munshiganj bomb case, shot dead at Routhbog

June 17th, 1911 —Murder of Mr Ashe, Collector of Tinnevelly

June 18th, 1911 —Murder of Sub-Inspector Raj Kumar Roy at Mymensingh

July 1911 —Sonarang case, Rashun Dewan Duffadar, Amani-Dewan, and Kali Benode Chakravarti shot at Netiapati

September 21st, 1912 —Head Constable Radhilal Roy shot dead at Dacca

December 13th, 1912 —Attempt to assassinate Abdul Rahaman, one of the witnesses for the police in the Midnapore conspiracy case

December 23rd, 1912 —H E Lord Hardinge wounded, and one of his servants killed, by a bomb during the State entry into Delhi

March 27th, 1913 —Attempt to murder Mr Gordon, the sub-divisional officer, with a bomb at Molvi Bazaar Sylhet

May 17th, 1913 —Chaprasi in the employ of the Lahore Gymkhana Club killed by a bomb near the Lawrence Gardens, Lahore

September 29th, 1913 —Murder of Head Constable Haripado Deb, College Square, Calcutta

September 30th, 1913 —Bankim Chandra Chowdhury, Inspector of Police at Mymensingh, formerly of Dacca, killed by a bomb

January 19th, 1914 —Nilpendra Nath Ghose, Inspector of the Calcutta C I D, shot dead on the Chitpur road, Calcutta A Teli boy, named Ananda, was also shot dead

The list, it will be seen, includes two attempts on the life of the Viceroy himself It does not include a number of equally significant disturbances, such as the riots in Bombay (June 1908), during the trial of Tilak, which led to considerable loss of life Concurrently with these repressive measures steps were taken to extend representative institutions In 1907 a Hindu and a Mahomedan were appointed to the Secretary of State's Council, and in 1909 a Hindu was appointed for the first time to the Viceroy's Council The Indian Councils Act of 1909 carried this policy farther by reconstituting the legislative councils and conferring upon them wider powers of discussion. The executive councils of Madras and Bombay were enlarged by the addition of an Indian member

Lord Minto

As regards foreign policy, Lord Minto's Viceroyalty was distinguished by the conclusion (1907) between Great Britain and Russia of an agreement on questions likely to disturb the friendly relations of the two countries in Asia generally, and in Persia, Afghanistan and Tibet in particular Two expeditions had to be undertaken on the North-West frontier, against the Zakka Khels and the Mohmands, and ships of the East Indies Squadron were frequently engaged off Maskat and in the Persian Gulf in operations designed to check the traffic in arms through Persia and Mekran to the frontier of India. Towards Native States Lord Minto adopted a policy of less interference than that followed by his predecessor He invited their views on sedition, and, in a speech at Udaipur, disclaimed any desire to force a uniform system of administration in Native States, and said he preferred their development with due regard to treaties and local conditions Lord Minto left India in November, 1910, a few weeks after Lord Morley had resigned the Secretaryship of State, the tenure of their respective posts having been practically identical in point of time The position of the Viceroy had in those years materially changed Lord Minto had a weak Council, and this weakness was reflected in the government of Bengal and Madras, but it is more important to note that Lord Morley had extended the policy of transferring the actual government of India from India to London, to such an extent that the Under-Secretary for India was able to describe the Viceroy as merely the agent of the Secretary of State

Visit of the King and Queen.

Sir Charles (Lord) Hardinge was appointed to succeed Lord Minto His first year in India was marked by a weak monsoon and famine in parts of Western India, still more by the visit to India of the King Emperor and the Queen, who arrived at Bombay on December 2, 1911 From there they proceeded to Delhi where, in the most magnificent durbar ever held in India, the coronation was proclaimed and various boons, including an annual grant of 50 lakhs for popular education, were announced At the same ceremony His Majesty announced the transfer of the capital of India from Calcutta to Delhi, the reunion of the two Bengals under a Governor-in-Council, the formation of a new Lieutenant-Governorship for Behar, Chota Nagpur, and Orissa, and the restoration of Assam to the charge of a Chief

Commissioner. On December 14, a review of 60,000 British and Indian troops was held, and on the 15th Their Majesties each laid a foundation stone of the new capital From Delhi the King went to Nepal, and the Queen to Agra and Rajputana, afterwards meeting at Bankipur and going to Calcutta Thence they returned to Bombay and sailed for England on January 10 "From all sources, public and private," wrote His Majesty to the Premier, "I gather that my highest hopes have been realised Our satisfaction will be still greater if time proves that our visit has conduced to the lasting good of India and of the Empire at large."

In March,1912, a committee of experts was appointed to advise the Government of India as to the site of the new capital Temporary buildings were erected to accommodate the Government, and on December 23 the State entry into Delhi was made by the Viceroy This ceremony was marred by an attempt on His Excellency's life as he passed down the Chandni Chauk The bomb thrown from a house killed an attendant behind the Howdah in which the Viceroy was sitting, seriously wounded Lord Hardinge, but left Lady Hardinge unscathed The courage displayed by Their Excellencies was unsurpassed and elicited the admiration of all, but, in spite of the offer of large rewards, the assassin was not caught

Educational schemes claimed a large place in public attention during 1912 and 1913 In the former year a Royal Commission, under the presidency of Lord Islington, was appointed to inquire into the public services of India In 1912 also a Committee of four was appointed, under the Chairmanship of Field Marshal Lord Nicholson, to inquire into military policy and expenditure in India In the following year a Royal Commission was appointed under the Chairmanship of Mr Austen Chamberlain to investigate and report on certain administrative questions relating to Indian finance and currency which had for some years been much discussed particularly in India

In the North-East of India an expedition, under Gen. Bower, was despatched against the Abors for the punishment of the murderers of Mr Noel Williamson

In August, 1913, the demolition of a lavatory attached to a mosque in Cawnpore was made the occasion of an agitation among Indian Mahomedans and a riot in Cawnpore led to heavy loss of life Of those present at the riot, 106 were put on trial but subsequently released by the Viceroy before the case reached the Sessions, and His Excellency was able to settle the mosque difficulty by a compromise that was acceptable to the local and other Mahomedans

In October, 1913, it was announced that General Sir Beauchamp Duff had been appointed to succeed Sir O'Moore Creagh as Commander-in-Chief This was a departure from the long tradition of alternately choosing the Commander-in-Chief from the British and the Indian Army There were special reasons for the nomination of Sir Beauchamp Duff, who as Adjutant-General in India, and Chief of Staff during Lord Kitchener's term gave proof of his thorough knowledge of Indian conditions and his exceptional powers as a military administrator The Military changes in India in 1905 and 1909 had profoundly modified the duties of the Commander-in-Chief and had conferred on him alone duties formerly divided between the Commander-in-Chief and the Military Member of Council and had made him the administrative head of the Army.

In the latter part of 1913 considerable feeling was aroused in India by the circulation of stories—many of them shown to be unfounded—about the ill-treatment of Indians in South Africa Rioting by Indians in Natal was followed by the appointment by the Union Government of a Commission of Inquiry at which the Government of India was represented by Sir Benjamin Robertson The Commission's report afforded the basis of a settlement commonly regarded as equitable In the autumn of 1914 the Viceroy, at a Council meeting, outlined a reciprocal scheme for controlling emigration in India and in the Colonies, as an alternative to the principle of free migration between all parts of the Empire, for which the Government of India had long contended

In July the death of Lady Hardinge, wife of the Viceroy, took place in London after an operation The courage she had displayed at Delhi when the Viceroy was wounded by a bomb, and the sympathetic and active interest she had displayed in the women and children of India, had endeared her to all classes Her death was widely mourned, and her memory is to be perpetuated by a memorial originated by the Aga Khan

The various effects of the European war upon India are fully discussed elsewhere But it must here be set on record that the declaration of war was followed in India by an unprecedented declaration of loyalty on all sides, and the numerous offers of help or personal service made by the Chiefs and peoples aroused in England a feeling of intense gratitude A military force which is expected to reach 150,000, was sent from India to Europe and East Africa, within a short time of the outbreak of hostilities The announcement of that fact was made on the same day that a message from the King-Emperor was published In it His Imperial Majesty said —" Amongst the many incidents that have marked the unanimous uprising of the populations of my Empire in defence of its unity and integrity, nothing has moved me more than the passionate devotion to my Throne expressed both by my Indian and English subjects and by the Feudatory Princes and Ruling Chiefs of India and their prodigious offers of their lives and their resources in the cause of the realm Their one-voiced demand to be foremost in the conflict has touched my heart and has inspired to the highest issues the love and devotion which, as I well know, have ever linked my Indian subjects and myself" India was not included in the actual theatre of hostilities, except when Madras was subjected to a slight bombardment by the German cruiser "Emden," but shipping in the Bay of Bengal and in the Arabian Sea was on several occasions interfered with, and several vessels were sunk, by enemy ships

The impulse which drove the British to India was not conquest but trade The Government of India represents the slow evolution from conditions established to meet trading requirements On September 24, 1599, a few years before the deaths of Queen Elizabeth and Akbar, the merchants of London formed an association for the purpose of establishing direct trade with the East and were granted a charter of incorporation The Government of this Company in England was vested in a Governor with a General Court of Proprietors and a Court of Directors The factories and affairs of the Company on the East and West Coast of India, and in Bengal, were administered at each of the principal settlements of Madras (Fort St George), Bombay and Calcutta (Fort William), by a President or Governor and a Council consisting of the senior servants of the Company The three "Presidencies" were independent of each other and subordinate only to the Directors in England

Territorial Responsibility Assumed.

The collapse of Government in India consequent on the decay of Moghul power and the intrigues of the French on the East Coast forced the officers of the Company to assume territorial responsibility in spite of their own desires and the insistent orders of the Directors Step by step the Company became first the dominant, then the paramount power in India In these changed circumstances the system of government by mutually independent and unwieldy councils of the merchants at the Presidency towns gave rise to grave abuses Parliament intervened, and under the Regulating Act of 1773, a Governor-General and four councillors were appointed to administer the Presidency of Fort William (Bengal), and the supremacy of that Presidency over Madras and Bombay was for the first time established The subordinate Presidencies were forbidden to wage war or make treaties without the previous consent of the Governor-General of Bengal in Council, except in cases of imminent necessity Pitt's Act of 1784, which established the Board of Control in England, vested the administration of each of the three Presidencies in a Governor and three councillors, including the Commander-in-Chief of the Presidency Army The control of the Governor-General-in-Council was somewhat extended, as it was again by the Charter Act of 1793 Under the Charter Act of 1833 the Company was compelled to close its commercial business, and it became a political and administrative body holding its territories in trust for the Crown The same Act vested the direction of the entire civil and military administration and sole power of legislation in the Governor-General-in-Council, and defined more clearly the nature and extent of the control to be extended over the subordinate governments After the Mutiny, there was passed, in 1858, an Act transferring the Government of India from the Company to the Crown, This Act made no important change in the administration in India, but the Governor-General, as representing the Crown, became known as the Viceroy The Governor-General is the sole representative of the Crown in India, he is assisted by a Council, composed of high officials, each of whom is responsible for a special department of the administration

Functions of Government.

The functions of the Government of India are perhaps the most extensive of any great administration in the world. It claims a share in the produce of the land and in the Punjab and Bombay it has restricted the alienation of land from agriculturists to non-agriculturists It undertakes the management of landed estates where the proprietor is disqualified. In times of famine it undertakes relief works and other remedial measures on a great scale It manages a vast forest property and is the principal manufacturer of salt and opium It owns the bulk of the railways of the country, and directly manages a considerable portion of them, it has constructed and maintains most of the important irrigation works, it owns and manages the post and telegraph systems, it has the monopoly of the Note issue, and it alone can set the mints in motion. It lends money to municipalities, rural boards, and agriculturists and occasionally to owners of historic estates It controls the sale of liquor and intoxicating drugs and has direct responsibilities in respect to police, education, medical and sanitary operations and ordinary public works of the most intimate character The Government has also close relations with the Native States which collectively cover more than one-third of the whole area of India and comprise more than one-fifth of its population The distribution of these great functions between the Government of India and the provincial administrations fluctuates, broadly speaking it may be said that the tendency of the day is to confine the Government of India to control and the Local Governments to administration

Division of Responsibility.

The Government of India retains in its own hands all matters relating to foreign relations, defence, general taxation, currency, debt, tariffs, posts, telegraphs and railways The ordinary internal administration—the assessment and collection of revenue, education, medical and sanitary arrangements, and irrigation, buildings and roads, fall within the purview of the Local Governments In all these matters the Government of India exercises a general and constant control It prescribes lines of general policy, and tests their application from the annual administration reports of the Local Authorities It directly administers certain Imperial departments, such as Railways, Post Office, Telegraphs, the Survey of India and Geology, it employs a number of inspecting officers for those departments primarily left to Local Governments, including Agriculture, Irrigation, Forests, Medical and Archæology It receives, and when necessary modifies, the annual budgets of Local Governments, and every new appointment of importance, and every large addition even to minor establishments has to receive its specific sanction There also exists a wide field of appeal to the Government of India from officials or private individuals who may feel themselves aggrieved by the action of Local Governments, and outside the Presidencies of Madras, Bombay and Bengal, the approval of the Governor-General is necessary to the appointment of some of the most important officers of the provincial administration.

the supervision of the principal Native States rests directly with the Governor-General in-Council, but Local Governments have also responsibilities in this direction, where important States have historical association with them, and in the case of minor States

Personnel of the Government

The Governor-General and the "ordinary" members of his Council are appointed by the Crown No limit of time is specified for their tenure of office, but custom has fixed it at five years. There are six "ordinary" members of Council, three of whom must, at the time of their appointment, have been at least ten years in the service of the Crown in India, one of the three remaining members must be a Barrister, the qualifications of the fifth and sixth are not prescribed by statute The Indian civilians hold respectively the portfolios of Land Revenue and Agriculture, the Home, the Finance and the Education Departments The Law Member has charge of the Legislative Department, and a member with English official experience has charge of the Commerce and Industry Department The Viceroy acts as his own member in charge of Foreign affairs Railways are administered by a Board of three members, whose chairman has the status of a Secretary, and are under the general control of the Commerce and Industry Department The Commander-in-Chief may also be and in practice always is, an "extraordinary" member of the Council He holds charge of the Army Department The Governors of Madras, Bombay and Bengal become "extraordinary" members if the Council meets within their Presidencies The Council may assemble at any place in India which the Governor-General appoints, in practice it meets only in Delhi and Simla.

Business Procedure.

In regard to his own Department each Member of Council is largely in the position of a Minister of State, and has the final voice in ordinary departmental matters But any question of special importance, and any matter in which it is proposed to over-rule the views of a Local Government, must ordinarily be referred to the Viceroy Any matter originating in one department which also affects another must be referred to the latter, and in the event of the Departments not being able to agree, the case is referred to the Viceroy The Members of Council meet periodically as a Cabinet—ordinarily once a week—to discuss questions which the Viceroy desires to put before them, or which a member who has been over-ruled by the Viceroy has asked to be referred to Council If there is a difference of opinion in the Council the decision of the majority ordinarily prevails, but the Viceroy can over-rule a majority if he considers that the matter is of such grave importance as to justify such a step Each departmental office is in the subordinate charge of a Secretary, whose position corresponds very much to that of a permanent Under-Secretary of State in the United Kingdom, but with these differences—that the Secretary is present at Council meetings, that he attends on the Viceroy, usually once a week, and discusses with him all matters of importance arising in his Department, that he has the right of bringing to the Viceroy's special notice any case in which he considers that the Viceroy's concurrence should be obtained to action proposed by the Departmental Member of Council, and that his tenure of office is usually limited to three years The Secretaries have under them Deputy, Under and Assistant Secretaries, together with the ordinary clerical establishments The Secretaries and Under-Secretaries are usually members of the Indian Civil Service The Government of India has no Civil Service of its own as distinct from that of the Provincial Governments, and officers serving under the Government of India are borrowed from the Provinces

Government of India.

VICEROY AND GOVERNOR-GENERAL OF INDIA.

His Excellency the Right Hon BARON HARDINGE OF PENSHURST, G C B, G M S I, G C M G G M I E, G C V O, I S O, *assumed charge of office, 23rd November*, 1910

PERSONAL STAFF OF THE GOVERNOR-GENERAL

Private Secretary, Sir J H. Du Boulay, K C I E

Military Secretary, Lieut.-Col F A Maxwell, V C, C S I, D S O, 18th Lancers

Comptroller of the Household, Capt J Mackenzie, C I E, 35th Sikhs.

Asst Private Secretary, H A F Metcalfe, I C S

Aides-de-Camp, Muir, Capt, 15th Sikhs, Stephens Capt R, Oxf and Bucks, L I; Molineux, Lt G K North'd Fus, Mit Sing I O M Subdr.-Major, Sardar Bahadur, 53rd Sikhs, Muhi-ud-din Khan, Risaldar-Maj, Bahadur, 31st Lancers

Honorary Aides-de-Camp, Lumsden, Capt W R N, C V O, Burt, the Hon ble Hony Col, Sir H P, K C I E, V D, N W Ry Vol Rifles, Stanyon, Hony Col H J, C I E, V D, Nagpur Vol Rifles, Cuffe, Hon Lt.-Col O F L W, V D, Upper Burma Vol Rifles, Mackenzie, Hony Col C A, Southern Provinces Mounted Ri, Agabeg, Hony Col F J, Chota Nagpur Light Horse, Grice Hony Col W T, V D, 1st Battalion, Calcutta Vol Rifles, Knowles, Hony Col J G C I E, V D, Sumra V L Horse, Warburton, Hony Col H G, Luck V Rifles, Pugh Hony Col A J V D, Calcutta Light Horse, Graham, Hon'ble Capt W L O, I A Res of Officers, Reed, Hony Lt.-Col H Stanley, Bombay Light Horse, Muhammad Ali Beg, Hony Lt.-Col Sir Mawah Bahadur, K C I E, M V O, Commanding H H the Nizam's Forces, Zorawar Singh, Capt Commandant, Bhawnagar Imperial Service Lancers, Maharaj Sher Singh, Commandant, 2nd Sardar Risala, Jodhpur Imperial Service Troops

Wali Muhamad, Risaldar-Major, (Hony Capt) Sardar Bahadur, late Governor-General's Body Guard, Abdul Aziz, Risaldar-Maj (Hony Capt) Sardar Bahadur, late 5th Cav Madho Singh Rana, Subadar-Major (Hony Capt) Sardar Bahadur, late 4 G R, Abdul Karim Khan, Risaldar-Major, (Hony Capt) Sardar Bahadur, late Governor-General's Body-Guard

Indian Aides-de-Camp, Abdul Karim Khan-Risaldar Major, *Sardar Bahadur*, G G's Body Guard, Mit Singh, Subadar Major, *Sardar Bahadur*, 55rd Sikhs

Surgeon, Lieut.-Col Sir J R. Roberts, C I E.

Commandant of Body Guard, Capt. V. A. S Keighley, M V O, 18th Lancers.

Adjutant of Body Guard, Lieut J. R. V Sherston, 11th Lancers

COUNCIL.

Ordinary Members—

Sir R. W Carlyle, K C S I, C I E Took his seat, 4 July, 1910
Sir S H Butler, K C S I, C I E Took his seat, 15 November, 1910
Sir K Ali Imam, C S I Took his seat, 21 November, 1910 (*Law*)
W H Clark, C S I, C M G Took his seat, 24 November, 1910
Sir R H Craddock, K C S I Took his seat, 27 January, 1912
Sir William Meyer, K C I E, Took his seat, 28 June, 1913.

Extraordinary Member—

H E Gen Sir B Duff, G C B, K C S I, K.C V O, A D C, Commander-in-Chief in India Took his seat, 8th March 1914.

SECRETARIAT

REVENUE AND AGRICULTURE DEPARTMENT

Secretary, Hon Mr L J Kershaw, C I E.
Under Secretary, F Noyce
Inspector-General of Forests, G S Hart
Assistant Inspector-General of Forests, G E S Cubitt
Registrar, J. D Shapcott
Superintendents, W A Threlfall, C H Martin, L E Kershaw, T McDonnell

FINANCE DEPARTMENT.

Ordinary Branch

Secretary, The Hon. Mr J B Brunyate, C I E I C S
Deputy Secretary, F W Johnston, C I E
Under Secretary, E Burdon
Assistant Secretary, B N Mitra
Registrar, E. W Baker, I.S O
Additional Asst Secretary, H L French, I S.O
Superintendents, M H Khan, A V V Aiyer, B A, G W. C. Bradey, G T. Piper, C N Chakarty, A. Hyde
Comptroller and Auditor-General, R A Gamble
Controller of Currency, H F Howard

Military Finance Branch.

Financial Adviser, Hon Mr W. H. Michael
Military Accountant-General and ex-officio Deputy Financial Adviser, Col. B. W. Marlow, C I E, I A
Deputy Financial Adviser, W C. Ashmore.
Military Deputy Accountant-General and ex-officio Assistant Secretary, Major E. B. Peacock, I A
Assistant Financial Adviser, Capt. G. W Ross, I A.
Assistant Controller, G H. Cockhen.
Registrar, W C Glee on.
Superintendents, Lieut T A Duffy, G. E Hodges, Condr. E H Chapman.

FOREIGN DEPARTMENT.

Secretary, Hon Lieut.-Col. Sir A. H. Macmahon, G C V O, K C I E, C.S I, I A., A. H. Grant, C.I E (*offg*)
Political Secretary, Hon Mr J B. Wood, C I E
Deputy Secretaries, R E Holland, H N Bolton

Assistant Secretary, Major H D St John.
Attaché, Khan Bahadur Maula Baksh.
Registrar, G W. Marshall, ISO.
Superintendents, A Stapleton, ISO, S A Blaker, E L Nile, T G B Waugh.

HOME DEPARTMENT

Secretary, Hon H Wheeler CSI, CIE
Deputy Secretary, C W E Cotton
Under Secretary, W Booth Gravely
Registrar, G F Winn.
Superintendents, J H Frost, A S Lawrence, Rai Sahib A C Kour, H C Marsden, P K Basu

EDUCATION DEPARTMENT.

Secretary, Hon Mr L Porter, CIE
Joint Secretary, H Sharp, CIE
Assistant Secretary, Dhunwar Maharaj Singh
Superintendents, R H Blaker, T M Smith, P A Collins, L D. Harington
Registrar, G R Kave

LEGISLATIVE DEPARTMENT

Secretary, Sir W H Vincent, Kt
Deputy Secretary, A P Muddiman, CIE
Addl Dy Secy Mr H T Cullis
Legal Asst S G Gupta
Registrar, T W Payne ISO
Superintendents, S Ashley Collins and C H Pereira

ARMY DEPARTMENT

Secretary, Hon'ble Maj Genl W R Birdwood, C B, CSI, CIL, DSO
Deputy Secretary, Colonel B Holloway
Assist Secretaries, Major A H O Spence, Major R B Graham and Major A W Chitty
Registrar, Mr A A Welan
Superintendents, W C Dobenham, Rai Sahib L N Bose (on leave), A B Kunning, R Tharle-Hughes and P P Hypher

PUBLIC WORKS DEPARTMENT

Secretary, The Hon Mr R P Russell
Deputy Secretary, P Hawkins, MICE
Under Secretary, Cap H de L Pollard Lowsley RE
Assistant Secretary, J E Lacey, ISO
Registrar W J Drake, ISO
Superintendents, W G Dollman, W I Tilden R R Reaks, H M Marchant
Inspr Genl Irrign, M Nethersole, CSI
Consg Archt., J Begg FRIBA
Assts Archt, *E M Thomas* [*On deputation as offg Consg Archt*, *Madras*] T Oliphant Foster, FRIBA, A N Peckham
Elect Adviser, J W Mears, FRAS, MICE, MIEE.

COMMERCE AND INDUSTRY DEPARTMENT.

Secretary, Hon R E Enthoven, CIE
Under Secretaries, L A F Lindsay, S H Slater
Controller of Patents and Designs—H. G Graves
Registrar, T O Drake, ISO
Superintendents, E P Jones, H R W Charles A. K Sarkar, B B Banarji, S N. Banarji, C H. Baldrey

RAILWAY BOARD

President, Sir H P Burt KCIE *Members*, Hon Mr R W Gillan, CSI, A R Anderson
Secretary, F Ryan
Chief Engineer J Woodside.

POST OFFICE & TELEGRAPH DEPT

Director-General of Posts & Telegraphs, Hon Mr W. Maxwell, CIE, MVO

NORTHERN INDIA SALT REVENUE

Commissioner, I F Conolly

INDO-EUROPEAN TELEGRAPH DEPARTMENT.
Persian Gulf and Persian Sections

Directors, E E Gunter, H. W. Smith, CIE., W. King-Wood, CIE (*offg*), Commander of Cable Steamer "Patrick Stewart," F W. Townsend

SURVEY DEPARTMENT.

Surveyor-General of India, Col. Sir S G Burrard, K.CSI, RE.

GEOLOGICAL SURVEY.

Director, H H Hayden, CIE, BA, FGS
Superintendents, C S Middlemiss, BA, FGS, E Vredenburg, BSc, FGS, L L Fermor, DSC, FGS
Chemist, W A K Christie, BSC, Ph.D.

BOTANICAL SURVEY

Director, Major A T Gage, MB, IMS, *Economic Botanist*, H G Carter, MBAB, *Economic Botanist*, *Madras*, F R Parnell, *Economic Botanist*, *Bombay*, W Burns, BSc, *Economic Botanist*, *United Provinces*, H M Leake, MA, FLS

ARCHÆOLOGICAL SURVEY

Director-General of Archæology, J H Marshall, MA, CIE, *Superintendent*, *Western Circle*, D R Bhandarkar, MA, *Superintendents*, *Southern Circle*, A Rea, A H Longhurst, *Superintendent*, *Eastern Circle*, D B Spooner, PhD, *Superintendents*, *Northern Circle*, G Sanderson, H Hargreaves, *Superintendent*, *Burma*, C Duroiselle, *Superintendent*, *Frontier Circle*, Sir M A Stein, KCIE, PhD, D Litt, DSc

MISCELLANEOUS APPOINTMENTS

Director-General, *Indian Medical Service* Surg-Gen Sir C P Lukis, KCSI, MD, FRCS KHS, IMS
Sanitary Commissioner with the Government of India, Major J C Robertson, CIE, MB, IMS
Deputy Director-General, *Indian Medical Service*, Bt-Col B G Seton, VHS, IMS
Asstt, D G IMS, Lt-Col Jay Gould, MB, IMS
Asstt Director General, *Service Medical Service* (Sany) Major F W White, ML, IMS
Director, *Central Research Institute*, *Kasauli* Major W F Harvey, MA, MB, DPH, IMS
Assistants to Director, *Central Research Institute*, *Kasauli*, Major S R Christophers, MB, IMS, Hony. Lieut C J Fox
Director, *Pasteur Institute of India*, *Kasauli* Major A G McKendrick
Asst Director, *Pasteur Institute of India*, *Kasauli*, Capt H W Acton, IMS
Superintendent, *X-ray Institute*, *Dehra Dun*, Major A E Walter, IMS
Director, *King Institute of Preventive Medicine*, F M Gibson, MB, BSc
Asst Director King Institue of Preventive Medicine, Major W S Patton, MB, IMS
Officer in charge, *Biological Laboratory*, *General Hospital*, *Calcutta*, W M Haffkine, CIE
Director-General of Indian Observatories, G T. Walker CSI, MA, D Sc, FRS
Imperial Meteorologists, G C Simpson, D.Sc.; C W B Normand, Hem Raj
Director, *Kodaikanal and Madras Observatories*, J Evershed
Director, *Bombay and Alibagh Observatories*, *Bombay*, N A F. Moos.
Director, *Aerological Observatory*, *Agra*, J. H. Field, MA

Secretary, Board of Examiners, Capt. C. L. Peart, I A.
Officer in Charge of the Records of the Government of India, A F Scholfield, M A, (*offg*)
Librarian, Imperial Library, Calcutta, J. A Chapman
Agricultural Adviser and director of the Agricultural Research Institute, Pusa B Coventry, C I E
Imperial Entomologist, Calcutta, Major J D E Holmes, I C V D, D Sc
Superintendent, Civil Veterinary Department, Sind, Baluchistan and Rajputana, Major A. S Trydell, I C V D.
Superintendent of Natural History Section of Indian Museum, N Annandale, B A, D Sc
Curator, Industrial Section of Indian Museum, D Hooper, F C S F L S
Chief Inspector of Mines, G F Adams
Controller of Printing, Stationery and Stamps, M J Cogswell
Superintendent of Government Printing, J J Meikle
Superintendent of Linguistic Survey, Sir G A Grierson, K C I E (*Bengal Annuitant*)
Chief Inspector of Explosives, Lieut-Col C A Muspratt-Williams, R A
Inspectors of Explosives, Hon Capt J S Rush, Hon Major J W Turner
Administrator-General of Bengal, H T Hyde
Deputy Administrator-General of Bengal, A. Kinney
Director, Criminal Intelligence, Sir C R Cleveland, K C I E
Director-General of Commercial Intelligence, H H Ley
Director of Statistics G F Shirras
Customs and Excise Chemist, R L Jenks

GOVERNORS-GENERAL OF FORT WILLIAM IN BENGAL

Name	Assumed charge of office.
Warren Hastings	1774
Sir John Machpherson, Bart	1785
Earl Cornwallis, K G (*a*)	1786
Sir John Shore, Bart. (*b*)	1793
Lieut-General the Hon. Sir Alured Clarke, K C B (*offg*)	1798
The Earl of Mornington, P C (*c*)	1798
The Marquis Cornwallis, K G (2nd time)	1805
Sir George H Barlow, Bart	1805
Lord Minto, P C (*d*)	1807
The Earl of Moira, K G, P C (*e*)	1813
John Adam (*offg*)	1823
Lord Amherst, P C (*f*)	1823
William Butterworth Bayley (*offg*)	1828
Lord William Cavendish Bentinck, G C B, G C H, P C	1828

(*a*) Created Marquess Cornwallis, 15 Aug, 1792.
(*b*) Afterwards (by creation) Baron Teignmouth
(*c*) Created Marquess Wellesley, 2 Dec, 1799
(*d*) Created Earl of Minto, 24 Feb., 1813.
(*e*) Created Marquess of Hastings, 2 Dec, 1816.
(*f*) Created Earl Amherst, 2 Dec, 1826

GOVERNORS-GENERAL OF INDIA

Name.	Assumed charge of office.
Lord William Cavendish Bentinck, G C B, G C H, P C	1834
Sir Charles Metcalfe, Bart (*a*) (*offg*)	1835
Lord Auckland, G C B, P C. (*b*)	1836
Lord Ellenborough, P C (*c*)	1842
William Wilberforce Bird (*offg*)	1844
The Right Hon. Sir Henry Hardinge, G C B. (*d*)	1844
The Earl of Dalhousie, P C (*e*)	1848
Viscount Canning, P C. (*f*)	1856

(*a*) Afterwards (by creation) Baron Metcalfe.
(*b*) Created Earl of Auckland, 21 Dec, 1839.
(*c*) Afterwards (by creation) Earl of Ellenborough
(*d*) Created Viscount Hardinge, 2 May, 1846.
(*e*) Created Marquess of Dalhousie, 25 Aug, 1849
(*f*) Afterwards (by creation) Earl Canning

NOTE.—The Governor-General ceased to be the direct Head of the Bengal Government from the 1st May, 1854, when the first Lieutenant-Governor assumed office. On 1st April, 1912, Bengal was placed under a separate Governor and the appointment of Lieutenant-Governor was abolished.

VICEROYS AND GOVERNORS-GENERAL OF INDIA

Name	Assumed charge of office
Viscount Canning, P C (*a*)	1858
The Earl of Elgin and Kincardine, K T, G C B, P C	1862
Major-General Sir Robert Napier, K C B (*b*) (*offg*)	1863
Colonel Sir William T Denison, K C B (*offg*)	1863
The Right Hon Sir John Lawrence, Bart, G C B, K C S I (*c*)	1864
The Earl of Mayo, K P	1869
John Strachey (*d*) (*offg*)	1872
Lord Napier of Merchistoun, K T (*e*) (*offg*)	1872
Lord Northbrook, P C. (*f*)	1872
Lord Lytton, G C B (*g*)	1876
The Marquess of Ripon, K G, P C	1880
The Earl of Dufferin, K P, G C B, G C M G, P C (*h*)	1884
The Marquess of Lansdowne, G C M G	1888
The Earl of Elgin and Kincardine, P C	1894
Baron Curzon of Kedleston P C	1899
Baron Ampthill (*offg*)	1904
Baron Curzon of Kedleston, P C	1904
The Earl of Minto, K G, P C G C M G	1905
Baron Hardinge of Penshurst, P C, G C B, G C M G, G C V O, I S O (*i*)	1910

(*a*) Created Earl Canning, 21 May, 1859.
(*b*) Afterwards (by creation) Baron Napier (of Magdala).
(*c*) Afterwards (by creation) Baron Lawrence
(*d*) Afterwards Sir John Strachey, G C S I, C I E
(*e*) Afterwards (by creation) Baron Napier of Ettrick
(*f*) Afterwards (by creation) Earl of Northbrook
(*g*) Created Earl of Lytton, 28 April, 1880
(*h*) Created Marquis of Dufferin and Ava, 12 Nov. 1888
(*i*) During tenure of office, the Viceroy is Grand Master and First and Principal Knight of the two Indian Orders (G M S I, and G M I E) On quitting office, he becomes G C S I and G C I E., with the date of his assumption of the Viceroyalty

The Imperial Legislative Council

The constitution of the Executive Council of the Government of India has been sketched, for the purposes of legislation, and to bring the administration into close touch with public opinion, the Executive Council is expanded by additional members into a great legislative assembly The first step was taken in 1861, when the Indian Councils Act provided that, for the better exercise of the power of making laws and regulations vested in the Governor-General-in-Council, he should nominate "Additional" members for the purposes of legislation only The additional members were appointed for two years and joined the Council when it met for legislative purposes The maximum number of members fixed by the Act was twelve, of whom not less than one half were to be non-officials (holding no office under the Government) and in practice most of the non-officials were natives of India Similar legislative councils were constituted in some of the provinces, but the growth of these bodies will be considered when we come to deal with the provincial administrations

The Act of 1892.

In 1892 important additions were made both to the constitution and the powers of the Legislative Council The number of Additional members was raised to sixteen, and the representative principle was introduced Whilst the method of appointment was, as before, nomination by the Governor-General, a certain number of nominations were made on the recommendation of specified persons, bodies and associations and in practice these recommendations were never refused Of the sixteen Additional members, six were usually officials and ten non-officials Four of the non-officials were nominated on the recommendation of the non-official members of the provincial Legislative Councils, the fifth was recommended by the Calcutta Chamber of Commerce, and the remaining five were chosen by the Governor-General, either with a special view to the legislative business to be transacted, or to secure the due representation of all classes The Council was also empowered to discuss the budget and to ask questions on matters of public interest

Morley-Minto Reforms.

The Imperial Legislative Council took its present shape under what is commonly called the Morley-Minto reform scheme of 1909, and was embodied in the Indian Councils Act of that year Two principles run through this scheme (1) to secure the fair representation of all the varied interests in the country and (2) to give the Council a real influence in determining the character of the administration The Imperial Legislative Council now consists of sixty Additional members, of whom thirty-five are nominated by the Governor-General and twenty-five are elected by specified electorates. Of the nominated members not more than twenty-eight may be officials, and three others who must not be officials must be nominated by the Muhamedans of the Punjab, the landholders of the Punjab, and the Indian commercial community respectively The remaining four seats are at the Governor-General's disposal to secure experts on special subjects or representatives of minor interests Of the twenty-five elected members, eleven are selected by the non-official members of the provincial Legislative Councils, two by each of the four largest provinces and one by each of the three other provinces. A twelfth is elected by the District and Local Boards of the Central Provinces, as that administration has no legislative council Six members are elected by electorates of landowners in six provinces, five by the Muhamedan community in each of the five provinces, and two by the Chambers of Commerce in Calcutta and Bombay The Governor-General-in-Council has the exceptional power of excluding a candidate whose reputation and antecedents are such that his election would be contrary to the public interest An oath, or affirmation of loyalty to the Crown is required of every member before he takes his seat Members hold office for three years, and each triennium there is a general election for the Council.

Powers of the Council

The additions to the non-legislative powers of the Council by the Act of 1909 were also substantial The Council can exercise a material influence on the Budget The Finance Member first presents the preliminary estimates with an explanatory memorandum On a subsequent day he makes such further explanations as he thinks necessary Members can thereupon move resolutions regarding any proposed alteration in taxation, any proposed loan, or any additional grant to Local Governments When these resolutions are voted upon, the estimates are taken by groups, and resolutions may be moved on any heads of revenue or expenditure Certain heads, as for instance, Customs and the Army, are excluded from discussion The Finance Member takes these discussions into consideration, and then presents his final budget He describes the changes made, and why any resolutions that have been passed have not been accepted A general discussion of the budget then takes place, but no resolution may be moved, or vote taken Government is not bound to act upon the resolution of the Council This power is never likely to be used, because the Government has an official majority on that body This official majority was specially prescribed by the Secretary of State, because as Parliament is, in the last resort, responsible for the good government of India, the British Government, through its mouthpiece, the Secretary of State, must have the means of imposing its will on the Government of India

Apart from the Budget debates, members of Council now have the right to initiate the discussion of any question of public interest at any sitting of the Council by moving a resolution The right of interpellation has also been expanded by the power of asking supplementary questions in order to elucidate a reply given to an original question The President of the Council may disallow any question which, in his view, cannot be answered consistently with the public interests

Control over Legislation.

The legislative powers of the Imperial Legislative Council are still regulated by the Act of 1861 Certain Acts of Parliament under which the Government of India is constituted cannot be touched and no law can be made affecting the authority of Parliament or allegiance to the Crown With these exceptions the legislative powers of the Governor-General-in-Council over the whole of the British India are unrestricted Measures affecting the public debt, or the revenues of India, the religion of any of his Majesty's subjects, the discipline or maintenance of the military or naval forces, and the relations of the Government with foreign states cannot be introduced by any member without the previous sanction of the Governor-General Every Act requires the Governor-General's assent The assent of the Crown is not necessary to the validity of an Act, but the Crown can disallow any Act that has been passed

Apart from these legislative powers the Governor-General-in-Council is authorised to make, without calling in the Additional Members, regulations having the force of law for the less advanced parts of the country, where a system of administration simpler than that in force elsewhere is desirable In cases of emergency the Governor-General can, on his own authority and without reference to his Council, make Ordinances which have the force of law for six months

All Members of the Imperial and Provincial Legislative Councils are entitled to the prefix "Hon'ble Mr" during their term of office

A.—Elected Members.

(*Not to be less than* 27)

Serial No	Name	Date of commencement of office	Date of expiry of term of office	Electorate	
1	Nawab SaiyidMuhammad SahibBahadur	11-1-13	10-1-16	Non-official Member, Madras.	
2	Mr Chakravarti Vijaraghavachariar	Do	Do	Do	Do
3	Sir Ibrahim Rahimtoola, Kt , C I E	Do	Do	Do	Bombay
4	Mr Gopal Krishna Gokhale, C I E	Do	Do	Do	Do
5	Babu Surendra Nath Banerji	15-2-13	14-2-16	Do	Bengal.
6	Maharaja Ranajit Sinha of Nashipur	Do	Do	Do	Do
7	Pandit Bishan Narayen Dar	18-9-14	21-1-16	Do	United Provinces
8	Pandit Madan Mohan Malaviya	22-1-13	Do	Do	Do
9	Sardar Daljit Singh of Jullundur	11-1-13	10-1-16	Do	Punjab
10	Maung Mye	28-12-12	27-12-15	Do	Burma
11	Mr Madhu Sudan Das, C I E	25-1-13	24-1-16	Do	Bihar and Orissa
12	Srijut Ghanasyam Barua	11-1-13	10-1-16	Non-Official Member, Assam.	
13	Mr M B Dadabhoy	22-1-14	Do	District Councils and Municipal Committees Central Provinces	
14	Rama Rayaningar Venkatarauga Bahadur of Panagallu	18-1-13	17-1-16	Landholders, Madras.	
15	Meherban Sardar Khan Bahadur Rustomji Jehangirji Vakil of Ahmedabad	7-1-13	6-1-16	Do (Sardars of Gujarat)	Bombay.
16	Maharaja Manindra Chandra Nandi of Kasimbazar	22-1-13	21-1-16	Landholders, Bengal	
17	Raja Kushalpal Singh, M A , LL B , of Kotla.	22-2-13	27-12-15	Do (Landholders of Agra)	United Provinces
18	Maharaj-Kumar Gopal Saran Narain Singh of Tikari	28-12-12	27-12-15	Do	Bihar and Orissa
19	Sir Gangadhar Madho Chitnavis, K C I E	11-1-13	10-1-16	Do	Central Provinces
20	Khan Bahadur Mir Asad Ali Khan	18-1-13	17-1-16	Muhammadan Community,	Madras
21	Sir Fazulbhoy Currimbhoy Ebrahim Kt	11-1-13	10-1-16	Do.	Bombay.
22	Mr Abdul Karim Abu Ahmed Ghuznavi	22-1-13	21-1-16	Do	Bengal
23	Raja Sir Muhammad Ali Muhammad Khan K C I E , Khan Bahadur, of Mahmudabad	18-1-13	17-1-16	Muhammadan Community,	United Provinces
24	Mr Qumrul Huda, Bar-at-law	11-1-13	10-1-16	Do	Bihar and Orissa.
25	Mr R. G. Monteath ..	6-6-14	27-12-15	Bengal Chamber of Commerce	
26	Mr M. F Reid, C I E.	4 4-14	Do	Bombay Chamber of Commerce.	
27	Raja Saiyid Abu Jafar of Pirpur	18-1-13	17-1-16	Muhammadan Landholders,	United Provinces.

B.—Nominated Members.

(*Not to exceed* 33)

Serial No	Name	Date of Commencement of office	Date of expiry of term of office	Province or body represented
	(*a*) OFFICIAL MEMBERS *Not more than* 28			
1	Mr R C C. Carr		10–1–16	Madras
2	Mr. J McNeill	12–9–14	Do	Bombay
3	Mr. J Donald	3–1–14	Do	Bengal
4	Mr E H G Walab C S I	13–12–13	Do.	Bihar and Orissa
5	Mr W H Cobb	13–12–13	Do	The United Provinces
6	Mr A H Diack, C V O	20–12–13	Do	The Punjab
7	Mr W F Rice, C S I	13–12–13	Do.	Burma
8	Mr J Walker, C I E	22–5–14	Do	The Central Provinces
9				Assam
10	Lt Col, Denys Brooke Blakeway, C I E	21–1–13	21–1–16	The N -W F Province.
11	Sir H P Burt, K C I E, V D	2–5–14	20–1–16	Government of India.
12	Mr L J Kershaw, C I E	4–4–14	Do	Do
13	Mr L C Porter, C I E	23–12–10	22–12–13	Do
14	Mr J B Wood, C I E	21–2–14	20–1–16	Do
15	Mr H Sharp, C I E	21–1–13	Do	Do.
16	Sir W H H Vincent Kt	Do	Do	Do
17	Mr R E Enthoven C I E	Do	Do	Do
18	Mr H Wheeler, C I E	Do	Do	Do.
19	Mr W Maxwell, C I E, M V O	Do	Do	Do
20	Mr W H Michael	Do	Do	Do
21	Mr R P Russell	10–4–13	Do	Do
22	Mr J B Brunyate, C I E	10–5–13	Do	Do.
23	Major-General W R Birdwood, C B, C S I, C I E, D S O	21–1–13	Do	Do
24	Surgeon-General Sir C P Lukis K C S I	6–12–13	Do	Do
25	Mr G H B Kenrick, K C, L L D	21–1–13	Do	Do
26	Mr C. H Kesteven	Do	Do	Do
27	Major J C Robertson, C I E, I M S	22–2–13	21–2–16	Do
	(*b*) NON-OFFICIAL MEMBERS			
1	Rai Sitanath Ray Bahadur	22–1–13	21–1–16	Indian Commercial Community
2	Malik Umar Hyat Khan, C I E, M V O, Tiwana	11–1–13	10–1–16	Muhammadan Community Punjab
3	Hony Lt -Col Raja Lal Chand, C S I, of Lambagraon	Do	Do	Landholders, Punjab
4	Mr J H Abbott	12–1–13	11–4–16	

Present Constitution of the Council.

I —The whole Council

By the proviso to Regulation I for the Legislative Council of the Governor-General it is declared that it shall not be lawful for the Governor-General to nominate so many non-official persons that the majority of all the Members of the Council shall be non-officials

Officials—

(*a*)	Members of the Executive Council	7
(*b*)	The Lieutenant-Governor or Chief Commissioner of the Province (1)	1
(*c*)	Nominated Members	27
	Total	35

Non-Officials (2)—

(*a*)	Elected Members	27
(*b*)	Nominated Members	5
	Total	32

Official majority, exclusive of the Governor-General 3

II —The Additional Members.

The Indian Councils Act, 1861, section 10, provides that not less than one half of the Additional Members (exclusive of the Lieutenant-Governor or Chief Commissioner of the Province (1) in which the Council may for the time being be assembled) shall be non-officials

(Present number of Additional Members exclusive of the Lieutenant-Governor or Chief Commissioner (1) as aforesaid)	Officials (nominated)	26
	Non-officials (elected and nominated)	31
	Vacancies	3
	Total	60

(*For work of Imperial Legislative Council, Session* 1914-15, *q v*)

The Home Government.

The Home Government of India represents the gradual evolution of the governing board of the old East India Company The affairs of the Company were originally managed by the Court of Directors and the General Court of Proprietors In 1784 Parliament established a Board of Control, with full power and authority to control and direct all operations and concerns relating to the civil and military government, and revenues of India By degrees the number of the Board was reduced and its powers were exercised by the President, the lineal precursor of the Secretary of State for India With modifications this system lasted until 1858, when the Mutiny, followed by the assumption of the Government of India by the Crown, demanded a complete change Under the Act of 1858 the Secretary of State is the constitutional adviser of the Crown on all matters relating to India He inherits generally all the powers and duties which were formerly vested either in the Board of Control, or in the Company, the Directors and the Secret Committee in respect of the government and revenues of India He has the power of giving orders to every officer in India, including the Governor-General, and of directing all business relating to India which is transacted in the United Kingdom

Secretary of State's Powers

Of these wide powers and duties many rest on his personal responsibility, others can be performed only in consultation with his Council, and for some of these the concurrence of a majority of the members of his Council is required The Secretary of State may act without consulting the Council in all matters where he is not expressly required by statute to act as "Secretary of State in Council" Appointments by the Crown are made on his advice Every official communication proposed to be sent to India must be laid before Council, unless it falls under either of two reserved classes One of these is "Secret communications" dealing chiefly with war and peace, relations with foreign Powers and Native States The others are those which he may deem "urgent" No matter for which the concurrence of a majority of Council is necessary can be treated as either "secret" or "urgent" In ordinary business, for which the concurrence of a majority of Council is not required, the Secretary of State is not bound to follow the advice of the Council These provisions reserve to the Secretary of State a wide discretionary power of interference with the Government of India which is exercised in accordance with the temperament of the Secretary of State for the time being But in all matters of finance, the authority is that of the Secretary of State and the Council and is freely exercised

The Council.

The Council of India originally consisted of fifteen members appointed by the Secretary of State By an Act passed in 1907 it now consists of such number of members, not being less than ten or more than fourteen, as the Secretary of State may from time to time determine The members hold office for seven years, and this term may, for special reasons of public advantage, which must be laid before Parliament, be extended for five years more The majority of the Council must be persons who have served or resided in India for at least ten years, and who have not left India more than five years before their appointment Most of the members are always men who have held high office in India Several of them have usually belonged to the Indian Civil Service, and have been lieutenant-governors of provinces or members of the Viceroy's Executive Council, others are soldiers, educationists, bankers, or men of diplomatic, official, or mercantile experience The object aimed at in the constitution of the Council is to give the Secretary of State, who has little knowledge of the details of the Indian administration, the help of a body of experts In 1907, in connection with the policy of constitutional reform, two Indians, one a Hindu and the other a Mahomedan, were appointed to vacancies in the Council In future this practice will certainly be followed

The India Office

Associated with the Secretary of State and the India Council is a secretariat known as the India Office, housed at Whitehall The Secretary of State has two Under-Secretaries, one permanent, the other parliamentary, to whom some of his minor duties are delegated Appointments to the establishment are made by the Secretary of State in Council, but "junior situations" must be filled in accordance with the general regulations governing admission to the Home Civil Service

The whole cost of the India Office is borne by the revenues of India It amounts to £357,000 a year

Secretary of State.

The Most Hon The Marquess of Crewe, K G P C

Under Secretaries of State.

Sir Thomas W Holderness, K C B, K C S I
C H Roberts, Esq

Assistant Under Secretary of State

Lionel Abrahams, C B

Council.

Vice-President, Sir Krishna Gobinda Gupta, K C S I
Lieut-Col Sir David W. K Barr, K C S I
Sir Felix O Schuster, Bart
Sir Theodore Morison, K C I E
Gen Sir Charles C Egerton, G C B, D S O
Sir James Thomson, K C S I
Sir Steyning William Edgerley, K C V O, C I E,
Abbas Ali Baig, C S I, L L D.
Laurence Currie.
Sir William Duke.
Clerk of the Council, Lionel Abrahams, C B
Deputy Clerk of the Council, James H Seabrooke, C I E
Private Secretary to the Secretary of State, Francis H Lucas, C B
Assistant Private Secretary, J. C. Walton
Assistant Private Secretary (unpaid), C T Clay
Political A-D-C to the Secretary of State, Lieut-Col Sir J. R. Dunlop-Smith, K C S I, C I E.

Private Secretary to Sir T W Holderness, R H W Bunsley-Richards
Private Secretary to Mr. C H Roberts, M P, S K Brown
Parliamentary ditto to ditto, Sir Henry S M Havelock-Allan, Bart, M P

Correspondence Departments

SECRETARIES

Financial, F W Newmarch, C S I, and W Robinson
Judicial and Public, Malcolm C C Seton
Military, Gen Sir E G Barrow, G C B,
Political and Secret, Sir F A Hirtzel, K C B
Public Works, Hermann A Haines
Revenue and Statistics, Francis C Drake
Director-in-Chief of the Indo-European Telegraph, Public Works Department, R C Baker, C I E
ACCOUNTANT-GENERAL'S DEPARTMENT — *Accountant-General*, Walter Badock, C S I, *also Director of Funds and Official Agent to Administrators-General in India*
STORE-DEPARTMENT—INDIA OFFICE BRANCH — *Director-General*, Henry J W. Fly
INDIA STORE DEPOT —*Belvedere Road, Lambeth, S E, Superintendent of the India Store Depot*, Captain G T Wingfield, R N
REGISTRY AND RECORD DEPARTMENT —*Registrar and Superintendent of Records*, W Foster, C I E

Miscellaneous Appointments

Government Director of Railway Companies, Sir T R Wynne, K C S I, K C I E,
Librarian, Fredk W Thomas, M A, Hon Ph. D (Munich)
Secretary for Indian Students, C E Mallet
Educational Adviser to Indian Students, T W Arnold, C I E, Litt D, M A (21, Cromwell Road, S W)
Medical Board for the Examination of Officers of the Indian Services—President, Surg-Gen Lieut-Col Sir R H Charles, G C V O, M D, I M S (retd), F R C S I, *Member*, Lt-Col J Anderson, M B, I M S (retd)
Legal Adviser and Solicitor to Secretary of State, Sir S G Sale, K C I E
Inspector of Military Equipment and Clothing, Major-Gen Sir John Steevens, K C B
Surveyor and Clerk of the Works, T H Winny, A R I B A
Ordnance Consulting Officer, Lieut-Col M S C Campbell, C I E, R A
Officers of the Indian Army attached to the General Staff, War Office, Major A G Stuart, Capt. L R Vaughan
Consulting Engineer, Sir A M Rendel, K C I E.
Stockbroker, Horace Hubert Scott
INDIAN TROOP SERVICE —The business of the Troop Service is under the superintendence of Rear-Admiral Herbert W Savory, M V O., Director of Transports at the Admiralty.

Secretaries of State for India.

Name	Assumed charge of office
Lord Stanley, P C (*a*)	1858
The Right Hon Sir Charles Wood, Bart (*b*)	1859
Earl de Grey and Ripon, P C (*c*)	1866
Viscount Cranborne (*d*)	1866
The Right Hon Sir Stafford Northcote, Bart (*e*)	1867
The Duke of Argyll, K T, P C	1868
The Marquis of Salisbury, P C (2nd time)	1874
The Right Hon Gathorne Hardy, P C created Viscount Cranbrook, 14 May, 1878 (*f*)	1878
The Marquis of Hartington, P C (*g*)	1880
The Earl of Kimberly, P C	1882
Lord Randolph Churchill, P C	1885
The Earl of Kimberley, K G, P C (2nd time)	1886
The Right Hon Sir Richard Assheton Cross, G C B, P C, created Viscount Cross, 19 Aug, 1886	1886
The Earl of Kimberley, K.G, P C (3rd time)	1892
The Right Hon H H. Fowler (*h*)	1894
Lord George F Hamilton, P C	1895
The Right Hon St John Brodrick (*i*)	1903
The Right Hon John Morley, O M (*j*)	1905
The Right Hon The Earl of Crewe, K G	1910
The Right Hon Viscount Morley of Blackburn, O M	1911
The Right Hon The Earl of Crewe, K G (*k*)	1911

(*a*) Afterwards (by succession) Earl of Derby
(*b*) ,, (by creation) Viscount Halifax
(*c*) ,, (by creation) Marquess of Ripon
(*d*) ,, (by succession) Marquess of Salisbury
(*e*) ,, (by creation) Earl of Iddesleigh
(*f*) ,, (by creation) Earl Cranbrook
(*g*) ,, (by succession) Duke of Devonshire
(*h*) ,, (by creation) Viscount Wolverhampton, G C S I
,, (by succession) Viscount Midleton
(*i*) ,, (by creation) Viscount Morley of Blackburn, O M
(*j*) ,, (by creation) Marquess of Crewe, K G
(*k*)

India Council Bill.

In July 1913 Lord Crewe, Secretary of State for India, outlined in the House of Lords certain ideas for the reform of the India Council. The purport of these changes was to reduce the number of the Council, and to substitute departments, with certain independent powers, for the Committees which discharge the detailed work of the Council Nothing more was heard of this scheme until June 1914, when there was published the text of the amending Bill, with an explanatory memorandum thereon.

Text of the Bill.

Appended is the full text of the Bill.—

1 —(1) The Council of India constituted under the Government of India Act, 1858 (which Act as amended by any subsequent enactment is hereinafter referred to as the principal Act), shall consist of such number of members, not less than seven nor more than ten, as the Secretary of State may from time to time determine.

(2) Unless at the time when an appointment is made to fill a vacancy in the Council two at least of the then existing members of the Council were at the time of their appointment domiciled in India, the person appointed to fill the vacancy must be domiciled in India, and unless at such time as aforesaid six at least of the then existing members were at time of their appointment either domiciled in India or were persons who had served or resided in India for at least ten years and had not ceased so to serve or reside more than five years before the date of their appointment, the person appointed to fill the vacancy must be either domiciled in India, or must have served or resided in India for at least ten years and have not ceased so to serve or reside more than five years before the date of his appointment.

The person appointed to fill a vacancy for which a person domiciled in India is alone eligible shall be selected from amongst the persons whose names appear on a list of persons domiciled in India chosen for the purpose by the members (other than official members) of the Legislative Councils of the Governor General, Governors, Lieutenant Governors and Chief Commissioners, in such manner, subject to such conditions and restrictions, and in such number, as may be prescribed by regulations to be made by the Secretary of State in Council, or by directions issued by the Secretary of State thereunder

(3) The yearly salary to be paid to a member of the Council shall be one thousand two hundred pounds, provided that such members appointed after the commencement of this Act who at the date of their appointment shall be domiciled in India shall be paid an additional yearly allowance of six hundred pounds

(4) Where the Secretary of State is of opinion that a person possessing special qualification as a financial expert should be appointed to be a member of the Council on special terms, he may, after recording in a minute to be laid before Parliament the special reasons for the appointment and the special terms on which the appointment is to be made, make the appointment, and the person so appointed shall, notwithstanding anything in the principal Act or this Act hold office for such term and on such conditions, and shall in respect thereof be entitled to such salary and to such pension, and other rights and privileges (if any) as His Majesty may, by Order in Council, in each case determine

Provided that not more than one person appointed under this provision shall be a member of the Council at the same time

2 —(1) Notwithstanding anything in section nineteen of the principal Act, it shall not be necessary for an order or communication sent to India or an order in the United Kingdom in relation to the government of India to be signed by a Secretary of State in such cases as the Secretary of State in Council may otherwise direct, but every such order and communication shall purport to be made by the Secretary of State in Council

(2) For section twenty of the principal Act (which relates to the powers of the Secretary of State to divide the Council into committees, and to regulate the transaction of business in Council) the following section shall be substituted —

It shall be lawful for the Secretary of State in Council to make rules and orders for the transaction of business as regards the powers which under the principal Act are to be exercised by the Secretary of State in Council

"Provided that any such rule or order, so far as it affects any matter or question in respect of which the concurrence of a majority at a meeting of the Council is required by this Act shall not be valid unless made with the concurrence of a majority of the members of Council present at the meeting of Council at which the rule or order is passed"

(3) Such rules and orders as aforesaid may, notwithstanding anything in sections twenty two, twenty-four, twenty-five, and twenty-six of the principal Act, provide, as respects such matters as may be specified in the rules and orders,—

(*a*) for enabling powers of the Secretary of State in Council to be exercised otherwise than at a meeting of the Council, and where necessary for that purpose, for dispensing with any requirement of the principal Act as to the occurrence of the majority of votes of members of Council,

(*b*) for dispensing with the necessity of submitting to Council or depositing in the Council Room for the perusal of members orders and communications proposed to be sent to India or to be made in the United Kingdom by the Secretary of State, and of recording and notifying to members of Council the grounds on which any order or communication to India has been treated as urgent.

(4) At a meeting of the Council the quorum shall be three, and meetings of the Council shall be convened and held when and as the Secretary of State may from time to time direct.

(5) Any document required by the principal Act to be signed by two or more members of the Council, either with or without the countersignature of the Secretary of State, or one of his Under Secretaries or Assistant Under Secretaries

may be signed in such manner as the rules and orders made by the Secretary of State in Council for the transaction of business in his Council may prescribe, and any such document, if signed in accordance with such rules and orders, shall be as valid as if it had been signed in accordance with the provisions of the principal Act.

(6) Section twenty-seven of the principal Act (which enables the Secretary of State to send certain secret orders without communicating them to the members of his Council) shall extend to any order, not being an order in respect of which concurrence of a majority at the meeting of the Council is required by the principal Act, which relates to any question gravely affecting the internal tranquillity of India, or the interests of India in any other country, or the peace or security of any part of His Majesty's Dominions, and which in the opinion of the Secretary of State is of the nature to require secrecy, and it is further declared that the said section shall apply to any order which the Secretary of State may send in reply to a despatch received and dealt with by him under section twenty-eight of the principal Act

(7) All rules and orders made under this section shall be laid before Parliament as soon as may be after they are made, and if an address is presented to His Majesty by either House of Parliament within the next subsequent thirty days on which that House has sat after any such rule or order is laid before it praying that the rule or order may be annulled His Majesty in Council may annul the rule or order, and it shall henceforth be void but without prejudice to the validity of anything previously done thereunder

The Bill Explained.

The publication of the Bill was accompanied by a memorandum explaining its provisions in the following terms —

The object of this Bill is to amend the Government of India Act, 1858 The Act of 1858 in transferring the Government of India to the Crown, created the Council of India, defined its powers and those of the Secretary of State and prescribed in great detail the procedure to be followed in the transaction of business

The Act of 1858 has, as regards the numerical strength of the Council and the conditions of office on it, been amended several times The procedure for the transaction of business is practically unaltered

By the Act of 1858 the strength of the Council was fixed at fifteen members, of whom not less than nine were to be persons who at the time of appointment had served or resided in India for ten years and had not last left India more than ten years The members were to hold office during good behaviour, but were removable upon an address of both Houses of Parliament Their salary was fixed at £1,200 a year

These provisions have since been altered The Council now consists of such number of members, not less than ten and not more than fourteen, as the Secretary of State may from time to time determine Nine members must be persons who at the time of appointment had served or resided in India for ten years, and had not last left India more than five years The terms of office is limited to seven years but the Secretary of State may re-appoint a member for a further period of five years. The salary is £1,000 a year Since 1907 it has been the recognised practice of the Secretary of State to reserve two appointments on the Council for Indians

The procedure for the transaction of business established by the Act of 1858 cannot be varied by rules. The powers of the Secretary of State in Council may be exercised only at meetings of the Council. A Council must be held every week and a quorum of five members is required In certain matters, however trivial in themselves, the sanction of a majority of votes at a meeting is required In other matters the Secretary of State may act alone, but except in cases where secrecy or urgency can be claimed, his proposed order must lie a week on the Council Table before it is sent The Act contemplates that all business before coming to the Council should be dealt with in Committee, and the Council is divided for this purpose into several Standing Committees

It is proposed by Clause 1 of the Bill to make certain changes in the strength and composition of the Council, and in the emoluments of the members Also to take power to make rules for simplifying the business procedure of the Council.

With a simplified procedure much of the unimportant work that now occupies the time of the Standing Committees and the Council would be disposed of by the Secretary of State in communication with and with the assistance of individual members, Committees being specially nominated by him when required A council of ten to fourteen members would then be needlessly large It is proposed to fix the number at seven to ten, and to return to the rate of salary (£1,200 a year) allowed by the Act of 1858

It is further proposed to convert the present practice of appointing two Indians to the Council into a statutory requirement, to provide that they shall be chosen from names submitted by Indian Legislative Councils, and to grant to them an allowance of £600 a year in addition to salary, in view of the expense of residing out of their own country

Provision is also made to enable the Secretary of State to appoint to the Council a financial member on special terms as to salary, pension and tenure of office The necessity for an exceptional power of this kind has been recognised by the Royal Commission on Indian Currency.

Clause 2 of the Bill provides for the simplification of business procedure It enables the Secretary of State in Council to make rules to modify the procedure prescribed by the Act of 1858 The rules as and when made are to be laid before Parliament The requirement of a weekly meeting of the Council is also dispensed with and the quorum reduced. The opportunity is taken to enlarge in a way which experience has shown to be desirable the category of cases which may be dealt with by the Secretary of State in his "Secret" Department without informing or consulting his Council

Reception of the Measure.

Strong Criticism.—The publication of the Bill and the explanation aroused a storm of criticism. It soon became known in India as

"The Friendless Bill" and "The Bill that Nobody Wants." The main objection to the Bill was that it proposed to substitute for the collective responsibility of the Council the responsibility of Departments, which would in many cases be independent of the Council and work only through the Secretary of State It was pointed out that these Departments might be staffed by officials entirely unacquainted with India, working in conjunction with Members who might have no experience of the Indian administration Also, that the collective responsibility of the Council would be further reduced by the abolition of the statutory provision requiring it to meet weekly, and placing the convening of the members entirely at the discretion of the Secretary of State There was further criticism of the discretion proposed to be given to the Secretary of State to transact "Secret" business without the knowledge of his Council The proposed introduction of the "panel" system for the election of two Indian members was also warmly opposed During his tenure of office, Lord Morley appointed two Indian members to the Council as part of what is called the Morley-Minto Reform Scheme The step proved good in practice, and there would probably be no opposition if these two seats were by statute reserved for Indians But the introduction of the elective element evoked dual criticism There was no mention of it in Lord Crewe's first outline of his scheme, but resolutions asking that one-third of the Council should be elected were passed by the Indian National Congress and the All-India Moslem League at their sessions in 1913-14, and a small deputation from the Congress was despatched to London to press these views on the Secretary of State When the deputation was received by its London friends, Lord Courtney of Penwith said that such a fetter on the discretion of the Secretary of State in choosing his advisers was what even the most radical might blench from, and threw out the idea that the unofficial members of the Imperial and Provincial Legislative Councils might elect a 'panel" from which the Secretary of State would select his two Indian Councillors One party contended that the principle was bad, inasmuch as the introduction of the elective element into selection for administrative posts was unsound, especially in Indian conditions, with the result that the elected men would either be publicists without any administrative experience, or administrators who had been obliged to bow the knee to the unofficial members of the Councils in order to secure election to the panel The Indian politicians objected to the panel on the ground that it was useless they asked for direct election, and election only by the elected members of the Councils to the exclusion of the nominated official members It is not exaggerating to say that the view of the middle man was that the introduction of the panel brought in a thoroughly bad principle—the making of administrative posts elective—without pleasing the people it was designed to satisfy

The Bill Rejected. —Lord Crewe set himself to answer these criticisms when moving the First Reading of the Bill in the House of Lords on June 30 Dealing with the panel, he said it had been adopted to remove the fear that the two Indian members would always acquiesce in what was said by the officials, and therefore this "qualified and limited representation has been introduced From the list (elected by the unofficial members of the Imperial and Provincial Legislative Councils) the Secretary of State would in all cases be able to make an adequate selection of men of real ability and administrative experience whose advice would be of great value" Lord Crewe emphatically denied that there was any intention to turn the members of the Councils into purely administrative officers, though a great deal would be done to expedite business by utilising them more as individuals and less as members of standing committees He repudiated in the most pointed language the suggestion that the Bill was an attempt to aggrandise the powers of the Secretary of State Lord Curzon, representing the Opposition, preferred the unusual course of moving the rejection of the Bill He did so on the grounds that—

"It appears to me and to everybody of experience whom I have consulted to be a bad Bill, founded upon radically unsound principles While affecting to maintain the Council of the Secretary of State, the Bill, as far as I can see, must reduce it, even if retained, to an impotent and costly sham The measure does affect—if it does not actually destroy—constitutional safeguards which have hitherto surrounded the Secretary of State It introduces into the composition of his Council a new, an inappropriate, and, as I personally think, a perilous method of appointment in regard to the Indian members, and I greatly doubt whether it really represents the collective wisdom of the noble Marquess' advisers in England or India"

Lord Curzon's criticism followed the broad lines indicated above The debate extended over two sittings, those who supported the Bill generally arguing that, though it was not perfect, the India Office stood in such strong need of reform that the wisest course would be to send the Bill to a Grand Committee where it could be shaped into a workable measure But Lord Curzon pressed his motion for rejection, and on July 7, the Bill was rejected by 96 to 38

The Provincial Governments.

British India is divided into eight large provinces and six lesser charges, each of which is termed a Local Government The eight major provinces are the Presidencies of Madras, Bombay, and Bengal, the Lieutenant-Governorships of the United Provinces, The Punjab, Burma, and Behar, and the Chief Commissionership of the Central Provinces The minor provinces are Assam, the North-West Frontier Province, Baluchistan, Coorg, Ajmere Merwara and the Andaman Islands The original division of British authority in India was between the Presidencies of Bengal, Madras and Bombay Bengal afterwards developed into and was separated from the Government of India and then was gradually divided into provinces as the tide of conquest brought under administration areas too large to be controlled by a single authority The status and area of these provinces have been varied from time to time to meet the changed conditions of the day The most recent of these changes was the separation of the North-West Frontier from the Punjab in 1901, the division of Bengal into two provinces in 1905, and the final adjustment made in accordance with His Majesty the King's announcement at the Durbar of 1911, whereby the newly-created province of Eastern Bengal and Assam disappeared, and Bengal was re-divided into the Presidency of Bengal, the Lieutenant-Governorship of Behar and Orissa, and the Chief Commissionership of Assam, whilst the headquarters of the Government of India were moved from Calcutta to Delhi, and the City of Delhi, with an *enclave* of territory surrounding it, was taken under the direct administration of the Government of India All Local Governments alike are under the superintendence and control of the Governor-General in Council They must obey orders received from him, and they must communicate to him their own proceedings But each Local Government is the Executive head of the administration within the province By custom, all appointments to Local Governments are for a term of five years

The Three Classes.

The three Presidencies occupy a superior position The Civil administration of each is vested in a Governor-in-Council, appointed by the Crown, and usually drawn from English public life On certain matters they correspond directly with the Secretary of State, a privilege not possessed by other provincial Governments The Governors are assisted by a Council composed of three members two members of the Civil Service and, under the Indian Councils Act of 1909, a fourth member who is usually an Indian Like the Governor-General they are addressed as Your Excellency, and they are escorted by a body-guard The maximum salaries as fixed by Act of Parliament are Rs 1,20,000 for a Governor and Rs 64,000 for a member of Council

Lieutenant-Governors are appointed by the Governor-General subject to the approbation of the Crown They must have served for at least ten years in India Under the Indian Councils Act power was taken to create executive councils in the Lieutenant-Governorships and this has been applied to Behar where the Lieutenant-Governor is assisted by a Council consisting of two members of the Civil Service and one Indian Lieutenant-Governors are addressed as Your Honour Their maximum salary, Rs 1,00,000, is fixed by Act of Parliament

Chief Commissioners stand upon a lower footing, being delegates of the Governor-General-in-Council In theory, a Chief Commissioner administers his province on behalf of the Governor-General-in-Council, who may resume or modify the powers that he has himself conferred In practice, the powers entrusted to Chief Commissioner of the Central Provinces are as wide as those exercised by a Lieutenant-Governor The salary of a Chief Commissioner is Rs 50,000 but in the case of the Central Provinces this was raised to Rs 62,000 in consideration of the addition of Berar to his Government

Provincial Councils.

The changes made in the constitution and non-legislative functions of the Legislative Councils of Madras and Bombay by the Act of 1909 more than doubled the number of members, election by specially constituted electorates was introduced, and powers were given to members to debate and move resolutions on the provincial financial statements, to move resolutions on matters of general public interest, and to ask supplementary questions. A description of the system in Bombay will show how the scheme works The Bombay Legislative Council is composed of four ex-officio members (the three members of the Executive Council and the Advocate-General) and 44 additional members Of the additional members the Governor nominates twenty-three (of whom not more than fourteen may be officials) and 21 are elected The Government is thus without a majority of officials in the Council Of the elected members, eight are elected by groups of municipalities and the District Boards, four by Mahomedan electorates, and three by electorates of the land-holding classes The Bombay University, the Bombay Municipal Corporation the Bombay Chamber of Commerce, the Karachi Chamber of Commerce, and the Mill-owner's Association, and the Indian Commercial Community, each elect one member The regulations for the formation of electorates, and as to the qualifications and disqualifications of candidates and voters, are similar to those made in the case of the Supreme Council

The rules for the discussion of the annual financial statement are similar to those applicable to the Supreme Council The Financial Statement is presented and considered as a whole and then in detail, and resolutions may be moved The Government is not bound by any resolutions which the Council may pass. Matters of general public interest under the control of Local Governments may be made the subject of resolutions Laws passed by these Legislative Councils require the sanction of the Governor-General and may be disallowed by the Crown

In constitution, in functions, and in the system of special electorates, the Legislative Councils in the Lieutenant-Governorships resemble in all the essential particulars the Legislative Council of Bombay.

The Secretariat.

Each Local Government works through a Secretariat, which is divided into various departments, each under a Secretary. In addition to the Secretaries, there are special departmental heads such as the Inspectors General of Police, Jails, and Registration the Director of Public Instruction, the Inspector-General of Civil Hospitals or Surgeon-General, the Sanitary Commissioner and the Superintendent of the Civil Veterinary Department. There are also Chief Engineers for Public Works and Irrigation, who are likewise Secretaries to Government In nearly all the Provinces except Bombay, the revenue departments are administered, under Government, by a Board of Revenue

The District Officer.

The administrative system is based on the repeated sub-division of territory, each administrative area being in the responsible charge of an officer who is subordinate to the officer next in rank above him The most important of these units is the District, and India embraces more than 250 Districts, with an average area of 4,430 square miles and an average population of 931,000 In Madras there is no local officer above the head of the District elsewhere a Commissioner has the supervision of a Division comprising from four to six Districts The head of a District is styled either the Collector and District Magistrate or the Deputy Commissioner He is the representative of the Government and embodies the power of the State He is concerned in the first place with the land and the land revenue He has also charge of the local administration of the excise, income tax, stamp duty and other sources of revenue As a Magistrate of the first class, he can imprison for two years and fine up to a thousand rupees In practice he does not try many criminal cases, although he supervises the work of the other Magistrates in the District.

In addition to these two main departments, the Collector is interested in all matters pertaining to the welfare of the people In some branches of the administration his functions are, in consequence of the formation of special departments, such as those of Public Works, Forests, Jails, Sanitation, and Education less direct than was formerly the case But even in matters dealt with by separate departments, his active co-operation and direction in counsel are needed The Municipal Government of all considerable towns is vested in Municipalities but it is the duty of the Collector to guide and control their working He is usually the Chairman of the District Board which, with the aid of subsidiary boards, maintains roads, schools and dispensaries, and carries out sanitary improvements in rural areas

Other Officers.

Other important district officers are the Superintendent of Police, who is responsible for the discipline and working of the police force, and the Civil Surgeon, who (except in Bombay) is the head of the medical and sanitary administration The local organisation of Government Public Works, Forests, Education and other special departments varies in different parts of the country Each District has its own law officer, styled the Government Pleader

The Districts are split up into sub-divisions, under Junior Officers of the Indian Civil Service or members of the Provincial Service called Deputy Collectors In Madras, Bombay and the United Provinces there are smaller sub-district units called taluks or tahsils, administered by tahsildars (Bombay Mamlatdars), with naib tahsildars or mahalkarris The tahsildar is assisted by subordinate officers, styled revenue inspectors or kanungos and the village officers The most important of the latter are the headman who collects the revenue, the karnam, karkun or patwari who keeps the village accounts, and the chaukidar or village watchman

Administrative Divisions.

Provinces	No of Districts	Area in Square miles.	Population (1911)
Ajmer Merwara ..	2	2,711	501,395
Andamans and Nicobars . .		3,143	26,459
Assam	12	52,959	6,713,635
Baluchistan .	6	45,804	414,412
Bengal	28	78,412	45,483,077
Bihar and Orissa .	21	83,205	34,490,084
Bombay (Presidency) .	26	123,064	19,672,642
Bombay . .	26	75,918	16,113,042
Sind	6	47,066	3,513,435
Aden .		80	46,165
Burma	41	236,738	12,115,217
Central Provinces and Berar	22	100,345	13,916,308
Coorg	1	1,582	174,976
Madras	24	141,726	41,405,404
North-West Frontier Province (Districts and administered Territories)	5	16,466	2,196,933
Punjab	29	97,209	19,974,956
United Provinces of Agra & Oudh	48	107,164	47 182,044
Agra	36	83,198	34,624,040
Oudh	12	23,966	12,558,004
Total British Territory	267	1,097,901	244,267,542

States and Agencies	No of Districts	Area in Square miles	Population (1911)
Baluchistan States		86,511	396,432
Baroda State		8,099	2,032,798
Bengal States		32,773	4,538,161
Bombay States		65,761	7,411,567
Central India Agency		78,772	9,356,980
Central Provinces States .		31,188	2 117,002
Eastern Bengal and Assam States	.		575,825
Hyderabad State		82,698	13,374 676
Kashmir State . .		80,900	3 158,126
Madras States		9,969	4,811,841
Cochin State			918,110
Travancore State			3,428,975
Mysore State		29,444	5,806,193
North-West Frontier Province (States and Tribal areas)			1,622,094
Punjab States .		36,532	4,212,794
Rajputana Agency .. .		127,541	10,530,432
Sikkim . .			87,920
United Provinces States		5,079	832,036
Total Native States..		675,267	70,864,995
Grand Total, India.. ..		1,773,168	315,132,537

The Bombay Presidency.

The Bombay Presidency stretches along the west coast of India, from Sind in the North to Kanara in the South It embraces, with its feudatories and Aden, an area of 186,923 square miles and a population of 27,084,317 Of this total 65,761 square miles are in Native States, with a population of 7,411,675 Geographically included in the Presidency but under the Government of India is the first class Native State of Barod.., with an area of 8,182 square miles and a population of 2,032,798 The outlying post of Aden is under the jurisdiction of the Bombay Government it has an area of 80 square miles and a population of 46,165

The Presidency embraces a wide diversity of soil, climate and people In the Presidency Proper are the rich plains of Gujarat, watered by the Nerbudda and the Tapti, whose fertility is so marked that it has long been known as the Garden of India South of Bombay City the province is divided into two sections by the Western Ghats, a range of hills running parallel to the coast Above Ghats are the Deccan Districts, with a poor soil and an arid climate, south of these come the Karnatic districts On the sea side of the Ghats is the Konkan, a rice-growing tract, intercepted by creeks which make communication difficult. Then in the far north is Sind, totally different from the Presidency Proper, a land of wide and monotonous desert except where irrigation from the Indus has brought abounding fertility

The People

The population varies as markedly as soil and climate In Sind Mahomedans predominate Gujarat has remained true to Hinduism although long under the dominion of powerful Mahomedan kings Here there is an amplitude of caste divisions, and a people, who although softened by prosperity, are amongst the keenest trading races in the world The Deccan peasant has been seasoned by adversity, the saying goes that the Deccan expects a famine one year in every three, and gets it, the population is much more homogeneous than in Gujarat, and thirty per cent are Mahrattas The Karnatic is the land of the Lingayets, a Hindu reforming sect of the twelfth century, and in the Konkan there is a large proportion of Christians Four main languages are spoken, Sindi, Gujarati, Marathi and Kanarese, with Urdu a rough *lingua franca* where English has not penetrated The main castes and tribes number five hundred

Industries

The principal industry is agriculture, which supports sixty-four per cent of the population In Sind the soils are wholly alluvial, and under the influence of irrigation produce yearly increasing crops of wheat and cotton In Gujarat they are of two classes, the black cotton soil, which yields the famous Broach cottons, the finest in India, and alluvial which under careful cultivation in Ahmedabad and Kaira makes splendid garden land The dominant soil characteristic of the Deccan is black soil, which produces cotton, wheat, gram and millet, and in certain tracts rich crops of sugar cane. The Konkan is a rice land, grown under the abundant rains of the submontane regions, and in the south the Dharwar cotton vies with Broach as the best in India. There are no great perennial rivers suitable for irrigation, and the harvest is largely dependent upon the seasonal rainfall, supplemented by well irrigation A chain of irrigation works, consisting of canals fed from great reservoirs in the region of unfailing rainfall in the Ghats, is gradually being completed, and this will ultimately make the Deccan immune to serious drought More than any other part of India the Presidency has been scourged by famine and plague during the past fifteen years The evils have not been unmixed, for tribulation has made the people more self-reliant, and the rise in the values of all produce, synchronising with a certain development of industry, has induced a considerable rise in the standard of living The land is held on what is known as the ryotwari tenure, that is to say, each cultivator holds his land direct from Government under a moderate assessment, and as long as he pays this assessment he cannot be dispossessed

Manufactures.

Whilst agriculture is the principal industry, others have no inconsiderable place The mineral wealth of the Presidency is small, and is confined to building stone, salt extracted from the sea, and a little manganese But the handicrafts are widely distributed. The handloom weavers produce bright-coloured saris, and to a diminishing extent the exquisite kincobs of Ahmedabad and Surat. Bombay silver ware has a place of its own, as well as the brass work of Poona and Nasik. But the tendency is to submerge the indigenous handicrafts beneath industry organised on modern lines Bombay is the great centre in India of the textile trade. This is chiefly found in the headquarter city, Bombay, where the industry embraces 2,925,966 spindles and 45,250 looms and employs 110,033 hands and consumes 3,762,983 cwts of cotton This industry is now flourishing, and is steadily rising in efficiency In lieu of producing immense quantities of low grade yarn and cloth, chiefly for the China market, the Bombay mills now turn out printed and bleached goods of a quality which improves every year, and the principal market is at home Whilst the industry centres in Bombay City, there are important offshoots at Ahmedabad, Broach and Sholapur. In Ahmedabad there are 929,702 spindles and 18,039 looms, in Sholapur 222,963 spindles and 3,055 looms, and in the Presidency 4,538,710 spindles and 69,121 looms. It is expected that the prosperity of the Bombay trade will be quickened, when a project, now approaching completion, for the substitution of electricity for steam—the electricity to be generated at a hydro-electric station in the Ghats, fifty miles distant—furnishes cheap and efficient power Its situation on the western-sea-board, in touch at once with the principal markets of India and the markets of the west, has given Bombay an immense sea-borne trade The older ports, Surat, Broach, Cambay and Mandvie, were famous in the ancient days, and their bold and hardy mariners carried Indian commerce to the Persian Gulf and the coasts of Africa. But the opening of the Suez Canal and the increasing size of ocean steamers have tended to concentrate it in modern ports with deep water anchor-

ages, and the sea-borne trade of the Presidency is now concentrated at Bombay and Karachi, although attempts are being made to develop Mormugao, in Portuguese territory, into an outlet for the trade of the Southern Mahratta Country The trade of Bombay is valued at 216 crores of rupees; the foreign trade of the port of Bombay at 168¾ crores (imports 94 crores, exports 74 crores), Karachi at 43,08 lakhs (imports 16,13, exports 26,65)

Administration.

The Presidency is administered by a Governor-in-Council The Governor is appointed by the Crown, and is usually drawn from the ranks of those who have made their mark in English public life He is assisted by a Council of three members, two of whom are drawn from the Indian Civil Service, and the third in practice is an Indian Each Member takes special charge of certain departments, and cases where differences of opinion occur, or of special importance, are decided "in Council" All papers relating to public service business reach Government through the Secretariat, divided into five main departments each under a Secretary (*a*) Revenue and Financial (*b*) Political, Judicial, and Special (*c*) General, Educational, Marine and Ecclesiastical (*d*) Ordinary Public Works (*e*) Irrigation The senior of the three Civilian Secretaries is entitled the Chief Secretary The Government frequently moves It is in Bombay from November to the end of March, at Mahableshwar from April to June, in Poona from June to September, and at Mahableshwar from October to November, but the Secretariat is always in Bombay Under the Governor-in-Council the Presidency is administered by four Commissioners The Commissioner in Sind has considerable independent powers In the Presidency Proper there are Commissioners for the Northern Division, with headquarters at Ahmedabad, the Central Division at Poona, and the Southern Division at Belgaum Each district is under a Collector, usually a Covenanted Civilian, who has under him one or more Civilians as Assistant Collectors, and one or more Deputy Collectors A collectorate contains on an average from eight to ten talukas, each consisting of from one to two hundred villages whose whole revenues belong to the State The village officers are the patel, who is the head of the village both for revenue and police purpose, the talati or kulkarni, clerk and accountant, the messenger and the watchman Over each Taluka or group of village is the mamlatdar, who is also a subordinate magistrate The charge of the Assistant or Deputy Collector contains three or four talukas The Collector and Magistrate is over the whole District The Commissioners exercise general control over the Districts in their Divisions The control of the Government over the Native States of the Presidency is exercised through Political Agents.

Justice.

The administration of justice is entrusted to the High Court sitting in Bombay, and comprising a Chief Justice, who is a barrister, and six puisne judges, either Civilians, Barristers, or Indian lawyers. In Sind the Court of the Judicial Commissioner (three judges, one of whom must be a barrister) is the highest court of civil and criminal appeal Of the lower civil courts the court of the first instance is that of the Subordinate Judge recruited from the ranks of the local lawyers. The Court of first appeal is that of the District or Assistant Judge, or of a first class subordinate judge with special powers District and Assistant Judges are Indian Civilians, or members of the Provincial Service In cases exceeding Rs 5,000 in value an appeal from the decision of the Subordinate or Assistant Judge and from the decision of the District Judge in all original suits lies to the High Court District and Assistant Judges exercise criminal jurisdiction throughout the Presidency, but original criminal work is chiefly disposed of by the Executive District Officers Capital sentences are subject to confirmation by the High Court In some of the principal cities Special Magistrates exercise summary jurisdiction (Bombay has four Presidency Magistrates, as well as Honorary Magistrates exercising the functions of English Justices of the Peace) and a Court of Small Causes, corresponding to the English Country Courts

Local Government.

Local control over certain branches of the administration is secured by the constitution of local boards and municipalities, the former exercising authority over a District or a Taluka, and the latter over a city or town These bodies are composed of members either nominated by Government or elected by the people, who are empowered to expend the funds at their disposal on education, sanitation, the construction of roads and tanks, and general improvements Their funds are derived from cesses on the land revenue, the toll and ferry funds The tendency of recent years has been to increase the elective and reduce the nominated element, to allow these bodies to elect their own chairmen, whilst large grants have been made from the general revenues for water supply and drainage

Finance.

The finance of the provincial governments is marked by definite steps toward provincial financial autonomy Up to 1870 there was one common purse for all India. Since then progressive steps have been taken to increase the independence of local Governments. Broadly, certain heads of revenue are divided with the Imperial Government, whilst certain growing heads of revenue, varying in each province, are allotted to the local Government Thus in Bombay the land revenue, stamp revenue and revenue from assessed taxes are divided with the Government of India All other local sources of revenue go intact to the local Government The provincial Budget for 1914-15 shows an opening balance of Rs 178 lakhs, revenue 758 lakhs, expenditure 823 lakhs and the closing balance Rs 114 lakhs These large balances are due to grants from the Imperial Governments for non-recurring expenditure

Public Works.

The Public Works Department is under the control of two Chief Engineers who act as Secretaries to the Government; one for General Works and the other for Irrigation.

Under them are Superintending Engineers in charge of Divisions and Executive Engineers in charge of districts, with the Consulting Architect The chief irrigation works are in Sind and consist of a chain of canals fed by the annual inundations from the Indus and one perennial canal the Jamrao In the Presidency proper the principal protective works are the Nera Canal, Gokak Canal, Mutha Canal and a large number of tanks In addition there is under construction a chain of protective irrigation works, originating in reservoirs in the Ghat regions The first of these the Godavari Scheme, is now in operation, the Pravara Scheme is in progress and the Nira Scheme has recently been sanctioned The Public Works budget for the current year is 90 lakhs of rupees

Police

The Police Force is divided into three categories District Police, Railway Police and the Bombay City Police The District Police are under the Inspector-General who is either a member of the Gazetted Force or a Covenanted Civilian Under him are the Deputy Inspector-Generals for Sind and the Northern and Southern Ranges of the Presidency proper, for Railways and for Criminal Investigation District Superintendents of Police have charge of each District with a regular cadre comprising Assistant Superintendents, Sub-Inspectors, Chief Constables and Constables The Bombay City Police is a separate force maintained by Government under a Commissioner who is responsible direct to Government The Training School at Nasik prepares young gazetted officers and the rank and file for their duties The cost of the Police is 106 lakhs

Education

Education is imparted partly through direct Government agency, partly through the medium of grants-in-aid Government maintain Arts Colleges at Bombay, Poona and Gujarat, the Grant Medical College, the Poona College of Science, the Agricultural College, Veterinary College, School of Art, Law School and a College of Commerce A Science College in Bombay is now in course of construction Also in Bombay City, and the headquarters of each district, a model secondary school The other secondary schools are in private hands, the majority of the primary schools are maintained by District and Local Boards with a grant-in-aid The Bombay Municipality is responsible for primary education in Bombay City There are now in the Presidency 15 Arts Colleges, 607 Secondary Schools, 14,061 Primary schools, 137 Schools for Special Instructions, 3,094 Private Institutions, with 956,297 scholars The Government Educational Budget is 102 lakhs

The Educational Department is administered by a Director, with an Inspector in each Division and a Deputy Inspector with Assistants in each district Higher education is controlled by the Bombay University (established in 1857) consisting of the Chancellor (the Governor of the Presidency), the Vice-Chancellor (appointed by Government for two years), and 110 Fellows of whom 10 are *ex-officio*; 10 elected by the Graduates, 10 by the Faculties, and 80 are nominated by the Chancellor.

The principal educational institutions are —

Government Arts Colleges—
Elphinstone College, Bombay, Principal Wilkinson
Deccan College, Poona, Principal Mr J Bain
Gujarat College, Ahmedabad, Principal the Rev W G Robertson

Private Arts Colleges—
St Xaviers, Bombay (Society of Jesus), Principal Rev Father Sicip
Wilson College, Bombay (Scottish Mission), Principal Rev Dr Mackichan
Ferguson College, Poona (Deccan Educational Society), Principal the Hon'ble Mr. R P Paranjpe
Baroda College, Baroda (Baroda State); Principal Mr Clarke
Samaldas College, Bhavnagar (Bhavnagar State), Principal Mr Unwalla
Bahauddinbhai College, Junagadh State, Principal Mr Scott

Special Colleges—
Grant Medical College, Bombay (Government), Principal Lt-Col Stiet, I M S
College of Science, Poona (Government), Principal Dr Allen
Agricultural College, Poona (Government), Principal Dr Harold Mann
Chiefs' College Rajkot, Principal Mr Mayne
College of Science, Ahmedabad
Law School, Bombay, Principal, Mr Lang,
College of Commerce, Bombay, Principal, Mr P Anstey
Veterinary College, Bombay, Mr K Hewlett
Bombay Bacteriological Laboratory, Director, Major Liston, I M S
Sir J J School of Art, Bombay (Government), Principal Mr Cecil Burns
Victoria Technical Institute, Bombay, Principal Mr T Dawson

Medical

The Medical Department is in charge of the Surgeon-General and Sanitation of the Sanitary Commissioner, both members of the Indian Medical Service Civil Surgeons stationed at each district headquarters are responsible for the medical work of the district, whilst sanitation is entrusted to one of the Deputy Sanitary Commissioners Three large hospitals are maintained by the Government in Bombay, and well-equipped hospitals exist in all important up-country stations Over four million persons including 67,000 in-patients are treated annually The Presidency contains 7 Lunatic Asylums and 16 institutions for the treatment of Lepers. Vaccination is carried out by a staff under the direction of the Sanitary Commissioner Sanitary work has received an immense stimulus from the large grants made by the Government of India out of the opium surpluses.

Governor and President in Council

His Excellency The Right Hon'ble Freeman Freeman-Thomas Baron Willingdon of Ratton G C I E Took his seat 5th April 1913

Personal Staff.

J Crerar, I C S, J P, *Private Secy.*
Major J G Greig, C I E, 121st Pioneers, *Military Secy*

Captain Rigby, R A M C, *Surgeon to H. E. the Governor*

Capt K O. Goldie, 10th Duke of Cambridge's Own Lancers (Hodson's Horse), *Aide-de-Camp*

Captain Eliot, Hampshire Territorials, *Extra Aide-de-Camp*

Capt Vere Arthur Coaker, 3rd Skinner's Horse, *Commandant, H E the Governor's Body Guard (On leave)*

Lieut E D Metcalfe, 3rd Skinner's Horse, *Adjutant, H E the Governor's Body Guard (Acting Commandant)*

Subedar-Major Sher Muhammad Khan, 121st Pioneers, *Indian Aide-de-Camp*

Members of Council

Sir R A Lamb, K C S I, C I E, I C S

Mr C H A Hill, C S I, C I E, I C S.

Mr Prabhashankar D Pattani, C I E,

Additional Members of Council

Elected

Moulvie Rafiuddin Ahmad, Bar-at-Law Elected by the Muhammadan Community of the Central Division

Mr D V Belvi, B A, L L B Elected by the Municipalities of the Southern Division

Mr G M Bhurgri, Bar-at-Law Elected by the Jaghirdars and Zamindars of Sind

Mr F M Chinoy Elected by the Muhammadan Community of the City of Bombay

Sardar Syed Ali El Edroos Elected by the Muhammadan Community of the Northern Division

Mr. K R Godbole Elected by the District Local Boards of the Central Division.

Shaikh G H Hidayatallah, L L B Elected by the District Local Boards of the Sind Division

Sardar Sir Chunubhai Madhavlal, Bart, C I E Elected by the Millowners' Association of Ahmedabad.

Sir Pherozeshah M Mehta, K C I E, M A, Bar-at-Law. Elected by the Municipal Corporation of the City of Bombay

Mr G K Parekh, B A, L L B Elected by the Municipalities of the Northern Division

Mr. V J. Patel, Bar-at-Law Elected by the District Local Boards of the Northern Division

Sardar B A Saheb Patwardhan, Chief of Kurundwad (Senior). Elected by the Sardars of the Deccan.

Mr Abdul Hussein Adamji Peerbhoy. Elected by the Muhammadan Community of the Southern Division

Sardar Dulabawa Raisingji, Thakor of Kerwada. Elected by the Sardars of Gujarat.

Mr. Manmohandas Ramji. Elected by the Indian Commercial Community.

Mr. T W Birkett. Elected by the Bombay Chamber of Commerce.

Rao Bahadur S. K. Rodda Elected by the District Local Boards of the Southern Division.

Mr. C H Setalvad, B A, L L B Elected by the University of Bombay

Mr. S B Upasani Elected by the Municipalities of the Central Division.

Mr Harchandrai Vishindas, B A, L L B Elected by the Municipalities of the Sind Division

Mr M De Pomerory Webb, C I E Elected by the Karachi Chamber of Commerce

Nominated.

The Advocate-General (*ex-officio*)

Mr R P Barlow, I C S

Mr G. S. Curtis

Mr J E C Jukes

Dr Dommick Anthony D'Monte

Mr W L Graham

Mr G W Hatch

Sir Jamsetjee Jeejeebhoy, Bart

Mr B S Kamat

Mr N D Khandalavala, L L B

Mr J H Kothari

Mr J A D McBain.

Mr Lalubhai Samaldas Mehta

Mr. G. P Millet

Rao Saheb V S Naik

Mr E F Nicholson

Rao Bahadur R M Nilkantha, L L B

Mr R P Paranjpe

Sir Ibrahim Rahimtoola, Kt, C I E

Rao Bahadur G K. Sathe

Mr. W. H Sharp

Sir F L Sprott

Surgeon-General R W S Lyons

Mr E G Turner.

SECRETARIES TO GOVERNMENT

Political, Special and Judicial—L Robertson I C S

J E B Hotson, I C S, *Dy. Secretary, Judicial and Political Departments* (Temporary)

Revenue, Financial and Separate—The Hon'ble Mr George Carmichael, C S I.

General, Educational, Marine and Ecclesiastical—J L Rieu, I C S.

Legal Department and Remembrancer of Legal Affairs—Philip Edward Percival

G D French, I C S, Dy Secretary, Legal Department (Temporary)

Public Works Department—H F. Beale, and Lt-Col W. V. Scudamore, R.E. (*Joint Secretary*)

MISCELLANEOUS APPOINTMENTS (S C)

Advocate-General, The Hon. Mr. T. J. Strangman.

Inspector-General of Police, Michael Kennedy, C S I.

Director of Public Instruction, The Hon. Mr. W. L. Sharp.

Surgeon-General, The Hon. Surgeon-General R. W. S. Lyons, I M S.

Oriental Translator, Sorab Maneckshah Bharucha

Talukdari Settlement Officer, The Hon Mr. J E C Jukes, I C S

Settlement Commissioner and Director of Land Records, C N Seddon, I C S

Director of Agriculture and Co-operative Societies, G. F. Keatinge, C.I E

Registrar of Co-operative Societies, R B Ewbank (on deputation)
P. B Haigh, I C S, Acting

Municipal Commissioner, Bombay, P. R. Cadell C I E

Vice-Chancellor, Bombay University, The Hon Mr Justice Heaton, I C S

Registrar, Bombay University, Fardunji Dastur

Commissioner of Police, Bombay, S. M. Edwardes, C V O, I C S

Sanitary Commissioner, Major F H. G Hutchinson

Accountant-General, D Dewar, I C S.

Inspector-General of Prisons, Lt -Col. J Jackson, I M S

Postmaster-General, E A Doran, C I E

Commissioner of Customs, Salt, Opium and Excise, H O Quin

Collector of Customs, Bombay, R F L Whitty

Consulting Architect, G W Wittet

Consulting Surveyor, A E Mirams, F S I

GOVERNORS OF BOMBAY.

Sir Abraham Shipman	1662
Died on the island of Anjediva in October	1664
Humfrey Cooke	1665
Sir Gervase Lucas Died, 21st May, 1667	1666
Captain Henry Garey (*Officiating*)	1667
Sir George Oxenden Died in Surat, 14th July, 1669	1668
Gerald Aungier Died in Surat, 30th June, 1677	1669
Thomas Rolt	1677
Sir John Child, Bart	1681
Bartholomew Harris Died in Surat, 10th May, 1694	1690
Daniel Annesley (*Officiating*)	1694
Sir John Gayer	1694
Sir Nicholas Waite	1704
William Aislabie	1708
Stephen Strutt (*Officiating*)	1715
Charles Boone	1715
William Phipps	1722
Robert Cowan Dismissed.	1729
John Horne	1734
Stephen Law	1739
John Geekie (*Officiating*)	1742
William Wake	1742
Richard Bourchier	1750
Charles Crommelin	1760
Thomas Hodges Died, 23rd February, 1771	1767
William Hornby	1771
Rawson Hart Boddam	1784
Rawson Hart Boddam	1785
Andrew Ramsay (*Officiating*)	1788
Major-General William Medows	1788
Major-General Sir Robert Abercromby, K C B (*a*)	1790
George Dick (*Officiating*)	1792
John Griffith (*Officiating*)	1795
Jonathan Duncan Died, 11th August, 1811.	1795
George Brown (*Officiating*)	1811
Sir Evan Nepean, Bart	1812
The Hon Mountstuart Elphinstone	1819
Major-General Sir John Malcolm, G C B	1827
Lieut.-General Sir Thomas Sidney Beckwith, K C B Died, 15th January, 1831	1830
John Romer (*Officiating*)	1831
The Earl of Clare	1831
Sir Robert Grant, G C H Died, 9th July, 1838	1835
James Farish (*Officiating*)	1838
Sir J Rivett-Carnac, Bart.	1839
Sir William Hay Macnaghten, Bart (*b*)	
George William Anderson (*Officiating*)	1841
Sir George Arthur, Bart, K C H	1842
Lestock Robert Reid (*Officiating*)	1846
George Russell Clerk	1847
Viscount Falkland	1848
Lord Elphinstone, G C H, P C	1853
Sir George Russel Clerk, K C B (2nd time)	1860
Sir Henry Bartle Edward Frere K C B	1862
The Right Hon William Robert Seymour Vesey FitzGerald	1867
Sir Philip Edmond Wodehouse, K C B	1872
Sir Richard Temple, Bart, K C S I	1877
Lionel Robert Ashburner, C S I (*Acting*)	1880
The Right Hon Sir James Fergusson, Bart, K C M G	1880
James Braithwaite Peile, C S I (*Acting*)	1885
Baron Reay	1885
Baron Harris	1890
Herbert Mills Birdwood, C S I. (*Acting*)	1895
Baron Sandhurst	1895
Baron Northcote, C B	1900
Sir James Monteath, K C S I (*Acting*)	1903
Baron Lamington, G C M.G, G C I E	1903
J W P Muir-Mackenzie, C S I (*Acting*)	1907
Sir George Sydenham Clarke, G C.M G, G C I E (*c*)	1907
Baron Willingdon, G C I E	1913

(*a*) Proceeded to Madras on duty in Aug ,1793, and then joined the Council of the Governor-General as Commander-in-Chief in India on the 28th Oct , 1793

(*b*) Was appointed Governor of Bombay by the Honourable the Court of Directors on the 4th Aug , 1841, but, before he could take charge of his appointment, he was assassinated in Cabul on the 23rd Dec , 1841

(*c*) Afterwards (by creation) Baron Sydenham.

The Madras Presidency.

The Madras Presidency, officially the Presidency of Fort St George, together with the Native States, occupies the whole southern portion of the peninsula, and, excluding the Native States, has an area of 141,075 square miles It has on the east, on the Bay of Bengal, a coast-line of about 1,200 miles, on the west, on the Indian Ocean, a coast-line of about 450 miles In all this extent of coast, however, there is not a single natural harbour of any importance, the ports, with the exception of Madras, which has an artificial harbour, are merely open roadsteads A plateau, varying in height above sea-level from about 1,000 to about 3,000 ft, and stretching northwards from the Nilgiri Hills, occupies the central area of the Presidency, on either side are the Eastern and the Western Ghats, which meet in the Nilgiris The height of the western mountain-chain has an important effect on the rainfall Where the chain is high, the intercepted rain-clouds give a heavy fall, which may amount to 150 inches, on the seaward side, but comparatively little rain falls on the landward side of the range Where the chain is low, rain-clouds are not checked in their westward course In the central tableland and on the east coast the rainfall is small and the heat in summer excessive The rivers, which flow from west to east, in their earlier course drain rather than irrigate the country, but the deltas of the Godaveri, Kistna and Cauvery are productive of fair crops even in time of drought and are the only portions of the east coast where agriculture is not dependent on a rainfall rarely exceeding 40 inches and apt to be untimely

Population

The population of the Presidency in 1911 was 41,402,000 and that of the Native States was 4,813,000 Hindus account for 89 per cent, Mahomedans for 6, Christians for 3, and Animists for 2 The vast majority of the population is of Dravidian race, and the principal Dravidian languages, Tamil and Telugu, are spoken by 15 and 14 million persons, respectively Of every 1,000 people, 407 speak Tamil, 377 speak Telugu, 74 Malayalam, 37 Canarese and 23 Hindustani It is remarkable that of the 41 millions of population all but quarter of a million belong to it by birth

Agriculture.

About 68 per cent of the population is occupied in Agriculture About 49 per cent having a direct interest as land-owners or tenants About 86 per cent of the cultivated acre is under food crops, the principal being rice (10 7 million acres), cholum or great millet (5 8 million acres), spiked millet (3 3 million acres) and ragi or millet (2 5 million acres) 24,023 acres are under wheat, 3,079 acres are under barley About 3 2 million acres are under oil seeds, about 2 7 million acres are under cotton, 26,822 acres are under tea and 43,522 acres are under coffee Irrigation is unnecessary on the West Coast but on the East about 30 5 per cent of the cultivated area has ordinarily to be irrigated. Irrigation works include 28,896 tanks, 6,164 river channels, 6,114 spring channels, 1,391 anicuts, 391,659 ayakat wells and 215,736 supplemental wells The recent progress of the application of machinery to irrigation on a small scale has been remarkable

Industries

Comparative poverty in readily exploitable mineral wealth and the difficulty of coal supply prohibit very large industrial development in the Presidency, but excellent work, both in reviving decadent industries and testing new ones, has been done under Government auspices The only indigenous art employing a considerable number of workers is weaving There is no system of regular registration in vogue, and the figures given can be regarded only as approximate, but returns show a total of 1,231 factories driven by engines of an aggregate H P of 33,417 Of these factories 179 are concerned with cotton

Trade

The grand total of sea-borne trade of the Madras Presidency in 1913-14 was Rs 58,15,93,000, the average for the 5 years ending 1910-11 was Rs 45,01,10,000 The total foreign imports were valued at Rs. 16,97,76,951 and the total foreign exports were valued at Rs 26,90,23,740 Under imports articles wholly or partly manufactured amounted to Rs 1,350 lakhs, of which cotton manufactures reached Rs 4,68,59,000 Under exports 'raw produce and articles mainly unmanufactured' amounted to 1,137 lakhs, the most important items were seeds (Rs 5,32,89,000), leather (Rs 3,47,72,000), cotton (Rs 3,08,96,000), grain and pulse, coffee and tea About 63 per cent of the trade of the Presidency was with the British Empire and about 42 per cent with the United Kingdom The port of Madras accounted for 41 per cent of the whole sea-borne trade of the Presidency

Education

The literate population numbers 3,130,000 in every 1,000, 138 men and 13 women can read and write Of every 1,000 persons, 6 are literate in English, but the total number of women literate in English is only 4,000 There were in 1913-1914, twenty-nine Arts Colleges five Oriental Colleges, three Professional Colleges, 364 Secondary Schools and 26,018 Elementary Schools for males, for females there were two Arts Colleges, 69 Secondary Schools and 1,143 Elementary Schools In addition to these all of which were public institutions, there were 368 advanced and 4,222 elementary private institutions for male scholars and 122 for females The total number of scholars in educational institutions of all kinds was 1,469,945 including 7,094 students in Arts and Oriental Colleges, 986 in Professional Colleges, 128,157 in Secondary Schools and 1,200,249 in Elementary schools The Madras University produces each year about 600 graduates in Arts

Government

The Madras Presidency is governed on a system generally similar to that obtaining in Bombay and Bengal At the head is the Governor, usually selected from the ranks of British public men or of ex-Governors of Colonies, with the Governor is associated an Executive Council of three members, two of

whom must have served for ten years under the Crown in India, while the third, of whom official experience is not required, is in practice, but not of necessity, an Indian. Madras administration differs, however, in some important respects from that of other major Provinces. There is no intermediate local authority between the Collector of the District and the authorities at headquarters, the Commissioner being unknown in Madras. Part of the power which would be reserved elsewhere for the Commissioner is given to the Collector, whose status is rather higher in Madras than elsewhere, and part is exercised by the Board of Revenue. Each member of the Board of Revenue is in fact a Commissioner for specific subjects throughout the Presidency. This conduces to administration by specialists and to the maintenance of equal progress in specific matters in every part of the Presidency, but it leaves the Government without an official who can judge of the general administration of large parts of the country. For these and other reasons the Decentralisation Commission has recommended that a system of Commissionerships be introduced in Madras.

Finance

The revenues of the Presidency according to the revised estimates, 1912-13, amounted to Rs 740 37 lakhs, derived mainly from land revenue (Rs 348 35 lakhs) and excise (Rs 174 lakhs). The last figure is unprecedentedly large. The expenditure amounted to Rs 817 06 lakhs, the main heads being land revenue administration (Rs 146 78 lakhs), education (Rs 81 67 lakhs), police (Rs 92 69 lakhs), "civil works, civil" (Rs 95 63 lakhs), "civil works, public works department" (Rs 72 40 lakhs), courts of law (Rs 69 22 lakhs), medical (Rs 29 16 lakhs).

The impression conveyed by considerable surpluses is misleading. Madras has been living to a great extent on windfalls in the form of grants from the Government of India and a good deal of technically non-recurring expenditure is in fact recurring. The excess of recurring revenue over recurring expenditure is thus largely illusory.

Governor and President-in-Council

His Excellency the Rt. Hon. Baron Pentland, G.C.I.E., P.C. *Took his seat* 30th *October*, 1912

Personal Staff

Private Secy., C. B. Cotterell.
Military Secy., Capt. C. J. L. Allanson, 6th Goorka Rifles.
Aides-de-Camp, Lieut. R. B. Butler, 30th Lancers, Lieut. R. H. V. Cavendish, M.V.O. Grenadier Guards.
Extra Aide-de-Camp, Lieut. J. R. W. Stone.
Honorary Aides-de-Camp, Col. F. D. Bird, V.D., Comdr. W. B. Huddleston, R.I.M.
Native Aide-de-Camp, Risaldar Major Malik Sher Bahadur.
Surgeon, Capt. Hugh Stott, M.B., I.M.S.
Commandant of Body Guard, Capt. C. Jarvis, 20th Deccan Horse.
Adjutant of Body Guard, Lieut. J. H. Muir, 19th Lancers.

Members of Council

P. S. Aiyar Sivaswami Aiyar, C.S.I., C.I.E.
Sir H. A. Stewart, K.C.V.O., C.S.I.
Mr. A. G. Cardew, C.S.I., I.C.S.

Additional Members of Council
Elected

Dr. T. M. Nair.
Rev. G. Pittendrigh.
B. N. Sarma.
M. Ramachandra Rao Pantulu.
A. Subba Krishna Rao Pantulu.
Pattu Kesava Pillai.
A. Subbarayulu Reddiyar.
B. V. Aiyar Narasimha Aiyar.
K. P. Raman Menon.
V. K. Aiyangar Ramanujachariyar.
Krishnaswami Rama Aiyangar.
K. R. Venkata Krishna Rao Pantulu.
Diwan Bahadur Venkataswami Ramabhadra Nayudu Garu.
C. V. Surya Narasimha Raju.
K. Chidambaranatha Mudaliyar.
V. Kunhiraman Nayanar.
T. Zain-ul-abiden Sahib Shifa-ul-Mulk.
Ahmed Tambi Ghulam Muhuddin Marakkayar.
J. O. Robinson.
Sir Hugh Stokes Fraser.
E. F. Barber.

Nominated

F. H. M. Corbet.
N. S. Brodie.
L. Davidson, C.S.I.
L. E. Buckley.
J. H. Stone.
W. Francis.
S. B. Murray.
R. C. C. Carr.
A. Butterworth.
Surg.-Gen. W. B. Bannerman, C.S.I., M.D., I.M.S.
P. Rajagopala Achariyar.
H. F. W. Gillman.
C. R. M. Schmidt.
Diwan Bahadur L. D. Swamikannu Pillai.
Haji Ismael Sait, Khan Bahadur.
T. Richmond.
Sir F. J. E. Spring, K.C.I.E.
P. Somasundara Chettiyar.
V. S. Srinivasa Sastri.
A. Muirhead, C.I.I.
Raja Sri M. M. Simhi Deyu Garu.

SECRETARIES TO GOVERNMENT.

Chief Secretary to Government, A. G. Cardew, A. Butterworth, I.C.S. (*Ag.*)
Revenue, L. Davidson, C.S.I., I.C.S.
Local and Municipal, Education and Legislative, W. Francis, I.C.S.
Public Works (General), Col. W. M. Ellis, R.E.
Joint Secretary (Irrigation Branch), S. B. Murray.

BOARD OF REVENUE.

First Member, W. O. Horne, I.C.S.
Second Member, R. B. Clegg, I.C.S.
Third Member, R. C. C. Carr, I.C.S.
Fourth Member, A. Butterworth, I.C.S.

MISCELLANEOUS APPOINTMENTS

Commissioner of Revenue Settlement, etc. L. E. Buckley, I.C.S.
Revenue Survey Department, Director, D. G. Hatchell.
Director of Public Instruction, J. H. Stone, C.I.E. (*Ag.*)
Vice-Chancellor of Madras University—Justice Sir John Wallis.
Registrar of Madras University, F. Dewsbury.

Inspector-General of Police, P. L. Moore, C I E, I C S

Surgeon-General, Surgeon-General W. B. Bannerman, C S I

Accountant-General, Krishna Lal Datta, M A.

Inspector-General of Prisons, Lt.-Col R J Macnamara, I M S.

Postmaster-General, H. C Sheridan.

Collector of Customs, Percy Eccles, I C S

Commissioner of Salt, Abkari, etc, N S Brodie.

Inspector-General of Registration, C. R. M Schmidt.

President, Madras Corporation, P L Moore, C I E

Director of the Kodaikanal and Madras Observatories, J Evershed

Supt., Govt Central Museum, and Principal Librarian, Connemara Public Library, J R Henderson

Piscicultural Expert, H C Wilson

Persian and Hindustani Translator to Government, Major A R. Nethersole, I A

Registrar of Co-operative Credit Societies, L D. Swamikannu Pillai, Diwan Bahadur

Scientific Officer for Planting Industries of S India, R D Anstead

Consulting Architect, E M Thomas

Presidents and Governors of Fort St. George in Madras.

William Gyfford ..	1684
Elihu Yale .	1687
Nathaniel Higginson	1692
Thomas Pitt .	1698
Gulston Addison .	1709
Died at Madras, 17 Oct, 1709	
Edmund Montague (*Acting*)	1709
William Fraser (*Acting*)	1709
Edward Harrison	1710
Joseph Collet	1711
Francis Hastings (*Acting*) .	1727
Nathaniel Elwick . . .	1727
James Macrae .	1725
George Morton Pitt	1730
Richard Benyon .	1735
Nicholas Morse .	1744
John Hinde ..	
Charles Floyer .	1747
Thomas Saunders	1750
George Pigot .	1755
Robert Palk ..	1763
Charles Bourchier	1767
Josias DuPre .	1770
Alexander Wynch	1773
Lord Pigot (Suspended)	1775
George Stratton	1776
John Whitehill (*Acting*)	1777
Sir Thomas Rumbold, Bart	1778
John Whitehill (*Acting*) .	1780
Charles Smith (*Acting*) ..	1780
Lord Macartney, K B.	1781

Governors of Madras.

Lord Macartney, K B	1785
Alexander Davidson (*Acting*) ..	1785
Major-General Sir Archibald Campbell, K B	1786
John Hollond (*Acting*)	1789
Edward J. Hollond (*Acting*)	1790
Major-General William Medows	1790
Sir Charles Oakeley, Bart . ..	1792
Lord Hobart	1794
Major-General George Harris (*Acting*) .	1798
Lord Clive . ..	1799
Lord William Cavendish Bentinck ..	1803
William Petrie (*Acting*) . ..	1807
Sir George Hilaro Barlow, Bart, K B ..	1807
Lieut.-General the Hon. John Abercromby	1813
The Right Hon Hugh Elliot .	1814
Major-General Sir Thomas Munro, Bart, K C B	1820
Died, 6 July, 1827	
Henry Sullivan Grœme (*Acting*)	1827
Stephen Rumbold Lushington ..	1827
Lieut.-General Sir Frederick Adam, K C B	1832
George Edward Russell (*Acting*) .	1837
Lord Elphinstone, G C H, P C	1837
Lieut.-General the Marquess of Tweeddale, K T, C B	1842
Henry Dickinson (*Acting*) ..	1848
Major-General the Right Hon Sir Henry Pottinger, Bart, G C B	1848
Daniel Elliott (*Acting*) ..	1854
Lord Harris	1854
Sir Charles Edward Trevelyan, K C B	1859
William Ambrose Morehead (*Acting*) ..	1860
Sir Henry George Ward, G C M G	1860
Died at Madras, 2 August, 1860.	
William Ambrose Morehead, (*Acting*) ..	1860
Sir William Thomas Denison, K C B.	1861
Acting Viceroy, 1863 to 1864	
Edward Maltby (*Acting*) ..	1863
Lord Napier of Merchistoun, K T (*a*)	1866
Acting Viceroy	
Alexander John Arbuthnot, C S I (*Acting*)	1872
Lord Hobart .	1872
Died at Madras, 27 April, 1875.	
William Rose Robinson, C S I. (*Acting*) ..	1875
The Duke of Buckingham and Chandos ..	1875
The Right Hon W P Adam . .	1880
Died at Ootacamund, 24 May, 1881.	
William Hudleston (*Acting*) .	1881
The Right Hon M E Grant Duff .	1881
The Right Hon Robert Bourke, P C. .	1886
Lord Connemara, 12 May, 1887 (by creation)	
John Henry Garstin, C S I. (*Acting*) ..	1890
Baron Wenlock . ..	1891
Sir Arthur Elibank Havelock, G C M G. ..	1896
Baron Ampthill .	1900
Acting Viceroy and Governor-General, 1904	
James Thomson, C S I (*Acting*) ..	1904
Gabriel Stokes, C S I (*Acting*) .	1906
Hon Sir Arthur Lawley, K C M G, G C I E	1906
Sir Thomas David Gibson-Carmichael, Bart., K C M G, G C I E (*b*)	1911
Became Governor of Bengal, 1 April, 1912	
Sir Murray Hammick, K C S I, C I E. (*Acting*)	1912
Right Hon. Baron Pentland, P C, G C I E.	1912

(*a*) Afterwards (by creation) Baron Napier of Ettrick

(*b*) Afterwards (by creation) Baron Carmichael of Skirling.

The Bengal Presidency.

The Presidency of Bengal, as constituted on the 1st April 1912, comprises the Burdwan and Presidency divisions and the district of Darjeeling, which were formerly administered by the Lieutenant-Governor of Bengal, and the Rajshahi, Dacca and Chittagong divisions which by the partition of the old Province had been placed under the administration of the Lieutenant-Governor of Eastern Bengal and Assam The area of the Presidency is 84,092 square miles, and it possesses a population of 46,305,642 persons, included within this area are the two Native States of Cooch Behar and Hill Tippera, which are under the general supervision of the Government of Bengal The area of the British territory is 78,699 square miles Bengal comprises the lower valleys and deltas of the Ganges and Brahmaputra, and in the main consists of a great alluvial plain intersected in its southern portion by innumerable waterways In the north are the Himalayan mountain and submontane tracts of Darjeeling and Jalpaiguri, and on the south-east the hills in Hill Tippera and Chittagong, while on the west the Chota Nagpur plateau is continued by an undulating tract running through the western portions of Midnapur, Bankura, Burdwan and Birbhum The general range of the country however is very low, and a great fertile plain extends southward from Jalpaiguri to the forests and swamps known as the Sunderbans, which lie between the area of cultivation and the Bay of Bengal

The People.

Of the inhabitants of the Presidency 24,237,238 or 52 4 per cent are Mahomedans and 20,945,379 Hindus These two major religions embrace all but 2 4 per cent of the population Christians, Buddhists, and Animists combined number a little over 1,100,000

Bengali is spoken by ninety-two per cent. of the population of the Presidency and Hindi and Urdu by four per cent The Oriya-speaking people number nearly 300,000 and Naipali is the tongue of 89,000 persons principally residents in the Darjeeling and Jalpaiguri districts The great majority of the speakers of the Munda languages are Santals in West and North Bengal

Industries.

According to the returns of the Census of 1911 nearly 35½ million persons of three-fourths of the population derive their support from pasture and agriculture, and of these 30 millions are cultivators, and 3¾ millions farm servants and field labourers. The jute crop has greatly improved the economic status of the cultivator, especially in Eastern Bengal, and the area under this fibre in 1914 is estimated at 2,872,604 acres Bengal is the most important rice-producing area in Northern India and it is computed that 84 per cent. of the cultivated area of the Presidency is devoted to its production. Other crops include barley, wheat, pulses, and oil-seeds, the area devoted to the last named being over 2 million acres. Sugar is produced both from the sugar-cane and the date palm, and tobacco is grown for local consumption in nearly every district of Bengal. There are over 370 tea gardens in the Presidency with a planted area of 150,000 acres.

Manufactures.

The jute mills of Calcutta which constitute the principal manufacturing industry of the Presidency give employment to over 200,000 hands The total export of jute and jute manufactures in 1913-14 exceeded £ 39 millions of which £ 20 millions represented the raw material The industry has suffered from time to time from over-production but at present is experiencing exceptional prosperity and new mills are being erected, equipped with the most modern machinery. Other principal industries are cotton twist and yarn, silk yarn and cloth, hand-made cloth, sugar, molasses and paper The silk weaving industry is in a declining state The manufacture of tea is carried on an extensive scale in Darjeeling and Jalpaiguri In 1913-14 which the maritime trade of Bengal reached a total of Rs 214 85 crores 97 per cent of which passed through the Port of Calcutta The foreign trade amounted to Rs 174 83 crores of which Rs 72 08 crores represented imports and Rs 102 75 crores exports Of the foreign trade 39 per cent passed through Calcutta and 1 per cent through Chittagong The growth of Calcutta's commerce has been so rapid in recent years that the maritime trade exceeds the port accommodation available and urgent demands are being advanced for extensions both by importers of foreign merchandise and exporters of coal With the re-adjustment of the boundaries of Bengal and the creation of a new Province of Behar and Orissa the more important coal-fields have passed into the new Province The production of 1913 for Bengal itself, with Behar and Orissa, reached nearly 14 million tons

Administration.

The present form of Government dates from the 1st of April 1912, when the administrative changes announced by the King-Emperor at Delhi in December 1911 came into operation A Governor was then substituted for a Lieutenant-Governor, who had previously been at the head of the Province, and Lord Carmichael of Skirling assumed charge of the office The Governor is assisted by an Executive Council, two of whom are at present members of the Indian Civil Service and the third an Indian The Civil Secretariat consists of the Chief Secretary, who is in charge of the Political Appointment and Judicial Departments, the Revenue Secretary, the Financial Secretary, who also deals with Commercial question. The General Secretary who deals with questions of Local Self Government and Education and the Legislative Secretary, four Under-Secretaries and one Assistant Secretary The Government divides its time between Calcutta, Darjeeling and Dacca.

Bengal is administered by five Commissioners under the Governor in Council, the divisions being those of the Presidency, Burdwan, Rajshahi, Dacca and Chittagong The unit of administration is the District Magistrate and Collector. As Collector he supervises the ingathering of the revenue and is the head of all the Departments connected with it, while as District Magistrate he is responsible for the administration of Criminal justice in the district. The immediate superior of the District

Magistrate is the Divisional Commissioner Commissioners are the channels of communication between the local officers and the Government In certain revenue matters they are, in their turn, subject to the Board of Revenue in Calcutta, in other matters they are under the direct control of Government

Justice

The administration of justice is entrusted to the High Court of Calcutta which consists of the Chief Justice who is a barrister and 18 puisne judges who are barristers, civilians or vakils Below the High Court are the District and Additional Judges, the Small Cause Court and Subordinate Judges and the Munsifs Of these officers the District and Additional Judges and a certain number of subordinate judges are also endowed with the power of a Criminal Court while the remainder have jurisdiction in Civil matters only. Criminal justice is administered by the High Court, the Courts of Session and the courts of the various classes of magistrates On its appellate side the High Court disposes of appeals from the order of a Court of Session, and it also confirms, modifies or annuls sentences of death passed by Sessions Courts Calcutta has four Presidency Magistrates, one Municipal Magistrate and also a number of Honorary Magistrates and it possesses a Court of Small Causes with six judges who dispose of cases of the class that are usually heard in County Courts in England

Local Government

By the Bengal Act of 1884 which regulates municipal bodies in the interior and its subsequent amendments the powers of Commissioners of municipalities have been increased, and the elective franchise has been extended Municipal expenditure now comprises a large number of objects, including veterinary institutions and the training and employment of female medical practitioners The Commissioners also have large powers in regard to the water-supply and the regulation of buildings In Calcutta Act (III) of 1899 created three coordinate municipal authorities, the Corporation, the General Committee, and the Chairman The total number of Commissioners is fifty, of whom 25 are elected, and the remainder appointed by Government and by commercial bodies In order to improve the insanitary and congested areas of the city, the Calcutta Improvement Trust has been created with extensive powers In the mofussil, District and Local Boards exercise considerable powers, with regard to Public Works, Education and Medical relief and Union Committees have been formed which deal for the most part with the control of village roads, sanitation and water-supply

Finance

As in other Provinces, the revenue is divided between the Local Government and the Government of India The Budget for 1914-15 showed an opening balance of Rs 3 04 crores, estimated revenue amounted to Rs 6 30 crores and expenditure aggregated 7 36 crores. Of the closing balance of Rs 198 lakhs, Rs 169¼ lakhs was earmarked for various objects, including the Calcutta Improvement Trust, the new Dacca University, police re-organisation and education

Public Works

The Public Works Department is at present under the charge of a Chief Engineer and a temporary Chief Engineer whose appointment has been sanctioned for five years The redistribution of territories on 1st April 1912 caused considerable changes in this Department, and almost all the irrigation works in the old province of Bengal as well as two out of the three Canal Revenue Divisions went to the new Province of Behar and Orissa There was also a considerable reduction in the staff and in the number of Public Works Circles and Divisions Public buildings are erected by the Department which also constructs roads and carries out miscellaneous improvements Irrigation works in Bengal are under the charge of the Irrigation Department which deals with the numerous waterways that intersect the Province

Police

The Bengal Police force composes the Military Police, the District Police, Railway Police, and River Police (now in course of formation) The District Police are under the control of the Inspector-General of Police, who is usually a Covenanted Civilian, although the office is open to gazetted members of the Force Under him are Deputy Inspectors-General for the Dacca range, the Rajshahi range, and the Presidency range, and also a Deputy Inspector-General in charge of the C I D, the Railway and River Police Each district is in charge of a Superintendent, and several of the more important districts have an Additional Superintendent The cadre comprises Assistant Superintendents, Deputy Superintendents, Inspectors, Sub-inspectors, head constables and constables The River Police Force, the formation of which has not yet been completed, will be under the Deputy Inspector-General who has charge of the C I D There is also a Village Police, comprised of duffadars, and chowkidars, who are paid a monthly salary which is collected from the villages of the Panchyat The Calcutta City Police is a separate force maintained by Government under a Commissioner who is responsible direct to Government The Commissioner has under him Deputy Commissioners, Inspectors, Sub-Inspectors, head constables and constables, and a reserve force of about 100 European sergeants There is a training college and school at Sarda, in the district of Rajshahi where newly appointed gazetted officers, Sub-Inspectors and constables learn their duties The annual cost of the Police is nearly Rs 100 lakhs

Medical.

The head of the Medical Department is the Surgeon General with the Government of Bengal and Sanitation is in charge of the Sanitary Commissioner, both these officials being members of the Indian Medical Service There is also a Sanitary Engineer for the Presidency In the districts the Civil Surgeons are responsible for medical work There are 19 hospitals in Calcutta 9 of which are supported by the Government and 348,600 persons are treated at these institutions annually, of whom nearly 31,100 are in-patients In the mofussil districts there are several hundred

hospitals and dispensaries, the number of patients treated annually in the Province, were 51,07,500 1 cluding 54,300 in-patients

Education.

In the Presidency of Bengal education is imparted partly through Government agency and partly through private bodies, assisted in large measure by Government grants-in-aid Government maintains three Arts colleges in Calcutta (of which one is a college for women and one the Sanskrit College) one at Hooghly, one at Krishnagar, one at Dacca, one at Rajshahi and one at Chittagong It also maintains two training colleges for teachers in high schools at Calcutta and Dacca, an engineering college at Sibpur and an engineering school at Dacca, a medical college, a veterinary college, a school of art and a commercial school in Calcutta and a weaving school at Serampore It also provides at the head quarters of all districts except Burdwan and Midnapore, and also at certain other mofussil centres model high English schools for the education of boys, while each Government Arts college has a collegiate school attached also under Government control In Calcutta there are two Model High Schools for boys, both attached to Presidency College Government high schools for girls exist only in the head-quarters' stations of Calcutta, Dacca, Mymensingh and Chittagong The other secondary schools, with the exception of a few middle schools managed either by Government or by Boards, are under private control The administration of primary education rests mainly with the district and local boards, large grants being given from provincial revenues to the boards, which contribute only slightly from their own funds Only in backward localities are such schools either entirely managed, or directly aided, by Government Apart from the institutions referred to above, 130 institutions called Guru Training Schools are maintained by the Department for the training of vernacular teachers For the education of Mahomedans, there are senior madrasas at Calcutta, Dacca, Chittagong and Hooghly, which are managed by Government There are also certain Government institutions for technical and industrial education A large proportion of educational work of every stage is under the control of various missionary bodies, which are assisted by Government grants-in-aid

The municipalities are required to expend a certain proportion of their ordinary income on education They are mainly responsible for primary education within their jurisdiction, but schools in these areas are eligible also for grants from Government These bodies maintain a second grade Arts College and a high school at Midnapore, a high school at Burdwan, and a high school at Chittagong

There are now in the Presidency —	
Arts Colleges	33
Law ,,	9
Medical ,,	1
Engineering Colleges	2
Training Colleges	"
Secondary Schools	2,317
Primary Schools	35,186
Special ,,	3,008
Private Institutions	2,380

with 16,97,714 pupils in all

The Government Educational Budget allotment for the province for 1914-1915 is Rs 1,45,43,000 Of this a large proportion represents the grants recently allotted by the Government of India

The Department is administered by a Director of Public Instruction assisted by an Assistant Director and an Officer on special duty for work in connection with general education, and by a special officer in connection with Technical and Industrial Education A Special Officer is shortly to be appointed in connection with development of Mahomedan education Each division is in charge of a Divisional Inspector assisted by a certain number of Additional and Assistant Inspectors according to the requirements of the several divisions Similarly the administrative charge of the Primary education of each district is in the hands of a Deputy Inspector assisted by Additional Deputy and Sub-Inspectors of Schools, the latter class officers being in some instances helped by officers of humbler status called Assistant Sub-Inspectors and Inspecting Pandits Higher education is controlled by the University (Calcutta) established in 1857, administered by the Chancellor, (the Governor General and Viceroy of India), the Rector (the Governor of Bengal), the Vice Chancellor (appointed by the Government of India, usually for two years at a time) and 100 fellows of whom 10 are *ex-officio*, 10 are elected by the Graduates, 10 by the Faculties and the remainder (70) are nominated by the Chancellor This University maintains one Law College called the University Law College, Calcutta The University is mainly an examining University, but is rapidly developing into a teaching University also Four University professorships (Minto, Carmichael, Hardinge and King George V) have recently been founded.

The principal educational institutions are.—

GOVERNMENT ARTS COLLEGES

Presidency College, Calcutta, Principal, H R James

Dacca College, Principal, W A. J Archbold

Rajshahi College, Principal, Rai K. Banerjee Bahadur

Chittagong College, Principal, F C Turner.

Sanskrit College, Calcutta, Principal, S. C Acharyya

Hooghly College, Principal, S P Dass.

Krishnagar College, Principal, S C Dey.

Bethune College, Calcutta, Lady Principal, Mrs K Das

PRIVATE ARTS COLLEGES.

Aided

Scottish Churches College, Calcutta, Principal, Rev. J Watt

St Xavier's College, Calcutta, Principal, Rev. Father Crohan.

L M S College, Bhowanipore (Calcutta), Principal, Rev W G Brockway

Jaganath College, Dacca, Principal, L. M. Chatterji.

Braja Mohan College, Barisal, Principal, N. L Mookherjee

Ananda Mohan College, Mymensingh, Principal J. C. Ghosh

Victoria College, Comilla, Principal, Satyendra Nath Basu

Wesleyan College, Bankura, Principal, Rev J. Mitchell.

Victoria College, Narail, Principal, Gopal Chandra Maitra

Hindu Academy, Daulatpur, Principal, Kamakhya Charan Nag

Unaided

City College, Calcutta, Principal, Heramba Chandra Maitra

Ripon College, Calcutta, Principal, Ramendra Sundar Trivedi

Bangabasi College, Calcutta, Principal, G C Bose

Metropolitan Institution, Calcutta, Principal Saradaranjan Roy

Bishop's College, Calcutta, Principal, Rev R Gee

Central College, Calcutta, Principal, Khudiram Bose

C. M S. College, Calcutta, Principal, Rev W S Holland

Diocesan College, Calcutta, Lady Principal, Sister Mary Victoria

Krishna Chandra College, Hetampur, Principal Dhurmadas Dutt

Burdwan Raj College, Principal, Umacharan Bandhyopadhyay

Uttarpara College, Principal, Jogendra Nath Mitra

Serampore College, Principal, Dr George Howells

Krishnath College, Berhampore, Principal, E M Wheeler, M A

Edward College, Pabna, Principal, Atu Chandra Sen

Loreto House, Calcutta, Lady Principal, Mother Gonzaga

MUNICIPAL

Midnapore College, Principal, Jogendra Nath Hazra.

COLLEGES FOR PROFESSIONAL TRAINING

Engineering-Government

Civil Engineering College, Sibpur, Principal B Heaton.

Teaching-Government

David Hare Training College, Principal, W. E Griffith.

Dacca Training College, Principal, E E Biss.

Aided

L. M S. Training College, Bhowanipore (Calcutta), Principal, Rev W. G Brockway

Medicine-Government

Medical College, Calcutta, Principal, Lt -Col J. T Calvert.

Law.

University Law College, Calcutta, Principal Dr Satis Chandra Bagchi

The Law Department attached to the Dacca College, Vice-Principal, Muazzam Ali.

The Law Department attached to the Ripon College, Calcutta, Principal, Janaki Nath Bhattacharji

There are also Pleadership classes attached to the Government Colleges at Dacca, Rajshahi, Chittagong and Krishnagar and in the unaided college at Berhampore, the Ripon College and the Metropolitan Institution Calcutta, and the Municipal College at Midnapore

Administration

GOVERNOR AND PRESIDENT IN COUNCIL

His Excellency The Rt Hon Thomas David, Baron Carmichael of Skirling, G C I E, K C M G Took his seat, 1st April, 1912

PERSONAL STAFF

Private Secretary W R Gourlay

Military Secretary, Major H F Bateman-Champain, 9th Gurkhas

Surgeon, Capt W L Harnett, I M S

Aides-de-Camp, Lieut H G Vaux, Cornwall Light Infantry, Lieut C A Granthan, 33rd Q V O Light Cavalry

Honorary Aides-de-Camp Lieut-Col C M Pearce V D, Commander E A Constable, R N, Lt-Col R Glen, V D, Hony Col C Routh, Lt-Col R S Hawkins V D

Extra Aide-de-Camp, Lieut J F B Morrell M V O

Indian Aide-de-Camp, Risaldar Ismail, Khan Bahadur

Commander of Body Guard, Capt Walter Kenworthy, 33rd Cavalry

Adjutant of Body Guard, Lieut H A Garstin, 21st Cavalry

BENGAL EXECUTIVE COUNCIL.

N D Beatson Bell Took his seat, November 1914

P C Lyon C S I Took his seat, 1st April 1912

Syed Shamsul Huda Took his seat, 1st April 1912

LEGISLATIVE COUNCIL OF BENGAL

Councillors, Ex-Officio

Mr P C Lyon, C S I, I C S

Nawab Syed Shams-ul-Huda

Nominated, Officials

Mr C J Stevenson-Moore

,, F J Monahan.

,, J G Cumming, C I E

,, J H Kerr, C I E.

,, H L Stephenson, C I E

,, C H Bompas

,, H F Samman

Lt Col A. C DeLaJolyde Lotbinière, R E

Mr H H Green

,, Binod Chandra Mitra

,, W W Hornell

Rai Priya Nath Mukharji Bahadur.

Mr. C F Payne

,, A H Cuming

Nominated, Non-officials

Nawab Sir Khwaja Salimullah Bahadur, G.C.I E., K C S I
Mr H J. Hilary
,, Satyendra Prasanna Sinha.
Dr. Nilratan Sarkar.
Raja Hrishikesh Laha, C I E
Lt. Col. R Glen

Elected

Mr Byomkes Chakravarti.
Sir Bijay Chand Mahtab
Maharaja Jagadindra Nath Rav
Raja Soshi Kanta Acharyya Chaudhuri Bahadur
Dr Deba Prosad Sarbadhikari
Maulvi Muhamad Ismail Khan Chaudhuri
Rai Radhacharan Pal Bahadur
Mr N McLeod.
,, F H Stewart, C I E
,, W T Grice
,, G A Bayley
,, A W Crosswell Chaplin.
,, Golam Hoossain Cassim Ariff
Munshi Mazharul Anwar Chaudhuri
Maulvi Musharraf Hussain
Maulvi Abdul Kasem Fazl-ul-Haq
Nawab Saiyid Hoosain Haidar Chaudhuri, Khan Bahadur
Maharaja Ranajit Sinha of Nashipur
Rai Nalinaksha Basu Bahadur
Raja Mahendra Ranjan Ray Bahadur.
Nawab Saiyid Nawab Ali Chaudhuri, Khan Bahadur
Babu Prasanna Kumar Roy
Babu Surendra Nath Banarji.
Babu Surendra Nath Roy
Babu Mohendra Nath Ray
Rai Hari Mohan Chandra Bahadur.
Raja Dinendra Narayan Ray.
Babu Upendra Lal Ray

SECRETARIAT

Chief Secretary to Government, J G Cumming, C I E
Secretary, Revenue Department, J H Kerr, C I E
Secretary, General Department, H. F. Samman
Secretary, Financial Department, H L Stephenson
Secretary, Judicial Department, E P Chapman
Secretary to the Council and Secretary, Legislative Department, A. W. Watson.
Secretary to Government, Public Works Department, and Chief Engineer, H H. Green.
Under Secretary to Government, Public Works Department, (Irrigation Branch), Anadi Nath Mitra.

BOARD OF REVENUE.

Member, D J. Macpherson, C I E.
Secretary, W. A. Marr.

MISCELLANEOUS APPOINTMENTS.

Director of Public Instruction, W. W. Hornell.
Principal, School of Arts, P. Brown.
Inspector-General of Police, R. B Hughes Buller, C I E.
Commissioner, Calcutta Police, Sir F. L Halliday, C I E, M.V O.
Conservator of Forests, C. E. Muriel
Inspector-General of Civil Hospitals, Col G F. Harris, C I E.
Sanitary Commissioner, Major W. W Clemesha.
Deputy Sanitary Commissioner for Malaria Research, Major A B Fry.
Collector of Customs, Calcutta, E G L. Z MacGregor, I C S
Commissioner of Excise and Salt, A N Moberly
Accountant-General, H G Tombins, C I E
Inspector-General of Prisons, Lt-Col W J. Buchanan, C I E
Postmaster-General, P G Rogers, I C S
Inspector-General of Registration, P N Mukharji.
Director of Agriculture, J R Blackwood
Protector of Emigrants, C. Banks, M D
Chairman of Calcutta Corporation, C F Payne
Superintendent, Royal Botanic Gardens, Major A T Gage
Coroner, F K Dobbin
Registrar of Co-operative Credit Societies, J M Mitra

LIEUTENANT-GOVERNORS OF BENGAL

Frederick J Halliday	1854
John P Grant . .	1859
Cecil Beadon .	1862
William Grey ..	1867
George Campbell . .	1871
Sir Richard Temple, Bart, K C S I	1874
The Hon Ashley Eden, C S I. .	1877
Sir Steuart C. Bayley, K C S I, (*Offg*)	1879
A Rivers Thompson, C S I, C I E	1882
H A Cockerell, C S I (*officiating*)	1885
Sir Steuart C Bayley, K C S I, C I E.	1887
Sir Charles Alfred Elliott, K C S I .	1890
Sir A P MacDonnell, K C S I (*Offg*)	1893
Sir Alexander Mackenzie, K C S I Retired 6th April 1898	1895
Charles Cecil Stevens, C S I (*Officiating*) .	1897
Sir John Woodburn, K C S I. . . Died, 21st Nov 1902	1898
J A Bourdillon, C S I (*Officiating*) .	1902
Sir A H. Leith Fraser, K C S I ..	1903
Lancelot Hare, C S I, C I E. (*Offg*) .	1906
F. A. Slacke (*Officiating*) . ..	1906
Sir E N. Baker, K C S I . .. . Retired 21st Sept 1911.	1908
F. W. Duke, C S I (*Officiating*) .. .	1911

The office of Lieutenant-Governor of Bengal was abolished on April 1st 1912, when Bengal was raised to a Governorship.

GOVERNORS OF THE PRESIDENCY OF FORT WILLIAM IN BENGAL.

The Rt. Hon Baron Carmichael of Skirling, G C I E, K C.M.G.	1912

The United Provinces.

The United Provinces of Agra and Oudh lie in practically the centre of Upper India They are bounded on the north by Tibet, on the north-east by Nepal, on the south and south-east by Bengal, on the south by two of the Chota Nagpur States of the Central India Agency and the Saugor District of the Central Provinces, and on the west by the States of Gwalior, Dholpur, Bharatpur, Sirmor, and Jubbal, and by the Punjab. Their total area amounts to 107,267 square miles, to which may be added the area of the two Native States of Tehri and Rampur, both of which lie within the United Provinces, 5,079 square miles and the newly-created independent State of Benares with an area of 865 miles, giving a total of 112,346 square miles The total population is 48,014,080, out of which Tehri and Rampur account for 832,036

The Provinces, originally termed the North-Western Provinces and so amalgamated in 1877, receiving their present designation in 1902, include four distant tracts of country portions of the Himalayas, the sub-Himalayan tracts (the Kumaon), the great Gangetic plain and portions of the hill systems of Central India (Bundelkhand) The first two of these tracts are infertile and support a very sparse population and the Central Indian plateau is almost equally infertile, though better populated The soil of the Gangetic plain, however, possesses an extreme fertility and here the density of population rises from 512 persons per square mile in the west, to 549 in the centre and 718 in the east, which gives the Provinces as a whole a greater population pressure on the soil than any other Provinces in India In the south there are low rocky hills, broken spurs of the Vindhyan mountains, covered with stunted trees and jungle, and in the North the lower slopes of the Himalayas, clothed with dense forest, affording excellent big and small game shooting, and rising beyond in a tangled mass of ridges, ever higher and higher, until is reached the line of the eternal snows, but the greater part of the provinces consists of level plain, teeming with highly-cultivated fields and watered by four rivers—the Ganges, Jumna, Gogra and the Gumti

The People

The population is mainly Hindu, 85 per cent. ranking as such whilst Mahomedans number 14 per cent, the total of all other religions being less than 0 6 per cent. composed of Christians (Europeans and Indians),Jains, Aryas and Sikhs, the Aryas are the followers of the Arya Samaj sect, which obtains widely in the Punjab and has extended its influence to the United Provinces The three main physical types are Dravidian, Aryan and Mongoloid, the latter being confined to the Himalayan and sub-Himalayan districts and the former to South Mirzapur and Bundelkhand, whilst the high-caste Aryans frequent the western Districts of the Province Most of the people, however, show a mixed Arya-Dravidian origin Three languages are spoken by the great majority of the people in the plains—Western Hindi, Eastern Hindi and Behari, Urdu, or Hindustani, is a dialect of Western Hindi, though it contains a large admixture of Persian and Arabic words, which makes it a *lingua franca*

Industries.

The principal industry is agriculture, which supports no less than 71·7 of the population The soils of the Provinces fall into three groups, the valley soils of the Himalayas, the main alluvium and the Central Indian alluvium, the chief characteristic soil of the Central Indian alluvium is the black soil, with a lighter variant, though here also there are light loams and gravel The Himalayan soils are of local origin and vary with the nature of the rock from which they have been formed, whilst the main alluvium soils are sand, clay and loam, the loam being, naturally, the most productive The soil generally yields excellent crops of rice,millet, maize, linseed,cotton, wheat, sugarcane, pulses, barley and poppy, rice being grown mostly in low-lying, heavy clays The greater part of the Provinces is highly cultivated, the rainfall varies from 50 to 60 inches in the Hills, to 40 inches in the Benares and Gorakhpur Divisions, whilst the Agra Division receives about 25 to 30 inches annually only Drought seriously affected Bundelkhand and the Agra Division, in the past, but improved drainage, and irrigation (a protective system of irrigation works exists and is being extended) have enabled a complete recovery to be made and the agricultural prosperity of the Provinces is now high, though it varies with the rainfall The great scourge has been, and is, that of plague, which hampers the agriculturist severely, and in the Terai, malaria still exacts a large toll. Land is held mostly on the ryotwari tenure in Bundelkhand and Kumaon, on zemindari tenure in Agra and taluqdari tenure in Oudh The principal land owners in Oudh are the Taluqdars some of whom own very large estates The area held in taluqdari tenure amounts to 51 per cent of the total area in Oudh

Manufactures

The Provinces are not rich in minerals Coal exists in Southern Mirzapur, iron and copper are found in the Himalayan Districts, and there were mines of importance there formerly, but increased difficulty of working them as veins became exhausted resulted in the closure of most of them Gold is found in minute quantities by washing in some of the rivers in the Hills Limestone is found in the Himalayas and stone is largely quarried in the Mirzapur District Cotton is ginned and spun throughout the provinces, as a home industry, and weaving, by means of hand-looms, is carried on in most districts In 1901 nearly a million persons were dependent on weaving, 140,000 on spinning and 136,000 on cleaning, pressing, and ginning, but during the last decade these industries have been on the decrease The largest industry is in Azamgarh district, where there are 130,000 looms Silk spinning is confined almost entirely to the district of Benares, where the famous *Kinkob* brocade is made Embroidery is manufactured in Lucknow, where the noted *chikan* work of silk on cotton or muslin, is produced, and in Benares, where gold and silver work on velvet silk, crepe and sarsenet obtains The glass industry is important in some districts, Benares and Moradabad are noted for their lacquered brass work, porcelain

is manufactur d at Ghazipur, and other industries are those of paper-making (Lucknow) dyeing, leather-work and fireworks The chief centre of European and Indian industry is Cawnpore, which, situated in most advantageous position on the Ganges, possesses tanneries, cotton, woollen, jute and other mills, which have a large and ever increasing output (the woollen mill is the largest in India) There are cotton factories at Aligarh (famous for its locks) Meerut and Bareilly, Mirzapur (which produces also excellent carpets), Hardoi and Hathras have cotton mills Excellent furniture is made at Bareilly, at Allahabad there are stone works, at Rosa there is a very large English distillery, with patent still, and the provinces can claim six breweries, with an out-turn of over a million gallons

The largest trade centres are Cawnpore, Allahabad, Mirzapur, Benares, Lucknow, Meerut, Aligarh, Hathras, Muttra, Agra, Farukhabad, Moradabad, Chandausi, Bareilly, Saharanpur, Muzafarnagar, Ghaziabad, Khurja, Gorakhpur, Ghazipur, Pilibhit and Shahjahanpur

Administration.

The Provinces are administered by a Lieutenant-Governor, who is generally chosen from among the members of the Indian Civil Service who have served in the Province The medium for the transaction of public business is the Secretariat, the Staff of which consists of five Secretaries and five Under-Secretaries The Chief Secretary is in charge of the Revenue, Appointment, General Administration, Political and Forest Departments, another Secretary attends to the Medical, Judicial, Police, Educational and Sanitation Departments, whilst a third looks to the local Self-Government, Financial, Municipal, Miscellaneous and Separate Revenue Departments The other two Secretaries belong to the Public Works Department, and are also Chief Engineers, one of whom deals with Irrigation, and the other with Roads and Buildings Government spends the cold weather, October to April, in Lucknow and Allahabad, mostly in Lucknow, the Secretariat moves between these two places The Lieutenant-Governor and the Secretariat spend the hot weather in Naini Tal, but during the monsoon the Lieutenant-Governor tours the plains, as he does also in the cold weather The Board of Revenue is the highest court of appeal in revenue and rent cases, and it has important executive duties, being the chief revenue authority in the Provinces There are forty-eight British districts, thirty-six in Agra and twelve in Oudh, average area 2 000 square miles and average population a million Each District is in charge of a District Officer, termed a Collector and Magistrate in Agra and a Deputy Commissioner and Magistrate in Oudh and Kumaon, who is an Indian Civilian The Districts are grouped together in Divisions under a Commissioner There are nine Divisions, having an average area of nearly 12,000 square miles and a population of from 5 to 6 millions The District are sub-divided into *tahsils*, of which there are 217, with an average area of 500 square miles and a population of 220,000 Each *Tahsil* is in charge of a *Tahsildar*, who is responsible for the collection of revenue, and also exercises judicial powers *Tahsils* are divided into *parganas* which are units of importance in the settlement of land revenue Subordinate to the *Tahsildars* are *kanungos*, of whom there are, on an average, three to a *tahsil* These officials supervise the work of the *patwaris*, or village accountants, check their papers and form a link direct between the villagers and Government For judicial purposes (revenue and criminal), the District Officer assigns a subdivision, consisting of one or more *tahsils*, as the case may be to each of his subordinates, who may be covenanted civilians, (Joint and Assistant Magistrates and Collectors) or members of the Provincial Service (Deputy Collectors and Magistrates) The Commissioner of the Bareilly and Kumaon Divisions are Political Agents for the Native States of Rampur and Tehri respectively and the Commissioner of Benares is the Political Agent for Benares State

Justice.

Justice is administered by the High Court in the Province of Agra, and the Court of the Judicial Commissioner, in Oudh, which are the final appellate authorities in both criminal and civil cases The former, which consists of a Chief Justice and five puisne Judges two of whom are Indians, sits at Allahabad and the latter, represented by a Judicial Commissioner and two Additional Commissioners, one of whom is an Indian, sits always in Lucknow There are twenty-seven District and Additional District Judges, (Indian Civilians) twenty-one in Agra and six in Oudh, who have both original and appellate jurisdiction in civil and criminal cases, and occasional appellate jurisdiction in rent cases, but District Officers and their assistants, including *Tahsildars*, preside in both criminal and rent and revenue courts, and dispose of a good deal of the work In Kumaon, the Commissioner is a High Court Judge in Civil cases, and a District Judge in Criminal cases In the larger Cantonments, the Cantonment Magistrates have limited powers as Judges of a Small Cause Court There are also Subordinate Judges, Judges of Small Cause Courts and Munsifs, who dispose of a large number of small civil suits, being specially empowered, in some cases, to decide suits up to Rs 2,000, but generally they take cases up to Rs 1,000 whilst Subordinate Judges hear cases up to Rs 5,000 Appeals from Munsifs and Subordinate Judges go to the District Judges Small Cause Court Judges try suits to the value of Rs 500 There are also Honorary Munsifs, limited to Rs 200 suits, and village Munsifs, whose jurisdiction is fixed at Rs 20

Local Government.

Local Government is exercised by means of District and Municipal Boards, the former levying local rates on land-owners, the latter deriving its revenue from octroi and other forms of taxation The aim is to abolish octroi, because it interferes with through trade Eighty-five Municipalities possess the privilege of electing their own members and some of them have non-official Chairman They are generally composed of nominated and elected members, with an official Chairman, who guides them in their duties They deal with questions of sanitation, communication, lighting, town improvement, roads, water supply, drainage and education Grants are made to Boards by Governments in some

cases for special purposes from general revenues There is a tendency in the Provinces to give local self-government a wider extension by means of an increase in the number of boards with non-official Chairmen and recently this privilege has been extended to fifteen Municipalities. Small towns, termed Act XX towns also enjoy some measure of local self-government and it is under consideration to extend the principle here, too.

Finance.

The Financial history of the Province has not been a happy one, inadequate settlements, *i.e.*, contracts between the Government of India and the local Government, and the severe famine in 1896 having caused Provincial bankruptcy, which for a long time necessitated rigid economy in order to accumulate reserves which could be spent on productive works Recently liberal Imperial assignments have been made by the Government of India and the financial prospects are accordingly much brighter, giving hopes that ambitious schemes of reform will be able to be carried into effect The local Government gets 3-8 only of the land revenue. The Provincial Budget for 1914-15 shows an opening balance of 182 lakhs, revenue 659 lakhs, and expenditure 731 lakhs, and a closing balance of 110 lakhs

Public Works.

The Public Works Department is divided into the Roads and Buildings branch and the Irrigation branch, each of which is administered by a Chief Engineer, who is also a Secretary to Government The Provinces are divided into three circles and ten divisions for the administration of roads and buildings, and into four circles and twenty divisions for irrigation purposes Each circle is in charge of a Superintending Engineer, and each division is in charge of an Executive Engineer The whole of the irrigation works constructed or maintained by Government are in charge of the Department, nearly all metalled roads, and also bridges on second-class roads, and generally, all works costing more than Rs 1,000, except in Municipalities. The most important irrigation works within the last twenty years have been the construction of the Betwa Canal, the Fatehpur branch of the Lower Ganges Canal, the Mat branch of the main Ganges Canal, improvements in the Rohilkhand and Terai Canals and extensive drainage operations in the Doab districts of the Meerut and Agra division. Important irrigation extension works are now being considered The budget for irrigation and other public works for the present year is 140 lakhs.

Police.

The Police Force is divided into District and Railway Police and is administered by an Inspector-General, with five Deputies, one of whom is in charge of Railways, and two Assistants, forty-nine District Superintendents, two Railway Superintendents, and thirty Assistant Superintendents. There is a Police Training School at Moradabad There is a local C. I. D. forming a separate detective department, under a Deputy Inspector General, with an assistant. There is an armed police, specially recruited, and armed with the Martini Rifle. The present cost of the force is 124 lakhs. The administration of the Jail department is in charge of an Inspector-General of Prisons, who is a member of the Indian Medical Service

Education

Education is in part wholly State-maintained, and partly by means of grants-in-aid There is a State University at Allahabad, a Government Sanskrit College at Benares, whilst Arabic and Persian are taught in special classes at the Muir College, Allahabad, which also has a special science side, which of late has been greatly extended, and there is a Government Engineering College at Roorkee (Thomason College) There are aided Colleges in Lucknow (Canning College), (Reid Christian College), and (Isabella Thoburn College), Agra (St John's), Aligarh (the Mahomedan Oriental College), Gorakpur, Cawnpore and Meerut, and an unaided College at Benares, the Central Hindu College In Lucknow there is the Martiniere school, an entirely independent institution, for European and Anglo-Indian children, and there is a Girls' Martiniere connected with it, whilst in the Hill-Stations, Naini-Tal and Mussoorie, there are many excellent private scholastic institutions for European boys and girls, which are attended by students from all over India Government maintain Training Colleges, for teachers in Lucknow and Allahabad, an Art Crafts and an Industrial School in Lucknow, and an Agricultural College at Cawnpore Public Schools are almost entirely maintained by the District and Municipal Boards and primary education is almost entirely in their hands Primary and female education are in a very backward condition and a Committee has recently been sitting at Naini Tal to suggest a remedy Technical education is being pushed forward and there is a proposal to establish a Technological Institute in Cawnpore At the close of 1912 there were 1689 urban schools, attended by 103,138 scholars and 10,003 rural schools attended by 482,355 scholars, and the number of secondary schools for Indian boys was 545, *viz*, Anglo-Vernacular High Schools 102 with 42,611 scholars, Vernacular Middle Schools 375 with 45,378 scholars and English Middle Schools 68 with 10,284 scholars The amount budgetted for education this year is 79 lakhs

Higher education is controlled by the Allahabad University (constd in 1887) which consists of a Chancellor, Vice-Chancellor and seventy-five ordinary and four *ex-officio* Fellows, of whom some are elected by the Senate or by registered graduates and the Faculties, and the remainder nominated by the Lieutenant-Governor, in his capacity of Chancellor The Faculties are those of Art, Science, Law and Medicine, and the University possesses an important Law School It is proposed to establish a Mahomedan University at Aligarh and a Hindu University at Benares, identifying the M A O College with the former and the Central Hindu College with the latter.

The principal educational institutions are:—

The Mahomedan Anglo-Oriental College, Aligarh—Principal, J H. Towle.

The Central Hindu College, Benares—Principal, P. B Adhikari, offg.

St. John's College, Agra—Principal, Rev. A. W. Davies

Muir College, Allahabad—Principal, S. G Jennings

Queen's College, Benares—Principal, A Venis

Canning College, Lucknow—Principal, M. B Cameron

Agra College—Principal, T Cuthbertson Jones.

Reid Christian College, Lucknow—Principal, Rev. T C Badley

Meerut College—Principal, William Jesse

Woodstock College, Mussoorie,—Principal, Rev H M Andrews

Bareilly College—Principal, J H Alderson

Christian College, Allahabad—Principal, Rev C A R Janvier

Christ Church College, Cawnpore—Principal, Rev M S Douglas

Isabella Thoburn College, Lucknow—Principal, Miss Robinson

Thomason College, Roorkee—Principal, Lt-Col E H de Vere Atkinson

King George's Medical College, Lucknow—Principal, Colonel Selby, I M S

Medical.

The Medical Department is in charge of an Inspector-General of Civil Hospitals A Civil Surgeon is in charge and is responsible for the medical work of each district, and in a few of the larger stations he has an assistant In two stations (Ranikhet and Almora) Medical Officers in military employ hold collateral civil charge There are eighty-three Assistant Surgeons in charge of important dispensaries and a large number of Indian hospital assistants Lady doctors and female hospital assistants visit *purdu nashin* women in their own homes and much good work is done in this manner

The best equipped hospitals, for Indian patients are the Thomason Hospital at Agra and the Balrampur Hospital at Lucknow The Ramsay Hospital for Europeans at Naini Tal is a first class institution and there are also the Lady Dufferin Hospitals King George's Medical College and the hospital in connexion with it have been opened recently in Lucknow The College is one of the best equipped in the country, with a staff of highly efficient professors, and the hospital is the first in the Provinces There is an X-Ray Institute at Dehra Dun, where valuable research work has been carried out and the Pasteur Institute at Kasauli take cases from all parts of India, and there are sanatoria for British soldiers in the Hills

Administration.

Lieutenant-Governor, Sir J S Meston, K C S I, Assumed charge of office, 16th September1912.

Private Secretary, Capt C. A. Watson Smyth (1st Brahmans)

Aide-de-Camp, Capt G C S Black (8th Rajputs).

Honorary Aides-de-Camp, Lieut-Col P H. Clutterbuck, Lieut-Col J H. E Beer, C I E, V D, Lieut-Col J Walker, V D, Hony Capt Subadar Major Kanhai Prasad Dube. Risaldar Major Qudrat Khan Bahadur

LEGISLATIVE COUNCIL OF THE LIEUTENANT-GOVERNOR

President, The Lieutenant-Governor

Vice-President, J M Holms, C S I

Members

H H Nawab Sir Muhammad Hamid Ali, Khan Bahadur, G C I E, G C V O, Wali of Rampur

Kunwar Aditya N Singh, of Benares

J S Campbell, C S I, C I E

Raja Sir Muhammad Tasadduk Rasul Khan, K C S I

Nawab Mumtaz-ud-daula Sir Muhammad F Ali Khan, K C I E, K C V O, C S I, of Pahasu

A W Pim

A L Saunders, C S I.

R Burn

Rai Nathi Mal Bahadur, C I E

Narsingh Prasad

S P O'Donnell

C H Hutton

W G Wood

Col C C Manifold, C B, I M S

Lieut-Col C Mactaggart, C I E, I M S

C F de la Fosse

D M Straight

H R C Hailey

H C Fulard

F Mackinnon

Dr Tej Bahadur Sapru

Chaudri Maharaj Singh

Raja F X S Rikh.

Mahadeo Prasad

Dr Sundar Lal, C I E.

Saiyid Muhammad Abdur Rauf

Shankar Sahai Sahib.

Balak Ram

Raja Kushalpal Singh

Brij Nandan Prasad.

Moti Lal Nehru

Gopal Prasad

Maharaja Sir Bhagwati Prasad Singh, K.C.I.E. of Balrampur.

Moti Chand.

Khwaja Ghulam-us-Saqlain.

Saiyid Raza Ali

Shaikh Shahid Hosain.

Asghar Ali Khan

H Ledgard

Bishambhar Nath.

Sukbir Singh

O R Lyle.

H V Lovett.

Raja Ramlal Singh, C.I E, of Kurri-Sudauli.

SECRETARIAT.

Chief Secretary to Government, R Burn.

Financial Secretary to Government, A. W Pim.

Judicial ,, ,, S P. O'Donnell

Secretary to Government, Public Works Dept (Buildings & Roads, & Railways), W G Wood C S I

Secretary to Government, Public Works Dept (Irrigation), C H Hutton

Registrars, F E Lowe, A Grant, W J Summers F C Richardson

BOARD OF REVENUE

Members, J M Holm, C S I

J S Campbell, C S I, C I E

Secretary, J E Goudge

MISCELLANEOUS APPOINTMENTS

Opium Agent, Ghazipur, C E Wild

Director of Land Records and Agriculture, H R C Hailey

Director of Public Instruction, C F de la Fosse

Inspector-General of Police, D M Straight

Inspector-General of Civil Hospitals, Col C C Manifold, I M S

Sanitary Commissioner, Lieut.-Col S A Harris I M S

Inspector-General of Registration, W Raw

Commissioner of Excise, T A H Way

Accountant-General, J H Graham

Inspector-General of Prisons, Lt Col C Mac taggart, C I E, I M S

Postmaster-General, C J H Hogg

Chemical Analyser and Bacteriologist, Dr E H Hankin

LIEUTENANT-GOVERNORS OF THE NORTH WESTERN PROVINCES

Sir C T Metcalfe, Bart, G C B	1836
The Right Hon the Governor-General in the North-Western Provinces (Lord Auckland)	1838
T C Robertson	1840
The Right Hon the Governor-General in the North-Western Province (Lord Ellenborough)	1842
Sir G R Clerk, K C B	1843
James Thomson Died at Bareilly	1843
A W Begbie, *In charge*	1853
J R Colvin Died at Agra	1853
E A Reade, *In charge*	1857
Colonel H Fraser, C B, Chief Commissioner, N.-W Provinces	1857
The Right Hon the Governor-General administering the N.-W Provinces (Viscount Canning)	1858
Sir G F Edmonstone	1859
R Money, *In charge*	1863
The Hon Edmund Drummond	1863
Sir William Muir, K C S I	1868
Sir John Strachey, K C S I	1874
Sir George Couper, Bart., C B	1876

LIEUTENANT-GOVERNORS OF THE NORTH-WESTERN PROVINCES AND CHIEF COMMISSIONERS OF OUDH

Sir George Couper, Bart, C B K C S I	1877
Sir Alfred Comyns Lyall, K C B	1882
Sir Auckland Colvin, K C M G, C I E	1887
Sir Chas H T Crosthwaite, K C S I	1892
Alan Cadell (*Officiating*)	1895
Sir Antony P MacDonnell, K C S I (*a*)	1895
Sir J J D La Touche, K C S I	1901

(*a*) Afterwards (by creation) Baron MacDonnell

LIEUTENANT-GOVERNORS OF THE UNITED PROVINCES OF AGRA AND OUDH

Sir J J D La Touche, K C S I	1902
Sir J P Hewett, K C S I, C I E	1907
L A S Porter, C S I (*Officiating*)	1912
Sir J S Meston, K C S I	1912

The Punjab.

The Punjab, or land of the five rivers, is so called from the five rivers by which it is enclosed, namely, the Jhelum, Chenab, Ravi, Beas and Sutlej Together with the North-West Frontier Province and the Native State of Jammu and Kashmir which lie to the north, the Punjab occupies the extreme north-western corner of the Indian Empire, and with the exception of the above-mentioned province, comprises all of British India north of Sind and Rajputana and west of the river Jumna Previous to October 1912, the Punjab with its feudatories embraced an area of 136 330 square miles and a population at the Census of 1911 of 24,187,750 (inclusive of 28,587 transfrontier Baluchis) that is to say, about one-thirteenth of the area and population of the Indian Empire But the formation of a separate province of Delhi reduced the area and population of the Punjab by about 450 square miles and 380,000 souls respectively Of the total area of the Punjab, 36,551 square miles are in Native States (34 in number) with a population of 4,212,794, and 2,566 square miles are tribal territory on the western border of Dera Ghazi Khan district with a population of 28,587

Physical Features

The greater part of the Punjab consists of one vast alluvial plain, stretching from the Jumna in the east to the Sulaiman Range in the west The north-east is occupied by a section of the Himalayas and the Salt Range forms its north-western angle A few small spurs of the Aravalli mountain system traverse the extreme south-east and terminate in the Ridge at Delhi The Punjab may be divided into five natural divisions The Himalayan tract includes an area of 22,000 square miles, with a scanty population living scattered in tiny mountain hamlets The Salt Range tract includes the districts of Attock, Rawalpindi and Jhelum and part of Shahpur district Its physical configuration is broken and confused and the mountainous tracts of Murree and Kahuta approximate closely in characteristics to the Himalayan tract Except in the hills, the rainfall leaves little margin for protection against distress in unfavourable seasons and irrigation is almost unknown Skirting the base of the hills and including the low range of the Siwaliks, runs the narrow sub-montane tract This tract, secure in an ample rainfall, and traversed by streams from the hills, comprises some of the most fertile and thickly populated portions of the province Its population of over four millions is almost wholly agricultural and pastoral but it includes one large town in Sialkot Of the plains of the Punjab, the eastern portion covers an area of some 36,000 square miles with a population of 10½ millions East of Lahore, the rainfall is everywhere so far sufficient that cultivation is possible without irrigation in fairly favourable seasons, but over the greater part of the area the margin is so slight that, except where irrigation is employed, any material reduction in the rainfall involves distress, if not actual famine. Within the eastern plains lie the large cities of Lahore and Amritsar, and the population in comparison with the western Punjab is largely urban The western plains cover an area of 59,000 square miles, with a population of a little over six millions The rainfall in this area, heaviest in the north and east and decreasing towards the west and south, is everywhere so scanty that cultivation is only possible with the aid of artificial irrigation or upon the low-lying river-banks left moist by the retreating floods In this very circumstance, these tracts find their scarcity against famine, for there cultivation is almost independent of rain, a failure of which means nothing worse than a scarcity of grass So little rain is sufficient and absolute drought occurs so seldom that the crops may be said never to fail from this cause The western plains embrace the great colony areas on the Lower Chenab and Lower Jhelum Canals which now challenge the title of the eastern plains as the most fertile, wealthy and populous portions of the province Multan and Lyallpur are the largest towns in the western area Owing to its geographical position, its scanty rainfall and cloudless skies, and perhaps to its wide expanse of untilled plains, the climate of the Punjab presents greater extremes of both heat and cold than any other portion of India The summer, from April to September, is scorchingly hot, and in the winter, sharp frosts are common But the bright sun and invigorating air make the climate of the Punjab in the cold weather almost ideal

The People

Of the population roughly one half is Mahomedan, three-eighths Hindu and one-eighth Sikh Socially the landed classes stand high and of these the Jats, numbering nearly five millions, are the most important Roughly speaking, one half the Jats are Mahomedan, one-third Sikh and one-sixth Hindu In distribution they are ubiquitous and are equally divided over the five divisions of the province Next in importance come the Rajputs, who number over a million and a half The majority of them are Mahomedans by religion, about a fourth are Hindus and a very few Sikhs They are widely distributed over the province Both Jats and Rajputs of the Punjab provide many of the best recruits for the Indian Army The Gujars are an important agricultural and pastoral tribe, chiefly found in the eastern half of the province and in the extreme north-west In organisation they closely resemble the Jats and a often absorbed into that tribe There are many minor agricultural tribes, priestly and religious castes (Brahmans, Sayads and Kureshis), most of whom are landholders, the trading castes of the Hindus (Khatris, Aroras and Banias) and trading castes of the Mahomedans (Khojas, Parachas and Khakha), and the numerous artisan and menial castes There are also vagrant and criminal tribes, and foreign elements in the population are represented by the Baluchis of Dera Ghazi Khan and neighbouring districts in the west, who number about half a million and maintain their tribal system, and the Pathans of the Attock and Mianwali districts. Pathans are also found scattered all over the province engaged in

horse-dealing, labour and trade A small Tibetan element is found in the Himalayan districts.

Languages.

The main language of the province is Punjabi, which is spoken by more than half the population Western Punjabi may be classed as a separate language, sometimes called Lahudi, and is spoken in the north and west The next most important languages are Western Hindi, which includes Hindustani, Urdu (the polished language of the towns) and other Hindi, Western Pahari, which is spoken in the hill tracts; and Rajasthani, the language of Rajputana Baluchi, Pushto, Sindhi and Tibeto-Burman languages are used by small proportions of the population.

Agriculture.

Agriculture is the staple industry of the province, affording the main means of subsistence to 56 per cent of the population It is essentially a country of peasant proprietors About one-sixth of the total area in British districts is Government property, the remaining five-sixths belonging to private owners But a large part of the Government land is so situated that it cannot be brought under cultivation without extensive irrigation Thus the Lower Chenab Canal irrigates nearly 1,900,000 acres of what was formerly waste land and the Lower Jhelum Canal 390,000 acres, and the Lower Bari Doab Canal when completed will add considerably to this total Large areas in the hills and elsewhere which are unsuited to cultivation are preserved as forest lands, the total extent of which is about 8,700 square miles Of the crops grown, wheat is the most important and the development of irrigation has led to a great expansion of the wheat area, which now occupies in an average year over 8¾ millions of acres The average annual outturn of wheat is 3,000,000 tons, valued at present prices at approximately £20,000,000. Next in importance to wheat is gram, the average annual produce of which is a million tons valued at £5,000 000 Other important staples are barley, rice, millets, maize, oilseeds (rape, toria and sesamum,) cotton and sugarcane Cotton is grown generally throughout the province but the ravages of boll-worm have affected the popularity of the crop. The cotton grown is of the short stapled variety, known as 'Bengals' The country being preponderantly agricultural, a considerable proportion of the wealth of the people lies in its live-stock The latest cattle census gives the following figures —cattle, nearly 8,000,000 head buffaloes, about 850,000, bovine young stock, 3,800 000, sheep, 4,500,000, goats, 4,250,000 Large profits are derived from the cattle and dairy trades and wool is a staple product in the south-west in Kulu and Kangra and throughout the plains generally. The production of hides and skins is also an important industry

Industries.

The mineral wealth of the Punjab is small, rock salt, saltpetre, and limestone for road-building being the most important products. There are some small coal mines in the Jhelum district and gold-washing is carried on in most of the rivers, not without remunerative results Iron and copper ores are plentiful but difficulties of carriage and the absence of fuel have hitherto prevented smelting on a large scale. The Punjab is not a large manufacturing country, the total number of factories being only, 268 of which 202 are devoted to cotton ginning, cleaning and pressing Cotton weaving as a domestic industry is carried on by means of hand looms in nearly every village The Salvation Army has shown considerable enterprise in improving the hand-weaving industry Blankets and woollen rugs are also produced in considerable quantities and the carpets of Amritsar are famous Silk-weaving is also carried on and the workers in gold, silver, brass, copper and earthernware are fairly numerous and ivory carving is carried on at Amritsar and Patiala. The trade of the province is steadily expanding, the total internal trade being valued at 57½ crores of rupees The external trade with Afghanistan, Ladakh and Tibet is valued at 6½ lakhs

Administration.

The administrative functions of Government are performed by a Lieutenant-Governor appointed by the Governor-General with the approval of the Crown The Lieutenant-Governor in practice is always a member of the Indian Civil Service though military members of the Punjab Commission are eligible for the position The Punjab Commission, the body which is responsible for the Civil administration of the province, is recruited from the Indian Civil Service and the Provincial Civil Service Up to the date of the separation of the North-West Frontier Province from the Punjab, one-fourth of the cadre was drawn from the Indian Army The business of Government is carried on through the usual Secretariat which consists of three Secretaries, designated (1) Chief, (2, Revenue and (3) Financial Secretaries, and three Under-Secretaries In the Public Works Department, there are also three Secretaries (Chief Engineers), one in the Buildings and Roads Branch and two in the Irrigation Branch The heads of the Police and Educational Departments are also Under-Secretaries to Government The Government spends the winter in Lahore and the summer (from the middle of May to the middle of October) in Simla The Lieutenant-Governor has no Executive Council, but is assisted in legislative business by a Legislative Council of 24 members, of whom eight are elected and 16 nominated by the Lieutenant-Governor Of the nominated members, not more than ten may be officials, in addition there may be two nominated expert members Under the Lieutenant-Governor, the province is administered by five Commissioners (for Ambala, Jullundur, Lahore, Rawalpindi and Multan) who exercise general control over the Deputy Commissioners—28 in number—each of whom is in charge of a district A district on an average contains four tahsils, each consisting of about 300 villages. The Deputy Commissioner is usually a Covenanted Civilian or military member of the Punjab Commission, although twe Deputy Commissionerships are "listed" for Provincial Civil Servants The Deputy Commissioner has under him one or more Assistant Commissioners (Coven-

anted Civilians) and one or more Extra Assistant Commissioners (Provincial Civilians) In some cases, one or more tahsils form a subdivision under the charge of a sub-divisional officer who has wide powers The tahsil is in charge of a Tahsildar, in some cases assisted by one or more Naib Tahsildars The village is under a Lambardar or headman and in most districts the villages are grouped into zails, each under a zaildar The lambardars and zaildars are "village officers" and not Government-servants The district Land Records and Excise staff, though organised for special departmental purposes, is available for general administrative work The Native States of the province are arranged for the purposes of supervision into five groups, each under the charge of a Political Agent Except in the case of the Sikh Phulkian States (Patiala, Jhind and Nabha) and Bahawalpur, the Political Agent is either the neighbouring Commissioner or Deputy Commissioner The principal heads of Department in the province are the two Financial Commissioners (who are the highest Court of Revenue jurisdiction, and heads of the departments of Land and Separate Revenue and of Agriculture and the Court of Wards), the three Chief Engineers, the Inspector-General of Police, the Director of Public Instruction, the Inspector-General of Prisons, the Inspector-General of Civil Hospitals, the Sanitary Commissioner, the Conservator of Forests, the Director of Agriculture and Industries, the Inspector-General of Registration and the Legal Remembrancer The Accountant-General, the Postmaster-General, the Director of Telegraph Engineering, and the Agent, North-Western Railway, represent Imperial Departments under the Government of India

Justice.

The administration of justice is entrusted to a Chief Court, which is the final appellate authority in civil and criminal cases, and has powers of original criminal jurisdiction in cases where European British subjects are charged with serious offences and original civil jurisdiction in special cases. The Court sits at Lahore and is composed of a Chief Judge and four puisne judges (either Civilians or barristers), a sixth additional judge whose appointment is sanctioned for two years and a seventh and eighth additional judge whose appointment is sanctioned for one year Owing to the accumulation of arrears of business a further increase in the permanent strength of the Court is only a question of time, and there is a strongly supported movement in the province in favour of raising the Court to the status of a High Court. Subordinate to the Chief Court are the District and Sessions Judges (22 in number) each of whom exercises civil and criminal jurisdiction in a civil and sessions division comprising one or more districts They hear most of the first appeals in Civil suits and try sessions cases and hear criminal appeals from the district and first class magistrates. One or two divisions have an additional judge and in many districts a Subordinate Judge exercising unlimited civil jurisdiction, is appointed to assist the District Judge but the majority of civil suits are tried in the first instance by Munsifs whose jurisdiction is limited to suits not exceeding Rs 1,000 in value. The assistants to Deputy Commissioners are always invested with the powers of a Munsif, but the former practice of investing Tahsildars with Munsif's powers is being gradually discontinued At Lahore, Amritsar and Simla there are Courts of Small Causes The Deputy Commissioner is the District Magistrate and controls the subordinate Criminal Courts of the District All the assistants of the Deputy Commissioner as well as the District and Subordinate Judges, but not the Munsifs, are invested with magisterial powers Tahsildars usually exercise the powers of a second class magistrate and Naib Tahsildars those of the third class, and considerable assistance is obtained from Honorary Magistrates who sit either singly or as a bench In districts in which the Frontier Crimes Regulation is in force the Deputy Commissioner on the finding of a Council of Elders (Jirga) may pass sentence up to four years' imprisonment In all cases capital sentences require the confirmation of the Chief Court Special Revenue Courts to decide all suits regarding tenant right, rents and cognate matters in which civil courts have no jurisdiction have been established under the Punjab Tenancy Act The Financial Commissioners are the final court of appeal in revenue cases.

Local Government.

Local control over certain branches of the administration is secured by the constitution of district boards exercising authority over a district and of municipalities exercising authority over a city or town . A few districts have local boards which exercise authority over a tahsil These bodies are composed of members either nominated by Government or selected by the people and they are empowered to spend the funds at their disposal on schools and dispensaries, vaccination, sanitation, roads and rest houses and general improvements The funds of district boards are derived mainly from a cess on the land revenue of the district supplemented by grants from Provincial Funds, and those of municipalities from octroi, local taxation and Government grants In the smaller towns which are known as "notified areas", a simpler form of government than the municipal system is in force Where the elective principle is in force as regards both district boards and municipalities, the public shows very little interest in the elections, except in a few cases where sectarian feeling runs high

Finance.

Under the present system of decentralisation in finance, the Imperial Government delegates to the Punjab Government the control of expenditure on the ordinary administrative services together with the whole or a certain proportion of certain heads of revenue sufficient to meet those charges Of the various heads of revenue post office, telegraphs, railways, opium and salt are entirely Imperial, Land revenue, stamps, excise, income-tax and major irrigation works are divided between the Imperial and Provincial Governments in the proportion of one half to each. Minor irrigation works and some minor heads are divided in varying proportions, while the

revenue from forests, registration, courts of law, jails, police and education are wholly provincial as well as the income of district boards and municipalities The Budget for 1914-15 shows a total revenue (including opening balance) of Rs 6 44,50,000, and a total expenditure of Rs 5,00 29,000, leaving a closing balance of Rs 1,44,21,000

Public Works

As was stated in the section on "Administration" the Public Works Department is divided into two branches one for Buildings and Roads and the other for Irrigation In the former branch, under the Chief Engineer, the province is divided into three circles under Superintending Engineers and 11 divisions under Executive Engineers, while the King Edward Memorial at Lahore also constitutes a special division The primary object of this branch is the construction and maintenance of Imperial and Provincial works, but it also assists municipalities and district boards The Irrigation branch is under two Chief Engineers, one of whom is also Chief Engineer of Irrigation Works in the North-West Frontier Province Under them are nine Superintending Engineers in charge of circles and 39 Executive Engineers in charge of divisions In addition to the work of construction and maintenance Irrigation Officers are responsible for the assessment of water rates leviable on irrigated areas and in several districts where the land revenue demand is assessed on the fluctuating principle, for the formulation of this demand on irrigated crops as well

Irrigation

The canal system of the Punjab is admittedly one of the greatest achievements of British rule in India. Not including the enormous Triple Canal project now in process of completion, the total irrigated area in British districts and Native States amounts to 8,269,233 acres The Beas is the only one of the great rivers of the province from which no canal takes off The Indus provides supplies for two large series of inundation canals, one on either bank Taking off from the Jhelum is the Lower Jhelum perennial canal, with 150 miles of main channel and 1,000 miles of distributaries and lower down the river is a large series of inundation canals The Lower Chenab perennial canal takes off from the Chenab and comprises 427 miles of main channel and branches and 2,278 miles of branches, while below the junction of the Chenab and Ravi rivers is a series of inundation canals on both banks The Ravi provides supplies for the Upper Bari Doab Canal, which has 370 miles of main line and branches and 1,571 miles of distributaries Some small inundation canals and the Sidhani system with a length of 200 miles also take off from the Ravi The Sirhind Canal which has a main line and branches of 538 miles and distributaries amounting to 3,703 miles, takes off from the Sutlej, and there are two systems of inundation canals deriving their supplies from the Upper and Lower Sutlej respectively in addition to the Grey Canals maintained on the cooperative system in the Ferozepore district and a vast series of inundation canals in Bahawalpur State The Western Jumna Canal which takes off from the right bank of the Jumna has a main line and branches of 377 miles and distributaries of 1,764 miles The Triple Canal project is intended to carry surplus water from the Jhelum and the Chenab to supplement the scanty supplies in the lower reaches of the Ravi and incidentally to afford irrigation to the tracts through which the supply channels pass The three canals included in the project are known as the Upper Jhelum Upper Chenab and Lower Bari Doab Canals Of these the Upper Chenab was opened in April 1912 and the Lower Bari Doab in April 1913 and it is hoped that the Upper Jhelum will be ready for opening before long, The most interesting feature of this great work is the level crossing at Balloki, 40 miles from Lahore, where the Upper Chenab canal supply is passed across the Ravi into the Lower Bari Doab Canal The revised estimate of the cost of the whole scheme is £6¾ millions

Police

The Police force is divided into District and Railway Police The combined force is under the control of the Inspector-General, who is a member of the gazetted force and has under him three Deputy Inspector-Generals, for the Eastern (Ambala), Central (Lahore) and Western (Rawalpindi) Ranges respectively and a fourth Deputy Inspector-General in charge of Railway Police, Criminal Investigation, the Police Training School and Finger Print Bureau at Phillaur The Railway Police are divided into two districts, Northern and Southern, each under a Superintendent The District Police are controlled by Superintendents, each of whom is in charge of a district, and has under him one or more Assistant Superintendents The district is divided into circles under charge of Inspectors, and again into thanas in charge of a Sub-Inspector The staff of a thana consists on an average of one Sub-Inspector, two head constables and 10 constables A service of Provincial Police officers has also been established consisting of 18 Deputy Superintendents, who are employed as assistants to the Superintendents The total police force of the province exclusive of gazetted officers, consists of 1,075 officers and 19,974 men, practically half of whom are armed with revolvers and bored out rifles The village police or chaukidars are under the control of the Deputy Commissioner of each district not of the Police Superintendent The cost of the Police Force is 58½ lakhs

Education.

Although the Punjab is usually considered rather a backward province, education has made great strides especially in the last ten years Government maintain the Government College at Lahore, the Central Training College at Lahore, a Training class for European teachers at Sanawar (Simla Hills), normal schools at the headquarters of each division, and High Schools at the headquarters of each district, and the Lawrence Military Asylum at Sanawar for European children There are in the province nine arts colleges (one of them Oriental), 6 professional colleges for males and 2 for females, 101 High

Schools for boys and 16 for girls, 211 middle schools for boys and 36 for girls, 3,417 Primary Schools for boys and 637 for girls, 31 schools for special instruction for boys and 25 for girls The number of pupils attending schools of all classes is 276,000 boys and 36,400 girls The nine arts colleges are —The Government, Oriental, Forman Christian, Dayanand, Islamia and Dayal Singh Colleges at Lahore, Khalsa, Amritsar, Murray, Sialkot, Gordon, Rawalpindi Professional education is represented by the Law, Medical and Veterinary Colleges at Lahore, the Agricultural College at Lyallpur, the Clerical and Commercial School at Amritsar, the Engineering School at Rasaul, the Mayo School of Art and the Railway Technical School, both at Lahore There are eight Industrial Schools in the Province maintained by Municipalities or District Boards and others maintained by Missionary bodies, the Arya Samaj, etc, which receive grants-in-aid The education of the domiciled community is provided for by a number of secondary boarding schools in hill stations and of primary schools in the plains The aristocracy of the province is provided for by the Aitchison Chiefs' College for boys and the Queen Mary's College for girls, both at Lahore

The Education Department is administered by the Director of Public Instruction, who has under him an Inspector of Schools in each civil division with two or more assistants, a District Inspector, with assistants, in each district, two Inspectresses of girls' schools and an Inspector of European schools Higher education is controlled by the Punjab University (incorporated in 1882) which has the Lieutenant-Governor as *ex-officio* Chancellor, a Vice-Chancellor appointed by Government and a Senate In addition to the nine arts colleges already mentioned and the Law and Medical Colleges at Lahore, St Stephen's College, Delhi, and the Hindu College, Delhi, and six other colleges in Kashmir, Patiala, Bahawalpur, Kapurthala and the North-West Frontier Province are affiliated to the Punjab University

Medical

The Medical Department is controlled by the Inspector-General of Civil Hospitals (a member of the Indian Medical Service) who also supervises the departments of the Chief Plague Medical Officer and the Chief Malaria Medical Officer Sanitation is controlled by the Sanitary Commissioner (also a member of the Indian Medical Service) who has under him a Deputy Sanitary Commissioner and is advised by the Sanitary Board, with the Sanitary Engineer as Technical Adviser Medical work in the districts is in charge of the Civil Surgeons, of whom fourteen are members of the Indian Medical Service and others Military Assistant Surgeons and unconvenanted Medical Officers, chiefly Civil Assistant Surgeons The Mayo Hospital at Lahore and special railway, canal and police hospitals are maintained by Government, but the ordinary hospitals and dispensaries in the districts are maintained by municipal or district funds Certain private institutions such as the Walker Hospital at Simla and many mission dispensaries receive grants-in-aid The Mayo Hospital at Lahore is being greatly extended and improved as a memorial to King Edward VII The total number of patients treated at all hospitals and dispensaries in the year is over four millions, including nearly 75,000 in-patients A temporary department to combat plague has been organised under the Chief Medical Plague Officer. In the districts the Civil Surgeons are generally in charge of the operations against plague, but additional officers are employed from time to time There is only one lunatic asylum in the Province at Lahore, but there are ten leper asylums The Pasteur Institute at Kasauli performs the functions of a provincial laboratory for the Punjab Vaccination is supervised by the Sanitary Commissioner, but is more particularly the concern of the Deputy Sanitary Commissioner, who has under him a special staff Civil Surgeons also have a local staff of vaccinators under them

Lieutenant-Governor, Sir M F O'Dwyer, K C S I Assumed charge 1913

PERSONAL STAFF

Private Secretary, Lieut.-Col E C Bayley C I E, I A

Aide-de-Camp, Mr P Stuart, I C S

Honorary Aides-de-Camp, Lieut.-Col W T Wright, Hony Capt Gopala, Risaldar Major Muhammad Hayat Khan, Subedar Bahadur Gulab Singh

LEGISLATIVE COUNCIL

President, The Lieutenant-Governor

Vice-President, A H Diack, C V O

MEMBERS

Nominated

Nawab Sir Bahram Khan, K C I E
J C Godley, C S I
Sir A M Kei, Kt, C I E, M V O
Mian Muhammad Shafi, Khan Bahadur
Sundar Singh, Majithia, Sardar Bahadur
H J Maynard
R A Mant.
A H Diack, C V O
C A Barron, C I E
P J Fagan
S W Gracey
Sardar Daljit Singh, C S I
Khwajah Yusuf Shah, Khan Bahadur
Nawab Ibrahim Ali Khan of Kunjpura
J P Thompson
Col R S Maclagan, C B, C S I

Elected

J. Currie
Lala Kashi Ram of Ferozepore
Ram Saran Das of Lahore.
Hari Chand of Multan
Gajjan Singh of Ludhiana

Bakhshi Sohan Lal of Lahore
Malik Muhammad Amin Khan of Shamsabad
Sir P C Chatarji, C I E
Secretary, S W Gracey

SECRETARIAT

Chief Secretary, C A Barron, C I E
Revenue Secretary, J P Thompson.
Financial Secretary, R A Mant
Registrar, W Burr-Bryan, I S O

PUBLIC WORKS DEPARTMENT

Irrigation Branch

Secretaries, R E Purves, F E. Gwyther

Buildings and Roads Branch

Secretary, Col R S Maclagan, C B, C S I R E

REVENUE DEPARTMENT

Financial Commissioners, A H Diack, C V O, Sir M W Fenton, K C S I
Director of Agriculture and Industries W S Hamilton
Director of Land Records, Inspector Genl of Registration, and Registrar-General, B T Gibson
Director of Fisheries, G C L Howell

MISCELLANEOUS APPOINTMENTS

Director of Public Instruction, J C Godley, C.S I
Inspector-General of Police, Lieut-Col H T Dennys, I A
A. H. Close (N W Frontier Province)
Conservator of Forests, R McIntosh
Inspector-General of Civil Hospitals, Col C. J Bamber, M V O
Sanitary Commissioner, Lt-Col E Wilkinson.
Inspector-General of Prisons, Lt-Col G F. W. Braide
Accountant-General, A M Brigstocke, I C S
Postmaster-General, C H Harrison, I C S
Registrar of Co-Operative Credit Societies and Joint Stock Companies, A. Langley.

LIEUTENANT GOVERNORS OF THE PUNJAB

Sir John Lawrence, Bart, G C B ..	1859
Sir Robert Montgomery, K C B	1859
Donald Friell McLeod, C B	1865
Major-General Sir Henry Durand, K C S I, C B, died at Tonk, January 1871	1870
R H Davies, C S I .	1871
R E Egerton, C S I	1877
Sir Charles U Aitchison, K C S I, C I E	1882
James Broadwood Lyall . .	1887
Sir Dennis Fitzpatrick, K C S I .	1892
William Mackworth Young C S I ..	1897
Sir C M Rivaz, K C S I .	1902
Sir D C J Ibbetson, K C S I, resigned 22nd January 1908	1907
T G Walker, C S I, (*offg*) .	1907
Sir Louis W Dane, K C I E, C S I	1908
James McCrone Douie (*offg*) .. .	1911
Sir M F O'Dwyer, K C S I . ..	1913

Burma.

The Province of Burma lies between Assam on the North-West and China on the North-East, and between the Bay of Bengal on the West and South-West and Siam on the South-East Its area is approximately 261,899 square miles of which 169,000 are under direct British Administration and 68,000 belong to independen c" semi-independent Native States The main geographical feature of the country is the series of rivers and hills running fan-like from North to South with fertile valleys in between widening and flattening out as they approach the Delta On the West are the high hills of the Chin country, Manipur and Assam, and on the East the uplands of the Shan States On the South are the hill ranges of Siam The country is divided East and West by the Dry Zones which has most of the features of the highlands of India South and North of these are the Wet Zones with a rich tropical vegetation The climate of the Dry Zone resembles that of Behar the temperature in May rising to 116°, the climate of the Wet Zones is moist but fairly equable The magnificent rivers, the number of hilly ranges (Yomas) and the abundance of forests, all combine to make the scenery of Burma exceedingly varied and picturesque

The People.

The total populations of Burma at the census of 1911 was 12,115,217 Of this total, 7,642,204 are Burmans, 996,420 Shans, 919,641 Karens, 239,953 Kachins, 306,486 Chins, 344,123 Arakanese and 320,629 Talaings There is also a large alien population of Chinese 108,877 and Indians about 600,000, while the European population is 24,355

The Burmans who form the bulk of the population belong to the Tibetan group and then language to the Tibeto-Chinese family They are essentially an agricultural people, 80 of the agriculture of the country being in their hands Their chief concern is with their fields and their pagodas As long as they are left in peaceful enjoyment of these, they are apparently indifferent as to the Government of the country In appearance the Burman is usually somewhat short and thick-set with Mongolian features His dress is most distinctive and exceedingly comfortable. It consists of a silk handkerchief bound round his forehead, a loose jacket on his body and a long skirt-loongyi tied round his waist, reaching to his ankles The Burman woman, perhaps the most pleasing type of femininity in the East, lead a free and open life, playing a large part in the household economy Their dress is somewhat similar to the man's minus the silk kerchief on the head and the loongyi is tucked in at the side instead of being tied in front A well dressed and well groomed Burmese lady would, for grace and neatness, challenge comparison with any woman in the world.

Communications.

The Irrawaddy and to a less extent the Chindwin afford great natural thoroughfares to the country. At all seasons of the year these rivers, especially the Irrawaddy, are full of sailing and steam craft. In the Delta, the net-work of water ways is indeed practically the only means of communication The Irrawaddy Flotilla Company, with a fine fleet of mail cargo and ferry boats, gives the Irrawaddy and the Delta rivers and creeks a splendid river service

The Burma Railways Company has a length of 1,528 miles open line The principal lines are from Rangoon to Mandalay, from Sagaing to Myitkyina, the most northern point in the system the Rangoon-Prome line, and the Pegu-Martaban line which serves Moulmein on the further bank of the Salween River An important branch line runs from Thazi on the main line across the Meiktila and Myingyan Districts to Myingyan Town on the Irrawaddy Another branch goes from Sagaing on the Irrawaddy to Alon on the Chindwin A small branch on the Sagaing-Myitkyina line runs from Naba to Katha on the Irrawaddy A branch on the right bank of the Irrawaddy runs from Bassein to Kyangin An important line, the Southern Shan States Railway, is under construction It leaves the main line at Thazi and will run due East along the uplands to Yawnghwe, the principal town on the rich valley of the Nam Pilu

The length of metalled roads is 2,006 miles and of unmetalled roads 10,440 The number of roads for a rich province like Burma is quite inadequate One of the most urgent needs of the Province is a very generous extension of roads both metalled and unmetalled

Industry

Agriculture is the main industry of the Province, 71 63 per cent of the population being engaged in it The net total cropped area was in 1912-13, 14¼ million acres The bulk of the crop is paddy of which a surplus of 2,620,000 tons was exported in 1912-13 Paddy forms 62 per cent of the total exports of the Province Over 45 000 bales of cotton were produced The outturn of groundnut in 1912-13 was 75,000 tons Sesamum and wheat are also produced.

Forests play an important part in the industrial life of the Province The total area of reserved and unclassed forests is 133,613 square miles Wood is extracted by lessees, of whom the Bombay-Burma Trading Corporation and Messrs Steel Brothers are the principal In 1912-13 Government extracted 41,000 tons of teak, while purchasers extracted 214,000 tons.

A third important branch of industry consists of working in mines and quarries in which Burma is particularly rich The petroleum fields are in the Dry Zone, chiefly at Yenangyaung in the Magwe District where the principal extractor is the Burma Oil Company The total output of petroleum for the Province in 1912-13 was 245 million gallons. In the Ruby Mines District, the Burma Ruby Mines Company at Mogok has lately undergone a favourable change, the average annual value of the stones produced is about £ 59,000. 4,995 ounces of gold was won by the Burma Gold Dredging Company from the bed of the Irrawaddy River, north of Myitkyina.

The Burma Mines Company at Badwin in the Northern Shan States produced 22,563 tons of lead slag, valued at Rs. 8 96 lakhs and 2,950 tons of silver lead ore valued at Rs 61,415. Tavoy and Mergui Districts produced 8,026 cwts of Wolfram valued at Rs 4·99 lakhs. The Tawmaw Mines of the Myitkyina District produced 806 cwts. of jade, valued at Rs. 24,299

The rubber industry is still in its infancy, only 10 plantations employing more than 20 persons The plantations are situated in the Mergui, Amherst, Hanthawaddy and Toungoo Districts At the Census of 1911, 4,047 people were returned as engaged in the production of rubber The total quantity exported in 1913-14 was 6,831 cwts The production for 1915 is estimated at 1,500,000, and 1917 at 3,000,000 The prospect of rubber in this Province is very promising Well managed estates have proved that the products of rubber in Burma is a success Rubber is grown on ground unsuitable for paddy and the area available is very considerable

Manufacturers.

Out of a total of 307 factories, 165 are engaged in milling rice Of the rest 88 are Saw Mills At the Census of 1911, 469,743 or only 6 6 of the total population were engaged outside agriculture and production

As is the case in other parts of the Indian Empire, the imported and factory made article is rapidly ousting the home made and indigenous But at Amarapura in the Mandalay District a revival is being made of hand silk-weaving Burman wood carving is still famous and many artists in silver still remain, the finish of whose work is sometimes very fine Bassein and Mandalay parasols are well known and much admired in Burma But perhaps the most famous of all hand-made and indigenous industries is the lacquer work of Pagan with its delicate patterns in black, green and yellow traced on to a ground work of red lacquer over bamboo. Lacquered articles ranging from those of the most exquisite finish to those of a coarse description are produced at Pagan on the Irrawaddy and are sold throughout the length and breadth of Burma

Trade

The total value of the foreign trade was Rs. 4,326 lakhs, imports being Rs 2,353 lakhs Rangoon is *facile princeps* in the trade of the Province, accounting for 82 22 per cent of the total, at a value of Rs 4,419 lakhs. The net Customs duty was Rs 184 lakhs

The most important item of merchandise imported into Rangoon is manufactures of cotton, which account for 25 per cent. of the total import trade These imports are valued at Rs 575·60 lakhs The United Kingdom possesses 83 per cent. of the total import trade

Administration.

In 1897 the Province which had formerly been administered by a Chief Commissioner was raised to a Lieutenant-Governorship. The head of the Province is therefore now the Lieutenant-Governor He has a Council of fifteen members, one of whom is elected by the Burma Chamber of Commerce and the remaining fourteen are nominated by the Lieutenant-Governor Not more than six members may be official the rest must be non-officials and at least four must be selected from the Burmese population, one from the Indian and one from the Chinese community.

Burma is divided administratively into Upper Burma (including the Shan States and Chin Hills) and Lower Burma. The Shan States are administered by the Chiefs of the States, subject to the supervision of the Superintendents in the case of the Northern and Southern Shan States, and to the supervision of the Commissioners of the adjoining Divisions in the case of the other States. The Civil, Criminal and Revenue administration is vested in the Chief of the State subject to the restrictions contained in the sanad. The law administered is the customary law of the State

The Chin Hills are administered by a Superintendent

Under the Lieutenant-Governor are eight Commissioners of divisions, four in Upper and four in Lower Burma Commissioners in Upper Burma and the Commissioner of the Arakan Division are ex-officio Sessions Judges, but the other three Commissioners have been relieved of all judicial work

Under the Commissioners are 39 Deputy Commissioners including the Police officers in charge of the Hill Districts of Arakan and the Salween District, who exercise the powers of Deputy Commissioner Deputy Commissioners are also District Magistrates, Collectors, and Registrars, except in Rangoon where there is both a District Magistrate and a Collector Subordinate to the Deputy Commissioner are Assistant Commissioners Extra Assistant Commissioners and township officers, called Myooks In the villages are the village headmen, thugyis, assisted in Lower Burma by the Seeingaungs (rural policemen in charge of ten houses) The revenue administration is controlled by a Financial Commissioner assisted by two Secretaries Subordinate Departments are in charge of a Commissioner of Settlements and Land Records, a Director of Agriculture, a Superintendent of the Civil Veterinary Department and a Registrar of Co-operative Credit Societies.

Justice.

The administration of Civil and Criminal Justice is under the control of the Chief Court of Lower Burma with five judges, and of the Judicial Commissioner, Upper Burma, with an Assistant Judicial Commissioner There are six Divisional and eight District Judges There are also separate Provincial and Subordinate Judicial Services Divisional Judges are also Sessions Judges The Chief Court at Rangoon is the highest Civil Court of appeal and the highest court of Criminal appeal and revision in Lower Burma It is also the High Court for the whole of Burma (including the Shan States) where European British subjects are concerned It is the principal Civil and Criminal Court of original jurisdiction for Rangoon Town and hears appeals from all sentences of Courts and magistrate exercising jurisdiction in Rangoon Town

In Criminal and Civil matters the Judicial Commissioner, Upper Burma, exercises the power of a High Court for appeal, reference and revision, except in respect of criminal cases in which European British subjects are concerned

All village headmen have limited Magisterial powers and a considerable number are also invested with civil jurisdiction to a limited extent

Municipalities.

The Rangoon Municipality is the most important, with an income of Rs 41 61 lakhs and an expenditure of Rs 39 19 lakhs The Chairman is a member of the Indian Civil Service, of Deputy Commissioner's rank The members of the Committee are elected by wards.

There are 45 minor Municipalities of which the most important are those at Mandalay and Moulmein The average incidence of Municipal taxation is Rs 2-6-6.

Local Funds

No Local Boards nor District Boards exist in Burma In their place in Lower Burma, there are District Cess Funds, derived mostly from a 10 per cent cess on collections of ordinary local revenue and from collections from markets, ferries, slaughter houses etc The total receipts amount to over 30'97 lakhs

In Upper Burma, there are District Funds They are derived from market, ferry and license fees and occasional grants from Provincial revenues The total revenue was over 6 17 lakhs

There are 7 Cantonment Funds, 17 Town Funds and, excluding the Rangoon Port Trust, 6 Port Funds

Finance

As in the case of all other Provinces, the finances of Burma are based on a "Provincial Settlement" In the case of Burma, it came into force on the 1st April 1907 and the Government of India retains in the first place the entire profits of the commercial departments, such as Posts and Telegraphs, and in the second place, all the revenue where the 'locale' is no guide to its true incidence, such as the net receipts from Customs, Salt and Opium. But as the income from these sources is inadequate for the purpose of meeting the cost the Imperial Services, special arrangements are made as with other Provinces for the division of the remaining sources of revenue between Imperial and Provincial Funds.

In 1910-1911, as a result of the Report of the Decentralisation Committee, modifications were introduced into the Settlement Briefly, the Local Government, retains 5-8ths of the net Land Revenue instead of a half and the whole of the net Forest revenue The following figures show the gross revenue and expenditure for 1912-13 —

	Receipts Rs	*Expenditure* Rs
Imperial	374·13 lakhs	77 38 lakhs
Provincial	608 32 ,,	519·58 ,,
Local Funds	37·14 ,,	33·50 ,,
Municipalities	110 42 ,,	106·40 ,,
Other Funds	104·00 ,,	116·83 ,,

The Imperial Government makes fixed assignments of approximately Rs. 49 lakhs to the Burma Government.

Public Works

This Department is administered by two Chief Engineers who are also Secretaries to Government in the Public Works Department There are Superintending Engineers (including one for Irrigation and a Sanitary Engineer) 8; Executive Engineers and Assistant Engineers A Consulting Architect is attached to Head Quarters

There are four Major Irrigation Works—Mandalay, Shwebo and Mon Canals. The Ye-U canal in the Shwebo District is under construction

Police.

The Police Force is divided into Civil, Military and Rangoon Town Police. The first two are under the control of the Inspector-General of Police the latter is under the orders of the Commissioner of Police, Rangoon, an officer of the rank of Deputy Inspector-General

There are three other Deputy Inspectors-General, one for the Eastern and Western Range and one for the Military Police

The Civil Police Force numbered at the end of 1912, 1,343 officers and 13,361 men The strength of the Military Police on the 1st January 1913 was 15,829 officers and men The Rangoon Town Police stand at 79 officers and 1,191 men

A special feature of Burma is the Military Police Its officers are deputed from the Indian Army The rank and file are recruited from natives of India with a few Kachins Karens and Shans The organisation is Military the force being divided into Battalions The object of the force is to supplement the regular troops in Burma Their duties, apart from their Military work, is to provide escorts for specie, prisoners, etc., and guards for Treasuries, Jails and Courts

Education.

At the head is the Director of Public Instruction with an Assistant Director There are 6 Inspectors of Schools belonging to the Imperial and one belonging to the Provincial Service, and 7 Assistant Inspectors belonging to the Provincial Service The Rangoon College is staffed by a Principal and five Professors drawn from the Imperial Service Outside the Education Department is the Educational Syndicate whose aim is to promote education throughout the Province

Burma has no University, but it has two Colleges, the Rangoon College and the Baptist College which are affiliated to the Calcutta University Under Government there are—

An Arts College, Law School, Reformatory School, School of Engineering, Apprentice School, High School for Europeans, High School at Taunggyi for the sons of Shan Chiefs, 5 Normal Schools, 8 Anglo-Vernacular High Schools, 18 Anglo-Vernacular Middle Schools, and 28 Vernacular Middle Schools

A remarkable feature of education in Burma system of elementary education evolved, generations ago, by the genius of the people Nearly every village has a monastery (hpoongyi-kyaung); every monastery is a village school

and every Burman boy has, according to his religion, to attend that school, shaving his head and for the time wearing the yellow robe At the hpoongyi-kyaungs the boys are taught to read and write and an elementary and native system of arithmetic The result is that there are very few boys in Burma who are not able to read and write and the literacy of Burman men is 412 per mille.

Another feature of education in Burma is the excellent work of the American Baptist Mission which has established schools in most of the important towns in Burma, as well as a College in Rangoon

Medical.

The control of the Medical Department is vested in an Inspector-General of Civil Hospitals Under him are 41 Civil Surgeons There is also a Sanitary Commissioner, a Deputy Sanitary Commissioner, an Inspector-General of Prisons, three whole time Superintendents of Prisons, a Chemical Examiner and Bacteriologist and Superintendent of the Lunatic Asylum

A Civil Surgeon is in charge of each District while at the Summer Head Quarters of Maymyo there is a special Civil Surgeon

The total number of hospitals and Dispensaries is 265 at the end of 1912-13 The Rangoon General Hospital is perhaps the finest in the East.

The total number of patients treated in 1911 was 1,567,009.

Administration.

Lieutenant-Governor, Sir Harvey Adamson, Kt, K C S I, LL D, *Assumed charge, 19th May* 1910

Private Secretary, Capt E C. Lentaigue.

Aide-de-Camp, Lieut N. H. Hutcheson, 1st Royal Irish Rifles.

Honorary Aides-de-Camp, Lt -Col.H. Des. Voeux, C I.E., I A, Major E J. Foucar, V D.

Indian Aides-de-Camp, Hony. Capt Muzaffar Khan, *Sardar Bahadur*, Subadar-Major Amar Singh, *Rai Bahadur.*

LEGISLATIVE COUNCIL OF THE LIEUTENANT-GOVERNOR.

Officials.

W. J Keith.
Lt -Col E. C Townsend.
H. Thompson.

Non-Official..

Merwanjee Cowasjee.
Lim Chin Tsong.
Sao Mawng, C.I E.
Mirza Abdul Hussein, Khan Bahadur.
Maung Mye.
Maung Pe.
Maung Tun Myat.
B. J B Stephens
J E Du Bern

SECRETARIAT.

Chief Secretary, W. F Rice, C S.I.
Revenue Secretary, W. J. Keith
Secretary, C M Webb.
Secretary, P W D and Chief Engineer, G. C. Stawell.
Joint Secretary, P W D, D. W Aikman.
Financial Commissioner, H. Thompson.
Senior Registrar, E A C Walker, I S O

Miscellaneous Appointments.

Settlement Commissioner and Director of Land Records, H M S Matthews, C S I.
Director of Agriculture, H. Clayton.
Consulting Architect, H S Morris
Superintendent and Political Officer, Southern Shan States, G C R Stirling.
Superintendent and Political Officer, Northern Shan States, H A Thornton
Director of Public Instruction, J G Covernton.
Inspector-General of Police, Lt -Col H Des Voeux.
Chief Conservator of Forests, C G. Rogers
Inspector-General of Civil Hospitals, Col A. O. Evans
Sanitary Commissioner, Lt -Col C E Williams.
Inspector-General of Prisons, Lt -Col G. H. J. Bell
Commissioner of Excise, Major W. R. Stone
Chief Customs Authority, Herbert Thompson.
Accountant-General, A Newmarch, L. E Pritchard (*Ag*)

Chief Commissioners of Burma.

Lieut -Colonel A P. Phayre, C B. ..	1862
Colonel A Fytche, C S I . . .	1867
Lieut -Colonel R D Ardagh .	1870
The Hon Ashley Eden, C S I. .	1871
A R. Thompson, C S.I. ..	1875
C. U. Aitchison, C S I . ..	1878
C E Bernard, C S I . .	1880
C H T Crosthwaite . .	1883
Sir C E Bernard, K C S I. . .	1886
C H T Crosthwaite, C S I. .	1887
A P. MacDonnell, C S I. (*a*) .	1889
Alexander Mackenzie, C S I. .. .	1890
D M Smeaton	1892
Sir F W R Fryer, K C S I ..	1895

(*a*) Afterwards (by creation) Baron MacDonnell.

Lieutenant-Governors of Burma.

Sir F. W. R Fryer, K C.S.I.	1897
Sir H S Barnes, K C S I, K.C.V O. .	1903
Sir H. T. White, K.C I.E.	1905
Sir Harvey Adamson, Kt., K C.S I.; LL.D...	1910

Bihar and Orissa.

Bihar and Orissa lies between 19°-02′ and 27°-30′ N. latitude and between 82°-31′ and 88°-26 E longitude and includes the three provinces of Bihar, Orissa and Chota Nagpur, and is bounded on the north by Nepal and the Darjeeling district of Bengal, on the east by Bengal, on the south by the Bay of Bengal and Madras; and on the west by the United Provinces of Agra and Oudh and the Central Provinces.

The area of the British territories which constitute the Lieutenant-Governorship of Bihar and Orissa is 83,181 square miles inclusive of the area of large rivers. In addition to the districts which are directly under British rule, there are two groups of petty estates which lie to the south and south-west of the Province and which under the names of the Tributary States of Orissa and the Political States of Chota Nagpur are governed each by its own Chief under the superintendence and with the advice of the Commissioner of the nearest British Administrative division The area of these territories is 28,648 square miles and as it is usual to include them when speaking of Bihar and Orissa the area of the whole Province may be stated at 111,829 square miles Two of the provinces of the Lieutenant-Governorship of Bihar and Orissa, *viz*, Bihar and Orissa, consist of great river valleys, the third, Chota Nagpur, is a mountainous region which separates them from the Central Indian Plateau Orissa embraces the rich deltas of the Mahanadi and the neighbouring rivers and is bounded by the Bay of Bengal on the south-east and walled it on the north-west by Tributary Hill States Bihar lies on the north of the Province and comprises the higher valleys of the Ganges from the spot where it issues from the territories of the Lieutenant-Governor of the United Provinces of Agra and Oudh Between Bihar and Orissa, but stretching further westward and deep into the hill country, lies Chota Nagpur.

The People.

The temporary head-quarters of Government are at Ranchi in Chota Nagpur, while the permanent Capital at Patna is under construction The Province has at present no hill station

The Province has a population of 38,435,293 persons which is very little less than that of France and rather more than that of the Bombay Presidency. The province is almost entirely rural, no fewer than 966 per mille of the population living in villages Even so with 344 persons per square mile, Bihar and Orissa is more thickly populated than Germany. There are only three towns which can be classed as cities namely, Patna, Gaya and Bhagalpur. During the last thirty years the population of Patna, the capital designate, has been steadily diminishing. Hindus form an overwhelming majority of the population Though the Muhammadans form less than one-tenth of the total population they constitute more than one-fifth of urban population of the province Animists account for 7 per cent These are inhabitants of the Chota Nagpur plateau and the Santal Parganas.

Industries.

The principal industry is agriculture, Bihar more especially North Bihar, being the "Garden of India" Rice is the staple crop but the spring crops, wheat, barley, oats and the like are o considerable importance. It is estimated that the normal area cultivated with rice in this Province is 17,200,000 acres or 63 per cent. of the cropped area of the Province. Wheat is grown on about 1½ million acres, barley on 1,428,200 acres, maize or Indian-corn on 1,769,300 acres the latter being an autumn crop Oilseeds are an important crop, the cultivation having been stimulated by the demand for them in Europe The exports in various kinds of oilseeds amounted to 5,758,390 maunds valued at Rs 3,58,63,482 It is estimated that 2,021,300 acres of land are annually cropped with oil-seeds in the Province There is irrigation in Gaya, Champaran and Muzaffarpur districts in Bihar and in Balasore and Cuttack in Orissa The Indigo industry has been steadily on the decline during the last twenty years, the total areas sown having decreased from 342,000 acres in 1896 to 109,600 acres in 1911 The principal cause of this has been the discovery of the possibilities of manufacturing synthetic or chemically prepared indigo on a commercial scale, a process chiefly carried out in Germany All the districts of Bihar with the exception of Purneah are liable to famine The last serious famine was in 1895-96 In any year in which monsoon currents from either the Bay of Bengal or the Arabian Sea are unduly late in their arrival or cease abruptly before the middle of September the agricultural situation is very grave It may be said that for Bihar the most important rainfall is that known as the *hatia*, due towards the end of September or up to middle of October Rain at this time not only contributes materially to an increased outturn of the rice crop, but also provides the moisture necessary for starting the spring or *rabi* crops.

Manufactures.

Opium was formerly, with indigo, the chief manufactured product of Behar, but in consequence of the recent agreement with the Chinese Government the Patna Factory has been closed At Monghyr the Peninsular Tobacco Company have erected one of the largest cigarette factories in the world and as a result tobacco is being grown much more extensively. There are two important iron works in the Singhbhum District, Messrs Tata & Co's Iron and Steel Works at Sakchi and the Bengal Iron and Steel Company at Dhuia Both these works possess considerable economic possibilities and are likely to have a far reaching effect on the iron and steel trade of India in the future. By far the most important of the Mineral industries in the province is that concerned in the raising of coal The coalfields in the Manbhum District have undergone an extraordinary development in the past twenty years. Though the limits of the district include a portion of the Raniganj field, its fame as a coal-producing area is now identified practically with the Jharia field The importance of the industry may be said to date from the opening of the railway from Barakar to Dhanbaid and Katras in 1894, and from Kusunda to Pathordi in 1895. In 1894 the outturn of all the mines in the district was only 126,686 tons; in 1895 it rose to 1,281,294 tons the enormous increase being almost entirely from the Jharia field, In the two succeeding

years there was a set back, but from 1898 there was a steady rise in the outturn which first touched two million tons in 1901 In 1905 the outturn had swelled to nearly three million ton and in 1906 to nearly four millions, in 1907 over 5,800,000 tons were raised and in the following year no less than seven million tons The Jharia field is, of course, the one which accounts for the bulk of the increase in outturn, but there has also been a very considerable expansion in the Raniganj field and many new mines have been opened out The entrance of the Bengal-Nagpur Railway in the Jharia field in 1904, and the subsequent extension of various small loops and branches, besides innumerable sidings from both systems, the doubling of the line from Barakar to Dhanbaid, the opening of the section of the East Indian Railway of the Grand Chord from Dhanbaid to Gomoh have all contributed to this rapid development The tendency, however, which was manifest in 1907 and 1908 to open out new collieries has been checked From two concerns representing half a dozen mines in 1891, the number of collieries has grown to 251 in 1911, 196 in the Jharia and 55 in the Raniganj field producing respectively, 6½ million and 450,000 tons annually, just about double the output of the Burdwan mines in the same year, and nearly seven-twelfths of the total output of British India Giridih in Hazaribagh is also the centre of a considerable coal-mining industry, containing, as it does, mines owned and worked by the East Indian Railway Company In 1911 the output was 700,000 tons The Bokaro-Ramgarh field in the same district is likely to be of great economic importance as soon as the area is fully opened up by the railway now under construction It immediately adjoins the Jharia field across the Hazaribagh border There is a large undeveloped coal supply, it is believed, in the Districts of Palamau and Hazaribagh

Administration.

The Province is administered by a Lieutenant-Governor in Council The Lieutenant-Governor is appointed by the Crown and is a senior member of the Indian Civil Service He is assisted by a Council of three members, two of whom are drawn from the Indian Civil Service while the third, in practice, is an Indian Each member takes charge of departments and in the event of any difference of opinion regarding inter-departmental references the matter is decided in Council. In practice all important cases are submitted through the member concerned to the Lieutenant-Governor

The unit of executive administration is the District The District Officer is styled District Magistrate and Collector, except in the Scheduled districts where he is known as the Deputy Commissioner The ordinary district jails are placed in charge of a Superintendent, usually the Civil Surgeon while the Magistrate pays periodical visits of inspection All District Officers are *ex-officio* Registrars, and as *ex-officio* Chairmen of the District Boards, they have control over elementary education, and are charged with the execution and administration of all local public works. In a word, the District Officer is the executive chief and administrator of the tract of country committed to him As District Magistrate he is also local head of the magistracy who tries all cases, except the more important which are sent for trial at the Sessions, but except in the Scheduled districts he seldom presides in Court, and his share in this part of the administration is practically confined to the distribution of work, the hearing of petty appeals and the general superintendence of his subordinates The latter combine revenue with their magisterial functions and as Deputy Collector exercise under his control many of the powers of a Collector The police, by whose aid he carries on the criminal administration, have as their local superior a Superintendent, who in all matters, except those concerning the discipline and internal economy of the force, has to carry out such instructions as he receives from the District Magistrate The Sub-divisional Officers, who are Joint, Assistant and Deputy Magistrates in charge of divisions of districts, occupy, to a great extent, in their own jurisdictions, the position of the District Officer, except in respect of the police, over whom they have only judicial and no executive control There are 21 Districts.

Above the District Magistrates are the Divisional Commissioners Their duties are principally those of supervision In almost all matters they exercise a general superintendence, and especially in the Revenue Department they control the Collectors' proceedings Commissioners are the channels of communication between the local officers and Government, sifting, collating and bringing together, in a compact form the information they receive. In revenue matters the Commissioner forms a Court of appeal and in this and other respects is subject to the orders of the Board of Revenue With this exception he is in subordination to Government direct

The Civil Secretariat consists of the Chief Secretary, who is in charge of the Judicial, Political, Appointment and Education Departments, the Revenue Secretary, the Financial and Municipal Secretary and their three Under Secretaries

Finance.

The Province of Bihar and Orissa was formed with five divisions, detached from the old province of Bengal with effect from the 1st April 1912 The old arrangements made with the Government of Bengal regarding the financial administration of the Province therefore ceased to apply from that date A fresh arrangement has, however, been made, with the approval of the Secretary of State As the method adopted was in some measure tentative and provisional, a temporary settlement for a period of three years only has been effected It is expected that after the expiry of this period, it will be possible to gauge the needs of the province more accurately, so as to make a permanent arrangement possible Under the terms of this settlement the whole of the receipts under the heads of Provincial Rates, Forest, Registration, Courts of Law, Jails, Police, Ports and Pilotage, Education, Medical have been made over entirely to the local Government together with their corresponding charges In addition to these, it receives three-fourths of the receipts from stamps, assessed taxes, major and minor irrigation works, the whole of the Land Revenue collected from Government Estates, one-half of the receipts under all other sub-heads excepting

recoveries from zamindars and raiyats on account of survey and settlement in Bihar and other similar special surveys and the whole of the receipts under Scientific and other Minor Departments

The only expanding items of revenue are Excise and Stamps The Provincial Budget for 1914-15 shows an opening balance of Rs 1,88,25,000, Receipts Rs 2,97,13,000, Expenditure Rs 3,67,75 and the closing balance Rs 4,17,63 000.

Public Works.

The Public Works Department in the Province of Bihar and Orissa, consists of two branches, *viz* —(1)Roads and Buildings, which also deals with Railways and Miscellaneous Public Improvements and (2) Irrigation and Marine Each branch has a Chief Engineer, who is also Secretary to the Local Government with an Engineer Officer as Under Secretary under him There is also a non-professional Assistant Secretary, a Consulting Architect and a Sanitary Engineer, who works under the Sanitary Board The electrical work of the Province is carried out by an Electrical Inspector and a staff of subordinates

The Roads and Buildings branch consists of two Circles under the superintendence of two Superintending Engineers who control the Public Works Divisions held by the Executive Engineers for the execution of Imperial and Provincial works The Superintending Engineers are also the Inspectors of Works under the Local Self-Government Act, in respect of all local works of the District Boards and, in this capacity, are the professional advisers of the Chairman and of the Divisional Commissioners who control the operation of such Boards They also supervise all works carried out by District Boards

The Irrigation branch is composed of three Circles, each of which is held by a Superintending Engineer In the Irrigation Circles, the Executive Engineers carry out the works of the Roads and Buildings Branch, within the limits of their divisions, in addition to their irrigation duties The Superintending Engineers of Irrigation Circles also act as Inspectors of Works in regard to local works in the districts in their Circles In the Sone and Orissa Circles there are two Revenue Divisions under Deputy Collectors who deal with the assessment and collection of water-rates on the Orissa and Sone Canals under the control of the Superintending Engineers

Justice.

The administration of justice is at present entrusted to the High Court sitting in Calcutta, but shortly jurisdiction will be transferred to a High Court at Patna, the building for which is now in cause of erection In the administration of civil justice below the High Court are the District Judges as Courts of Appeal, the Subordinate Judges and the Munsifs The jurisdiction of a District Judge or Subordinate Judge extends to all original suits cognizable by the Civil Courts It does not, however, include the powers of a Small Cause Court, unless these be specially conferred The ordinary jurisdiction of a Munsif extends to all suits in which the amount or value of the subject matter in dispute does not exceed Rs 1,000 though the limit may be extended to Rs 2,000 On the criminal side the Sessions Judge hears appeals from Magistrates exercising first class powers while the District Magistrate is the appellate authority for Magistrates exercising second and third class powers The District Magistrate can also be, though in point of fact he very rarely is, a court of first instance It is usual in most districts for a Joint Magistrate or a Deputy Magistrate to receive complaints and police reports, cases of difficulty or importance being referred to the District Magistrate who is responsible for the peace of the district In the non-regulation districts the Deputy Commissioner and his subordinates exercise civil powers and hear rent suits

Local Self-Government.

Bengal Act III of 1884, which regulates the constitution, powers and proceedings of Municipal bodies in this Province has been amended by the Bengal Acts IV of 1891 and II of 1896 By these enactments the elective franchise has been further extended, and now provides for the establishment and maintenance of veterinary institutions and the training of the requisite staff, the improvement of breeds of cattle, the training and employment of female medical practitioners, the promotion of physical culture, and the establishment and maintenance of free libraries The Commissioners may order a survey and organise a fire brigade, they may control the water-supply when its purity is suspected, even to the extent of interference with private rights, larger powers of precaution are conferred in the case of ruined and dangerous houses and other erections, as well as increased optional powers for the general regulation of new buildings

The total number of Municipalities at present in existence is 55, of which 6 were established during the last decade The ratepayers of 48 Municipalities have been granted the privilege of electing two-thirds of the number of Commissioners fixed in each case, whilst in 24 cases the Commissioners are authorised to elect their own Chairman In the remaining towns Government has reserved to itself the power of appointing the Commissioners or Chairman, as the case may be, owing either to the backwardness of the place or to the necessity for holding the balance against contending interests or strong party feeling It is only in 7 towns, however, that Government exercises complete control in the appointment of both Commissioners and Chairmen

Apart from Municipalities, each district with the exception of Santal Parganas and Singhbhum has District and Local Boards. Municipal areas are excluded in accordance with the provisions of section 1 Local Boards have been formed in all districts where there are sub-divisions, except in Champaran and Ranchi There are at present 18 District Boards, 40 Local Boards, and 5 Union Committees in the Province

In accordance with the provisions of section 7 of the Act, a District Board is to consist of not less than 9 members Local Boards are entitled to elect such proportion (as a rule one-half) of the whole of the District Board as the Lieutenant-Governor may direct In districts where there are no Local Boards, the whole of the members are appointed by Government. The

Chairman of the District Board is appointed by Government; he is usually the Magistrate of the district.

Land Tenures.

Estates in the Province of Bihar and Orissa are of three kinds Permanently settled from 1793 to be found in the Patna, Tirhut and Bhagalpur divisions, Temporarily settled as in Chota Nagpur and parts of Orissa, and estates held direct by Government whether as proprietor or managed in the Court of Wards The passing of the Bengal Tenancy Act (VIII of 1885) safeguarded the rights of the cultivators under the Permanent Settlement Act Further, the Settlement Department under the supervision of the Director of Land Records takes periodical survey and settlement operations in the various districts both permanently and temporarily settled In the former, the rights of the under tenants are accorded and attested, while in the latter there is the re-settlement of rents In the re-settlement proceedings, rents are fixed not only of landlords but also for all the tenants A settlement can be ordered by Government on application made by raiyats

The tenures of Orissa are somewhat different Under the zamindars, that is, the proprietors who took settlement from Government and pay revenue to Government direct, is a class of subordinate proprietors of proprietary tenure holders, who were originally village headmen, dealing more or less direct with the revenue authorities They have a variety of names, such as *mukadam, padhan, maurusi, sarbarakar, pursethi, kharuldar* and *shikmi* zamindar These sub-proprietors or proprietary tenure holders pay their revenue through the zamindars of the estates within which their lands lie In Chota Nagpur, Orissa and the Santal Parganas, the rights of village headman have been recognised. The headman collects the rents and is responsible for them minus a deduction as remuneration for his trouble

Police.

The Departments of Police, Prisons and Registration are each supervised and inspected by an Inspector General with a suitable staff of assistants under the general direction of Government The Commissioner of Excise and Salt is also Inspector General of Registration

Under the Inspector General of Police are three Deputy Inspectors General and 25 Superintendents There are also 25 Assistant Superintendents of Police and 14 Deputy Superintendents The force is divided into the District Police, the Railway Police and the Military Police A Criminal Investigation Department has also been formed for the collection and distribution of information relating to professional criminals and criminal tribes whose operations extend beyond a single district and to control, advise, and assist in investigations of crime of this class and other serious cases in which its assistance may be invoked There are two companies of Military Police which are maintained as reserves to deal with serious and organised disturbances and perform no ordinary civil duties. The work of the Railway Police is practically confined to offences actually committed on the railways, but they are under the control of the Deputy Inspector General of the Criminal Investigation Department, and an important part of their duties is to co-operate with the District Police in watching the movements o bad characters by rail The prevention and detection of crime in the Province generally is entrusted to the District Police. In that work they are assisted by the rural police, known as chaukidars and dafadars, who form no part of the regular force, but are under a statutory obligation to report all cognizable crime at the police station, and generally to assist in the prevention and detection of crime They are not whole-time servants of Government, but they are paid a small monthly salary which is realized from the villagers by the panchayat. The cost of the police is Rs 46,48,000

Education.

The Department of Public Instruction is controlled by a Director There are four Divisional Inspectors of Schools, one of whom inspects European schools in addition to his own duties 2 Additional Inspectors, 3 Assistant Inspectors, including the Agency Inspector in Orissa, 4 special officers for Muhammadan Education, 24 Deputy Inspectors (exclusive of one in Native States), 182 Sub-Inspectors (exclusive of five paid by Native States), 46 Assistant Sub-Inspectors (exclusive of one paid by a Native State) and 259 Guru Instructors (exclusive of nine paid by Native States)

The main divisions of Educational institutions are Primary, Secondary, Collegiate and Training

The main object of Primary Schools is to provide the masses with sufficient knowledge of reading, writing, and arithmetic, to secure them in their dealings with the money lender and zamindar or zamindar's underlings Primary Schools for Indian boys are of two classes, Upper and Lower

It is probable that there will eventually be a new University situated at Patna The important Secondary Schools are the district or ZillaSchools to be found at the head-quarters of each district. The Higher English Schools which include private institutions as well as Government aided schools at sub-divisional head-quarters and Middle English and Middle Vernacular Schools which are under the control of District Boards. The District and Local Boards are also responsible for Primary Education with the assistance of the expert advisers of the Education Department There are at present seven colleges in the province—two at Patna, one at Bhagalpur, one at Cuttack, one at Hazaribagh, (managed by the Dublin Mission), one at Muzaffarpur and a small College at Monghyr. The number of High Schools for Indian pupils under Public management is 21 with 6,200 pupils, while 44 with 9,350 pupils are aided by public funds There are 23,231 Primary Schools with an attendance of 645,252 pupils. Of these, 16,802 are maintained or aided by public funds The village schoolmaster or *guru* is now receiving special training. There are 130 Guru Training Schools for masters and 8 Training Schools for Mistresses. Other special institutions are 36 Industrial and Artisan Schools, two Commercial Schools and 14 Madrassas, where instruction is given in Arabic and Persian. The expenditure on public education from public funds amounts to Rs. 48,98,000.

Medical.

The Medical Department is under the control of the Inspector-General of Civil Hospitals who is a Member of the Indian Medical Service Under him there are 20 Civil Surgeons who are responsible for the medical work of the districts at the head-quarters of which they are stationed 47 Dispensaries are maintained by Government—

State Public . ..	15
State Special Police .	23
State Canal	4
State Others .. .	5
Total .	47

Besides these there are 281 Dispensaries maintained by Local bodies, Railways, private persons, etc. 29,76,709 patients including 44,550 in-patients were treated in 1912 There is one Lunatic Asylum and 7 institutions for the treatment of lepers

The Sanitation Department is in charge of the Sanitary Commissioner who is directly subordinate to Government as its expert adviser in regard to sanitation There are three Deputy Sanitary Commissioners who work under the control of the Sanitary Commissioner Vaccination is carried out by a staff under the direction of the Sanitary Commissioner There is also a qualified Sanitary Engineer

Administration.

Lieutenant-Governor, Sir Charles Stuart Bayley, KCSI, ISO, Assumed charge of office, 1st April, 1912

PERSONAL STAFF

Private Secretary, C B Bayley, CVO

Aide-de-Camp, Capt H F. Collingridge

Extra Indian Aide-de-Camp, Hon Capt Sardar Bahadur Hira Singh

Honorary Aides-de-Camp, Lieut.-Col. V. N Hickley, VD, Major A T Peppe

EXECUTIVE COUNCIL

E A Gait, CSI, CIE. Took his seat, 1st August, 1912

E V Levinge, CSI. Took his seat, 1st August 1912

Maharaja Bahadur Sir Rameswar Singh, KCIE, of Darbhanga. Took his seat, 1st August 1912.

LEGISLATIVE COUNCIL.

President, The Lieutenant-Governor

Vice-President, E. A. Gait, CSI, C.I.E.

Ex-Officio

The Members of the Executive Council.

NOMINATED.

Officials.

C. E. A. W. Oldham.
H. LeMesurier, CSI., C.I.E.
J. G. Jennings.
L. C. Adami.
F. N. Fischer.
E. R. Gardiner.
H. McPherson.
C A. White
Ahsan-ud-din Ahmad, ISO.
E L Hammond
R T Dundas
L F. Morshead.
J R F Lowis.

Non-Officials

Maharaja Bahadur Sir Ravaneswar Prasad Singh, KCIE
Rai Bahadur Nishi Kanta Sen
Madhu Sudan Das, CIE
Rev. A Campbell, DD

ELECTED

Kesharı Prasad Singh
Kumar Girija Nandan Singh
Kirtyanand Singh
Raja Rajendra N Banj Deo
Kumar Thakurai G Prasad Singh
W A Lee
T R Filgate, CIF
Saiyid Fakhr-ud-din, Khan Bahadur.
Mahbub Hasan Khan, Khan Bahadur.
Saiyid Muhammad Tahir
Khwaja Muhammad Nur
Bishun Prasad
Dwarka Nath
Sheo Shankar Sahai, CIE.
Gokulanand Chanduri.
Sharat Chandra Sen.
Krishna Sahai
Braja Kishor Prasad
Kumar Sheonandan Prasad Singh
Sudam Charan Naik
Gopi Krishna

SECRETARIAT

Chief Secretary to Government, Political, Appointment, and Educational Department, H. LeMesurier, CSI, CIE

Secretary to Government, Financial and Municipal Departments, E L Hammond.

Secretary to Government, Revenue Department, H McPherson

Secretaries to Government (P W D), Irrigation Branch, C A White

Buildings and Roads Branch, E R Gardiner.

BOARD OF REVENUE

Member, W Maude

Secretary, J. A. Hubback.

MISCELLANEOUS APPOINTMENTS.

Director of Public Instruction, H. Sharp.

Inspector-General of Police, L F. Morshead.

Conservator of Forests, H. Carter

Inspector-General of Civil Hospitals, Lt.-Col. F. J. Drury.

Sanitary Commissioner, Lt.-Col E. C. Hare, IMS

Inspector-General of Prisons, Lt.-Col. Bawa Jivan Singh.

Accountant-General, V. C. Scott O'Connor.

Director of Agriculture, W. B. Heycock.

Registrar of Co-Operative Credit Societies, B. A. Collins.

The Central Provinces and Berar

The Central Provinces and Berar compose a great triangle of country midway between Bombay and Bengal Their area is 130,991 miles, of which 82,000 are British territory proper and the remainder held by Feudatory Chiefs The population (1911) is 13,916,308 under British administration and 2,117,002 in the Feudatory States Various parts of the Central Provinces passed under British control at different times in the wars and tumult in the first half of the 19th century and the several parts were amalgamated after the Mutiny, in 1861, into the Chief Commissionership of the Central Provinces Berar was, in 1853, assigned to the East India Company as part of a financial arrangement with the Nizam and was transferred to the Central Provinces in 1903, as the result of a fresh agreement with the Nizam

The Country.

The Central Provinces may roughly be divided into three tracts of upland, with two intervening ones of plain country In the north-west, the Vindhyan plateau is broken country, covered with poor and stunted forest Below its precipitous southern slopes stretches the rich wheat growing country of the Narbada valley. Then comes the high Satpura plateau, characterised by forest-covered hills and deep water-cut ravines Its hills decline into the Nagpur plain, whose broad stretches of shallow black cotton soil make it one of the more important cotton tracts of India and the wealthiest part of the C P The Eastern half of the plain lies in the valley of the Wainganga and is mainly a rice growing country Its numerous irrigation tanks have given it the name of the "lake country" of Nagpur Further east is the far-reaching rice country of Chattisgarh, in the Mahanadi basin The south-east of the C P is again mountainous, containing 24,000 square miles of forest and precipitous ravines, and mostly inhabited by jungle tribes. The Feudatory States of Bastar and Kankar lie in this region Berar lies to the south-west of the C P and its chief characteristic is its rich black cotton-soil plains

The People.

The population of the province is a comparatively new community Before the advent of the Aryans, the whole of it was peopled by the Gonds and these aboriginal inhabitants fared better from the Aryans than their like in most parts of India because of the rugged nature of their home But successive waves of immigration flowed into the province from all sides The early inhabitants were driven into the inaccessible forests and hills, where they now instituted a large portion of the tribes in those parts, who form a quarter of the whole population of the C P The Gonds are still found in large numbers in all parts of the province, but they are partially concentrated in the south-east The main divisions of the new comers are indicated by the language divisions of the province Hindi, brought in by the Hindustani-speaking peoples of the North, prevails in the North and East, Marathi in Berar and the west and centre of the C. P. Hindi is spoken by 56 per cent. of the population and is the *lingua franca*. Marathi by 31 per cent and in Berar, and Gondi by 7 per cent The effects of invasion are curiously illustrated in Berar, where numbers of Moslems have Hindu names, being descendants of former Hindu officials who on the Mahomedan invasion adopted Islam rather than lose their positions The recent census shows that a gradual Brahmanising of the aboriginal tribes is going on The tribes are not regarded as impure by the Hindus and the process of absorption is more or less civilising

Industries.

When Sir Richard Temple became first Chief Commissioner of the C P the province was land-locked The only road was that leading in from Jubbulpore to Nagpur The British administration has made roads in all directions, the two trunk railways between Bombay and Calcutta run across the province and in the last few years a great impetus has been given to the construction of subsidiary lines These developments have caused a steady growth of trade and have aroused vigorous progress in every department of life The prime industry is, of course, agriculture, which is assisted by one of the most admirable agricultural departments in India and is now receiving additional strength by a phenomenal growth of the co-operative credit movement The land tenure is chiefly on the zemindari, or great land-lord, system, ranging, with numerous variations, from the great Feudatory chief-ships, which are on this basis, to holdings of small dimensions A system of land legislation has gradually been built up to protect the individual cultivator Berar is settled on the Bombay ryotwari system Thirty-eight per cent of about 44,000 square miles of the C P is forest in Berar the forest area is 3,941 square miles. The rugged nature of the greater part of the country makes forest conservation difficult and costly Excluding forest and wastes, 57 per cent of the total land is occupied for cultivation, in the most advanced districts the proportion is 80 per cent, and in Berar the figure is also high. The cultivated area is extending continuously except for the temporary checks caused by bad seasons Rice is the most important crop of the C P, covering a quarter of the cropped area Wheat comes next, with 15½ per cent, then pulses and cereals used for food and oil seeds, with 11 per cent and cotton with 7 per cent In Berar cotton occupies nearly 40 per cent. of the cropped area, jowar covers an equal extent, then wheat and oil seeds In agriculture more than half the working population is female

Commerce and Manufactures.

Industrial life is only in its earliest development except in one or two centres, where the introduction of modern enterprise along the railway routes has laid the foundations for great future developments of the natural wealth of the province Nagpur is the chief centre of a busy cotton spinning industry. The Empress Mills, owned by Parsi manufacturers, were opened there in 1877 and the general prosperity of the cotton trade has led to the addition of many mills here and in other parts of the province The total output of spun yarn

in the past few years (April-March) has been as follows.—

1910–11	..	28,314,423	yards.
1911–12	..	37,738,443	,,
1912–13	..	33,581,772	,,

The output of woven goods in the same years was —

1910–11	..	42,538,830	yards.
1911–12	..	46,370,335	,,
1912–13	..	48,653,903	,,

The largest numbers engaged in any of the modern industrial concerns are employed in manganese mining There were in 1912-13, the last year for which returns are available, 28 mines, their output of manganese was 323,000 tons, value Rs. 14,72,000, and 6,196 people were employed in them Coal mining in the same period gave employment to 2,530 persons and the coal output was 234,000, of the value of Rs 9,61,000 Jubbulpore is the scene of the famous marble quarries and allied works The output of limestone in the same year was about 90,000 tons. The number of persons employed in the limestone quarries and in the mines for pottery clay, soapstone, &c being 2,807

The total number of factories of all kinds legally so described was according to the latest returns, 479 and the number employed in them 47,269 The same economic influences which are operative in every progressive country during its transition stage are at work in the C P and Berar, gradually sapping the strength of the old village industries, as communications improve, and concentrating industries in the towns While the village industries are fading away, a large development of trade has taken place The last available reports show an increase in volume by one-third in eight years

Administration.

The administration of the Central Provinces and Berar is conducted by a Chief Commissioner, who is the controlling revenue and executive authority and is appointed by the Governor-General-in-Council He is assisted by three secretaries, two under-secretaries and an assistant secretary Simultaneously with the jubilee of the foundation of the Province in 1913 a Legislative Council was constituted It consists of 24 members, excluding the Chief Commissioner, 7 being elected by municipalities, District Councils and Landholders in the C P and 17 nominated by the Chief Commissioner, of whom not more than 10 may be officials and 3 shall be non-officials chosen respectively by the municipalities, District Boards and Landholders of Berar The Chief Commissioner may nominate an additional member, official or non-official, who has special knowledge of a subject on which legislation is pending The C P are divided for administrative purposes into four divisions, and Berar constitutes another division Each of these is controlled by a Commissioner. Berar is divided into six districts, three other divisions into three districts each and one into three, and these are controlled by Deputy-Commissioners, immediately subordinate to the Commissioners. The principal heads of Provincial departments are the Commissioner of Settlements and Land Records, the Inspector-General of Civil Hospitals and Sanitary Commissioners, the Inspector-General of Police the Inspector-General of Prisons, the Director of Public Instruction, the Commissioner of Excise and Miscellaneous Revenue, and the Director of Agriculture and Industries. The Deputy-Commissioners of districts are the chief revenue authorities and District Magistrates, and they exercise the usual powers and functions of a district officer The district forests are managed by a forest officer, usually a member of the Imperial Forest Service, over whom the Deputy-Commissioner has certain powers of supervision, particularly in matters affecting the welfare of the people Each district has a Civil Surgeon, who is generally also Superintendent of the District Jail and whose work is also in various respects supervised by the Deputy-Commissioner The Deputy-Commissioner is also marriage registrar and manages the estates of his district which are under the Court of Wards In his revenue and criminal work the Deputy-Commissioner is assisted by (a) one or more Assistant Commissioners, or members of the Indian Civil Service, (b) one or more Extra-Assistant Commissioners, or members of the Provincial Civil Service, usually natives of India, but including a few Europeans and Eurasians, and (c) by tahsildars and naibtahsildars, or members of the Subordinate service, who are nearly always natives of India The district is divided for administrative purposes into tahsils, the average area of which is 1,500 square miles In each village a lambardar, or representative of the proprietory body, is executive headman

Justice.

The Judicial Commissioner is the highest court of civil appeal, and except in cases against European British subjects, in which the High Court of Bombay has jurisdiction, is the highest court of criminal appeal He is assisted by an Additional Judicial Commissioner for the Central Provinces and another for Berar The administration of criminal justice was formerly entirely in the hands of Commissioners and the District staff, but Commissioners have now no criminal powers as such and their place as Sessions Judges has been taken by Divisional Judges. By the Civil Courts Act of 1904, the civil has finally been separated from the executive department. The civil staff consists of Divisional Judges, District Judges, Subordinate Judges and Munsiffs

Local Government.

Municipal administration was first introduced under the Punjab Municipal Acts and the Municipality of Nagpur dates from 1864. Several revising Acts extend, its scope Viewed generally, municipal self-government is considered to have taken root successfully The general basis of the scheme is the Local Board for each tahsil and the District Council for each district. In Berar these bodies are called Taluk Boards and District Boards The larger towns have municipalities A certain proportion of the Local Board members are village headmen, elected by their own class, others are elected representatives of the mercantile and trading classes and a third proportion, not exceeding ⅓ of the whole, are nominated by Government The constitution of the District Councils is similar The officers of the District Councils are frequently non-officials, but it is generally found convenient that the Tahsildar and Naib Tahsildar

should be Chairman and Secretary of the Local Boards. The District Councils have no power of taxation and Local Boards derive their funds in allotments from the District Councils Rural education and sanitation are among the primary objects to which these bodies direct their attention and expenditure on famine relief is in the first instance a charge upon the District Council funds

Finance.

The main sources of Government income in the province has always been the land revenue, but under Mahratta rule many petty imposts were added in all branches of trade and industry and life in general Thus there was a special tax on the marriage of Banias and a tax of a fourth of the proceeds of the sale of houses The scheme of Provincial finance was introduced in 1871-72 Special settlements under this system have been necessitated in view of the special circumstances of the province and the recurrence of famine, which a few years ago caused a severe economic strain upon the province The wave of prosperity which has spread over the country in the past 12 years, since the end of the previous period, has more than trebled the funds available for the administration, compared with what they were before the several years of scarcity, and the progress of the administration and of expenditure has increased correspondingly, without any increase of taxation under provincial heads

Public Works.

The Public Works Department is controlled by a Chief Engineer, who is also Secretary to the Chief Commissioner There are two Superintending Engineers for roads and buildings and a third in charge of irrigation In 1892 a separate division of the Public Works Department was formed for the construction of roads and buildings in the Feudatory States The expansion of the department and its work has been one of the most remarkable features of the administration in the past decade and a half, largely owing to the demands of a progressive age in regard to communications and new buildings. The Irrigation Branch of the P W. D. represents a completely new departure It was formerly the accepted view that the irregular surface of the country would make irrigation canals impossible and that the S W. monsoon was so regular that it would pay better to relieve famine than to prevent it Both conclusions have been reversed Picked officers investigated projects for irrigation when the Irrigation Commission was appointed (1901) and canal and storage works have since been advanced with vigour The Tandula, Wainganga and Mahanadi canal projects are amongst the more important schemes.

Police.

The police force was constituted in its present basis on the formation of the province, the whole of which, including the Municipalities, is under one force. The strength is equal to one man per 9 square miles of area The superior officers comprise an Inspector-General, whose jurisdiction extends over Berar, Deputy Inspectors-General, in charge of the Eastern and Western range and of the Criminal Investigation Department, and the usual cadre of District Superintendents, Assistant and Deputy Superintendents, and subordinate officers. On three railways special railway police are employed and on others the Provincial force. A Special Reserve of 290 men is distributed over the head-quarters of six districts, for use in dealing with armed disturbers of the peace in whatever quarter they may appear The men in this reserve are regularly drilled and armed with rifles There is a small force of Mounted Police The Central Provinces have no village police as the term is understood in some other parts of India The village watchman is the subordinate of the village headman and not a police official and it is considered very desirable to maintain his position in this respect.

Education.

The educational department was constituted in 1862 and the scheme then drawn up has remained the basis of the system of public education to the present day The leading principles are that the department should content itself with the direct management of colleges and higher secondary schools, the training of teachers and inspection in work in rural areas The maintenance of rural schools should as far as possible be left to the local authorities, every encouragement should be given to private philanthropy and no Government schools should be founded where there existed a sufficient number of institutions capable, with the assistance of the State, of supplying the local demand for instruction. At the head of the Department is the Director of Public Instruction, who has a staff of Inspectors and an Inspectress for girls' schools. The Educational Service includes these appointments, except the last An Agency Inspector supervises the schools of the Feudatory States The province has three colleges a Government College at Jubbulpore, and the Morris and Hislop Colleges at Nagpur The Agricultural Department maintain an Agricultural College at Nagpur The Colleges are affiliated to Allahabad University, but a demand has arisen for a local University

Until recently, the demand for education, primary or secondary, was satisfied by a few institutions in the larger towns, while in the whole of the rural districts primary education had to be pressed on an apathetic and even obstructive agricultural population The new spirit of progress in recent years has quickened the public pulse and the efforts of Government to effect improved facilities have responded accordingly Special grants from the Government of India budget surpluses have in the past year or two largely been devoted to assisting the District Councils to overtake their arrears of primary school building District Councils in general have allowed their zeal for education to carry them into programmes of development beyond their means, The official figures for the last year for which the education report of the provinces has been issued shows an increase of 257 in the number of schools and of 20,982 scholars during the year, the percentage of scholars to population having thus increased from 13-85 to 14-85. The number of institutions for the education of Indian girls in British territory increased in the same year from 319 to 329 and their pupils from 17,079 to 17,653.

Medical.

The medical and sanitary services of the province are respectively controlled by an

Inspector-General of Civil Hospitals and a Sanitary Commissioner, the latter being assisted by a Sanitary Engineer. The medical department has progressed along comparatively stereotyped lines A striking advance has been made in recent years with urban sanitation The principal medical institutions are the Mayo Memorial Hospital at Nagpur, opened in 1874, with accommodation for 80 in-patients; the Victoria Hospital at Jubbulpore, opened in 1886 and accommodating 64 in-patients, the Lady Dufferin Hospitals at Nagpur and Raipur and the Lady Elgin Hospital at Jubbulpore, these last three being for women and containing together accommodation for 64 in-patients The province has two lunatic asylums, at Nagpur and Jubbulpore respectively Vaccination is compulsory in some Municipal towns to which the Vaccination Act has been extended

Administration.

Chief Commissioner, Sir B Robertson, K C S I, C I E, apptd 3rd Aug 1912
Personal Assistant, Capt F B Lane
Chief Secretary, Sir A Blennerhassett
Registrar, R W Johnson
Secretary, Public Works Department, R H Tickell
Financial Commissioner, H A Crump
Commissioner of Settlements and Director of Land Records, H E Hemingway, I C S

BERAR.

Commissioner, F G Sly, C S I

LEGISLATIVE COUNCIL

The inaugural meeting of the new Legislative Council took place at the Secretariat, Nagpur, on August 17th All the official and non-official members were present and the visitors gallery was full The following are Hon Members of the Council —

NOMINATED OFFICIALS

Financial Commissioner, Mr H A Crump, C S I, I C S
Commissioner in Berar, Mr P. Standen, C I I, I C S
Chief Secretary, Sir A Blennerhasset, Bart, I C S
Second Secretary, Mr J T Marten, I C S
Third Secretary, Mr C G Luttwich, I C S
Secretary in the Legal Department, Mr C S Findlay I C S
Chief Engineer, Mr R H Tickell, C I E
Inspector-General of Civil Hospitals, Colonel Dennys, I M S
Inspector-General of Police, R C H M King, I C S
Director of Public Instruction, Mr A I Mayhew
Commissioner of Excise, Mr A Mayne, I C S., (nominated for so long as the C P Excise Bill is before the Council

NOMINATED NON-OFFICIALS.

The Chief of Sarangarh State, Nawab Salimulla Khan of Berar, Sir Bipin Krishna Bose of Nagpur and Sir Kastur Chand Daga of Kamptee

ELECTED.

Elected by C P Municipalities—Mr Moreshwar Rao Dixit, Nagpur, Sheo Prasad, Jubbulpore, Rai Saheb Shet Nathmal, Raipur.
Elected by C P District Councils —Rai Saheb Mathura Prasad, Chindwara; Rao Bahadur Narayan Rao Kelkar, Balaghat.
Elected by the Central Provinces Landholders —Raja Bahadur Raghojirao Bhonsle, Nagpur; Rai Bahadur Bishan Dutt Shukul, Sheora

BERAR NON-OFFICIAL

Nominated after election by Public bodies — Rao Bahadur R N Mudholkar, C I E, (Berar Municipal Committees) Rao Bahadur K G Damle (Berar District Boards), Mr Moropant V Joshi (Berar Landholders)

The Legislative Council, on its constitution, took the place of the Municipalities in the election of a Member of the Imperial Legislature

MISCELLANEOUS APPOINTMENTS

Director of Public Instruction, A I Mayhew, B A
Inspector-General of Police, R M king, I C S
Chief Conservator of Forests, P H Clutterbuck
Inspector-General of Civil Hospitals, Col G W. P Dennys, I M S
Sanitary Commissioner, Major T G N Stokes, I M S
Commissioner of Excise, etc, A Mayne, I C S
Comptroller (Financial Dept), F D Gorden
Postmaster General, H A Sams
Director of Agriculture and Industries, C. E. Low, C I E
Registrar of Co-operative Credit Societies, H R. Crosthwaite

CHIEF COMMISSIONERS

Colonel E K Elliot	1861
Lieut-Colonel J K Spence (*Officiating*)	1862
R Temple (*Officiating*)	1862
Colonel E K Elliot	1863
J S Campbell (*Officiating*)	1864
R Temple	1864
J S Campbell (*Officiating*)	1865
R Temple	1865
J H Morris (*Officiating*)	1867
G Campbell	1867
J H Morris (*Officiating*) Confirmed 27th May 1870	1868
Colonel R H Keatinge, C S I (*Offg*)	1870
J H Morris, C S I	1872
C Grant (*Officiating*)	1879
J H Morris, C S I	1879
W. B Jones, C S I	1883
C H T Crosthwaite (*Officiating*) Confirmed 27th January 1885.	1884
D Fitzpatrick (*Officiating*)	1885
J W Neill (*Officiating*)	1887
A Mackenzie, C S I	1887
R J Crosthwaite (*Officiating*) Until 7th October 1889	1889
J W Neill (*Officiating*)	1890
A P MacDonnell, C S I	1891
J Woodburn, C S I (*Officiating*) Confirmed 30th November 1893	1893
C J. Lyall, C S I, C I E	1895
D C J Ibbetson, C S I.	1898
A H L Fraser C S I (*Officiating*) Confirmed 5th March 1902	1899
J P. Hewett, C S I, C I E (*Officiating*) Confirmed 2nd November 1903.	1902
F. S P Lely, C.S I (*Officiating*) Confirmed 23rd December 1904.	1904
J. O Miller, C S I	1905
S Ismay, C S I (*Officiating*) Until 22nd October 1906	1906
F. A T. Phillip (*Officiating*) Until 25th March 1907 Also from 20th May to 22nd November	1907 1909
R H Craddock, C S I	1907
H. A Crump (*Officiating*)	1912
M. W. Fox-Strangways, C S.I. (*Sub. protem*).	1912
Sir B Robertson, K C S I., C. I.E...	1912

North-West Frontier Province.

The North-West Frontier Province, as its name denotes, is situated on the north-west frontier of the Indian Empire It is in form an irregular strip of country lying north by east and south by west and may generally be described as the tract of country, north of Baluchistan, lying between the Indus and the Durand boundary line with Afghanistan To the north it extends to the mountains of the Hindu Kush From this range a long broken line of mountains runs almost due south, dividing the province from Afghanistan, until the Sulaiman Range eventually closes the south of the Province from Baluchistan. The greatest length of the province is 408 miles, its greatest breadth 279 miles and its total area about 39,000 square miles The territory falls into three main geographical divisions the Cis-Indus district of Hazara, the narrow strip between the Indus and the Hills, containing the Districts of Peshawar, Kohat, Banu and Dera Ismail Khan, and the rugged mountainous regions on the north and west between those districts and the border line of Afghanistan Hazara and the four districts in the second division contain 13,418 square miles The mountain regions, north and west, are occupied by tribes subject only to the political control of the Chief Commissioner in his capacity as Agent to the Governor-General The area of this tract is roughly 25,500 square miles and in it are situated, from north to south, the political agencies severally known as the Malakand, Khyber, Kurram, Tochi and Wana Agencies Each of the Deputy Commissioners of the five administered districts is responsible for the management of political relations with certain tribes or sections of the tribes across the frontier A few hundred miles of the trans-border Territory are internally administered by the Political Agents, but the bulk of the trans-border population is free from any internal interference, so long as offences are not committed and so long as the tribes observe the conditions on which allowances are paid to many of them

The area of the Province is a little more than half that of Bombay (excluding Sind and Aden) and amounts to more than three-fifths of the size of England without Wales The density of population throughout the Province equals 98 persons to a square mile, but in the more favoured portions the pressure of population is much greater. In the Hazara District there are 207 persons to a square mile and in the trans-Indus plains tract the number is 152 The key to the history of the people of the N.-W. F P lies in the recognition of the fact that the valley of Peshawar was always more closely connected politically with Eastern ran than with India, though in pre-Mahomedan times its population was mainly Indian by race Early history finds the Iranians dominating the whole Indus valley Then came the Greek invasion under Alexander the Great, in B C 327, then the invasions of the Sakas, and of the White Huns, and later, the two great waves of Muhammadan invasion. Last came the Sikh invasion, beginning in 1818. The Frontier Territory was annexed by the British in 1849 and placed under the control of the Punjab Government. Frequent warfare occurred with the border tribes, but since the conclusion of peace with the Afridis in 1898, the whole border has been undisturbed except for the expedition against the Zakka Khel Afridis in 1908

The division of the Frontier Province from the Punjab was frequently discussed, with the double object of securing closer and more immediate control and supervision of the Frontier by the Supreme Government and of making such alterations in the personnel and duties of frontier officials as would tend to the establishment of improved relations between the local British representatives and the independent tribesmen The province was eventually removed from the control of the Punjab administration in 1901 To it was added the political charge of Dir, Swat and Chitral, the Political Agent of which had never been subordinate to the Punjab. The new Province was constituted under a Chief Commissioner and Agent to the Governor-General, with headquarters at Peshawar, in direct communication with the Government of India in the Foreign Department In political questions there is no intermediary between the Chief Commissioner and the local officer, an arrangement designed to secure both prompt disposal of references and the utilisation of the expert knowledge of frontier conditions for which the head of the administration is selected

The People.

The total population of the N.-W F P (1911) is 3,819,027, made up as follows.—

Hazara	.	603,028
Trans-Indus Districts	.	1,593,905
Trans-Border Area	.	1,622,094

This last figure is estimated There are only 625 6 females per 1,000 males in the towns and 900 females per 1,000 males in rural areas This disproportion of the sexes cannot at present be explained in the N.-W F P. any more than in other parts of Northern India, where it also appears The discrepancy is greater here than in any other Province of India There is no ground for believing that the neglect of girls in infancy has any effect in causing the phenomenon On the other hand the female population has to face many trials which are unknown to men. The evils of unskilled midwifery and early marriage are among them Both the birth and death-rates of the Province are abnormally low. The birth rate in the administered districts in 1912 was 35·1 and the death-rate 33·3 There were 122 5 male births for every 100 females It is recognised that in this matter, and in regard to population generally, the registration of females may be defective, inasmuch as the Pathan, for whatever reasons, regards the birth of a daughter as a misfortune, the less said about which the better. The population is naturally increasing, but emigration reduces the net result

The dominant language of the Province is Pashtu and the population contains several lingual strata. The most important sections of the population, both numerically and by social position, are the Pathans. They own

a very large proportion of the land in the administered districts and are the ruling race, of the tribal area to the west There is a long list of Pathan, Baluch, Rajput and other tribal divisions. Gurkhas have recently settled in the Province The Mahomedan tribes constitute almost the whole population, Hindus amounting to only 5 per cent of the total and Sikhs to a few thousands The occupational cleavage of the population confuses ethnical divisions.

Under the North-West Frontier Province Law and Justice Regulation of 1901, custom governs all questions regarding successions, betrothal, marriage, divorce, the separate property of women, dower, wills, gifts, partitions, family relations such as adoption and guardianship, and religious usages and institutions, provided that the custom be not contrary to justice, equity or good conscience In these matters the Mahomedan or Hindu law is applied only in the absence of special custom.

Climate, Flora and Fauna.

The climatic conditions of the N.-W F P, which is mainly the mountainous region, but includes the Peshawar Valley and the riverain tracts of the Indus in Dera Ismail Khan District, are extremely diversified The latter district is one of the hottest areas of the Indian continent, while on the mountain ranges the weather is temperate in summer and intensely cold in winter The air is generally dry and hence the annual ranges of temperature are frequently very large The Province has two wet seasons, one the S.-W Monsoon season, when moisture is brought up from the Arabain Sea and the Bay of Bengal the other in winter, when storms from Mesopotamia, Persia and the Caspian Districts bring widespread rain and snowfall Both sources of supply are precarious and not infrequently either the winter or the summer rainfall fails almost entirely The following description of the Daman, the high ground above the Indus, stretching across Dera Ismail Khan to the mountains on the west, occurs in a account written some years ago by Captain Crostwaite "Men drink once a day and the cattle every second day Washing is an impossible luxury. . It is possible in the hot weather to ride thirty miles and neither hear a dog bark nor see the smoke of a single fire" With the exception of the Kunhar River, in Hazara, which flows into the Jhelum, the whole territory drains into the Indus The flora of the Province varies from the shrubby jungle of the south-eastern plains to barren hills, pine forests and fertile mountain valleys Tigers used to abound in the forests but are not quite extinct, leopards, hyenas, wolves, jackals and foxes are the chief carnivora Bear, deer and monkeys are found, a great variety of fish is caught in the Indus.

The mountain scenery is often magnificent The frontier ranges contain many notable peaks of which the following are the principal

Takht-i-Sulaiman, Sulaiman Range, in Dera Ismail Khan, 11,292 feet.

Pir Ghal, Sulaiman Range, in Mahsud Waziristan, 11,583 feet.

Sika Ram, in the Safed Koh, in the Kurram Agency, 15,621 feet

Kagan Peaks of the Himalayas, in the Hazara District, 10,000 to 16,700 feet

Istragh Peak (18,900 ft), Kachin Peak (22,641 ft), Tirich Mir (25,426 ft), all in the Hindu Kush, on the northern border of Chitral Agency

Trade and Occupations.

The population derives its subsistence almost wholly from agriculture The Province is practically without manufactures There is no considerable surplus of commercial products for export Any commercial importance which the province possesses it owes to the fact that it lies across the great trade routes which connect the trans-border tribal territories and the marts of Afghanistan and Central Asia with India, but the influence of railways is diminishing the importance of these trading interests The travelling traders (or Powindahs) from the trans-frontier area have always pursued their wanderings into India and now, instead of doing their trading in towns near the border, carry it by train to the large cities in India Prices of agricultural produce have in recent years been high, but the agriculturists, owing to the poverty of the means of communication, have to some extent been deprived of access to Indian markets and have therefore been unable to profit by the rates prevailing On the other hand, high prices are a hardship to the non-agricultural classes The effects of recent extensions of irrigation have been important Land tenures are generally the same in the British administered districts as in the Punjab The cultivated area of the land amounts to 32 per cent and uncultivated to 68 per cent

The work of civilisation is now making steady progress Relations with the tribes have improved, trade has advanced, free medical relief has been vastly extended, police administration has been reformed and the desire of people for education has been judiciously and sympathetically fostered In the British administered districts 19 per cent males and 7 per cent females of the total population are returned as literates The figures for males denote a very narrow diffusion of education even for India Those for females are not notably low, but they are largely affected by the high literacy amongst Sikh women, of whom 13 3 per cent. are returned as literate. The inauguration of a system of light railways throughout the Province, apart from all considerations of strategy, must materially improve the condition of the people and also by that means strengthen the hold of the administration over them. The great engineering project of the Upper Swat River Canal, which was recently completed, and the lesser work of the Paharpur Canal, also completed a year or two ago, will bring ease and prosperity to a number of peasant homes There has arisen in recent years the difficult question of the importation of thousands of rifles from the Persian Gulf

Administration.

The administration of the North-West Frontier Province is conducted by the Chief

Commissioner and Agent to the Governor-General in Council His staff consists of—

(1) Officers of the Political Department of the Government of India

(2) Members of the Provincial Civil Service

(3) Members of the Subordinate Civil Service

(4) Superintendents and Assistant Superintendents of Police.

(5) Officers recruited for the service of departments requiring special knowledge—Militia, Engineering, Education, Medicine and Forestry.

The cadre posts reserved for officers coming under the first head above are:—

Administration	Chief Commissioner & Agent to the Governor-General	5
	Secretary	
	Assistant Secretary	
	Personal Assistant	
	Revenue Commissioner and Revenue Secretary	
	Resident in Waziristan	1
	Deputy Commissioners 5	11
	Political Agents 4	
	District Judges 2	
	Assistant Commissioners and Assistant Political Agents	12
High Court and Divisional Judges	One Judicial Commissioner	3
	Two Divisional and Sessions Judges	

The districts under the Deputy Commissioners are divided into from two to five subcollectorates, in charge of tahsildars, who are invested with criminal and civil and revenue powers, and are assisted by naib-tahsildars, who exercise only criminal and revenue powers Some sub-divisions are in charge of Assistant or Extra Assistant Commissioners. The village community characteristic of some parts of India is not indigenous among the Pathans Its place as a social unit is to some extent taken by the tribe, which is held together by the ties of kinship and ancient ancestry, real or imaginary Modern municipal local government has been introduced in the towns There are also district boards The district is the unit for police, medical and educational administration and the ordinary staff includes a District Superintendent of Police, a Civil Surgeon, who is also the Superintendent of Jail and a District Inspector of Schools. The Province forms a single educational circle and only possesses one forest division, that of Hazara. There are four divisions of the Roads and Building Branch of the Public Works Department, each under an Executive Engineer. The Irrigation Department of the P.W.D. is in charge of the Chief Engineer, Irrigation, Punjab, who is also *ex-officio* Secretary to the Chief Commissioner The administration of the civil police force of the districts is vested in an Inspector-General There is a special force of Border military police. The revenue and expenditure of the Province are wholly Imperial Of the Agencies only Kurram and Tochi Valley pay land revenue to the British Government. The revenue administration of all five administered districts is controlled by the Revenue Commissioner For the administration of civil and criminal justice there are two Civil and Sessions divisions, each presided over by a Divisional and Sessions Judge The Judicial Commissioner is the controlling authority in the Judicial branch of the administration, and his Court is the highest criminal and appellate tribunal in this Province The principal officers in the present Administration are —

Agent to Governor-General and Chief Commissioner, Lieut.-Col Sir G O Roos-Keppel, K C I E, appointed 8th July, 1908.

Resident, Waziristan, J S Donald, C S I, C I E.

Judicial Commissioner, H R C Dobbs

Revenue Commissioner, Lieut.-Col C B. Rawlinson, C I E, I A

Secretary to Chief Commissioner, Major D. B. Blakeway, C I E, I A

Asst Secretary to Chief Commissioner, C. Latimer

Personal Asst to Chief Commissioner, R R. Moconachie.

Inspecting Officer, Frontier Corps, Col A R. Dick, I A

Secretaries, Public Works Department, Col. W J. D Dundee, C I E, R E Purves

Agency Surgeon and Administrative Medical Officer, Lieut.-Col. T W Irvine, I M S

Divisional and Sessions Judges, Lieut.-Col. C F. Minchin, D S O., I A, F P Renme,

Political Agents

Major W. J Keen, I A, Dir, Swat & Chitral.

S E Pears, Khyber

J A. O Fitzpatric Tochi.

Capt R A Lyall, I.A, Kurram.

Inspector-General of Police, H. A Close

Director of Public Instruction, J. A. Richey, M.A

Superintendent, Archæological Survey, Sir A. Stein, I C I E, D LITT. D S C.

Former Chief Commissioners.

Lieut.-Col. H A. Deane, C.S I. Died 7th July, 1908

W. R H. Merk, C.S.I. Officiating to 31st Oct 1910.

Assam.

The Province of Assam, 61,682 square miles in area, includes the Assam Valley Division, the Surma Valley and Hills Division and the State of Manipur. It owes its importance to its situation on the north-east frontier of India It is surrounded by mountainous ranges on three sides while on the fourth (the west) lies the Province of Bengal on to the plains of which debouch the two valleys of the Brahmaputra and the Surma which form the plains of Assam These two valleys are separated from each other by the Assam Range, which projects westward from the hills on the eastern border.

Population.

The total population of the province in 1911 was 7,059,857, of whom 1½ millions were Mahomedans, 3½ millions Hindus and 1½ millions Animists 46 per cent of the population speak Bengali, 22 per cent. speak Assamese other languages spoken in the province are Hindi, Uriya and a great variety of languages classified under the general heading of the Tibeto-Chinese languages. Owing to the great areas of waste and rivers the density of the province is only 115, which, compared with that of most other parts of India, is low, but is more than double that of Burma.

Agricultural Products.

It has agricultural advantages for which it would be difficult to find a parallel in any part of India, climate, soil, rainfall and river systems all being alike favourable to cultivation. Rice is the staple food crop, about 4 million acres being devoted to this crop Except in the Himalayan Terai irrigation is unnecessary. Jute and tea are the most important crops grown for export, the area under jute being generally about 40,000 acres, that under tea about 338,000 acres In 1910, the tea crop yielded over 175 million pounds of manufactured tea Wheat and tobacco are also grown and about 30 square miles are devoted to sugarcane. The total area of 'reserved' forest is about 3,778 square miles and the unclassed state forests cover about 18,509 square miles

Meteorological Conditions.

Rainfall is everywhere abundant, and ranges from 93 to 124 inches The maximum is reached at Cherrapunji in the Khasi Hills, which is one of the wettest places in the world, having a rainfall of 458 inches The temperature ranges from 59° at Sibsagar in January to 84° in July. Earthquakes of considerable severity have taken place, by far the worst being that which occurred in 1897

Land Tenures.

Most of the actual cultivators of the soil usually hold direct from the State, and the area of land on which rent is paid is inconsiderable A large part of Goalpara and of the more densely populated portions of Sylhet was however included in the permanent settlement of Bengal; and the system of land tenure in Cachar, and the existence of large estates on privileged rates of revenue in Kamrup have tended to produce a tenant class which at the 1901 census amounted to more than one-third of the total number of persons supported by agriculture. In the 1911 census a very marked increase in tenancy throughout the Province is shown.

Mines and Minerals.

The only minerals in Assam worked on a commercial scale are coal, limestone and petroleum oil. The most extensive coal measures are in the Naga Hills district, where about 239,000 tons are raised annually and used mainly by the river steamers Limestone is quarried in the Khasi and Jaintia Hills, in Sylhet, and in the Gare hills, about 96,000 tons are quarried in a year. Petroleum is worked only in Lakimpur, the oil is rich in paraffin, and the chief products are light naphthas, kerosine and wax. The oil is sold locally, and the wax is exported, mainly to England Lubricating oil is produced on the southern slopes of the Khasi Hills The total output of oil from the wells was, in 1910, nearly 3,300,000 gallons

An account of the petroleum occurrences in Assam was recently published in the memoirs of the Geological Survey of India It states that the petroleum localities in this province are confined to a curved belt of country along the basins of the Brahmaputra and Surma This belt is traceable over a distance of some 800 miles from N E Assam through Kachar and Chitagong to the Arakan coast, where it has a S S E trend It is roughly concentric with the trend of the Burmese oil belt, the distance between the two varying from 70 to 150 miles Various parts of the Assam-Kachar-Chittagong-Arakan belt have been exploited in a primitive way, but there are only two properly worked fields of commercial importance, *viz*, those of Digboi and Bappa Pung, two localities only about a mile apart in N E Assam

Manufactures.

Silk is manufactured in the Assam Valley, the weaving being done by the women Cotton weaving is also largely practised by the women, and almost every house contains a loom, the cloth is being gradually displaced by imported goods of finer texture and colour Boat building, brass and metal and earthenwares, tea manufacture and limestone burning are the other industries apart from agriculture, which itself employs about 84 per cent of the population. Assam carries on a considerable trade with the adjoining foreign tribes and countries In 1912-13 the total trade with Bhutan amounted to over 24 lakhs This is considerably less than usual owing to the fact that the exports fell considerably owing to an outbreak of cholera at Darranga which frightened the Bhutiyas and sent them back to their homes without their usual supplies In addition to this there is a small trade with the Abor, Mishmi, and other tribes

Communications.

The trade of Assam is chiefly carried by river, but increasing use is being made of the Assam Bengal Railway which runs from the port of Chittagong to Silchar at the eastern

end of the Surma Valley. A branch of that line runs along the south of the Assam Valley from Gauhati to Tinsukia, a station on the Dibru-Sadiya Railway, and is connected with the Surma Valley branch by a line that pierces the North Cachar Hills, the points of junction being Lumding in the northern and Badarpur in the southern valley The Eastern Bengal State Railway connects Assam with the Bengal system *via* the valley of the Brahmaputra The excellence of its water communication makes Assam less dependent upon roads than other parts of India, but in recent years the road system has been developed and there is a trunk road through the whole length of the Brahmaputra Valley and an excellent road from Gauhati to Shillong. A large fleet of steamers maintained by the India General Steam Navigation Company and the Rivers Steam Navigation Company plies on the rivers of both valleys. A daily service of passenger boats runs from Goalundo to Dibrugarh

Education

The latest census report shows that there are in the Province at present 4,118 educational institutions including two Arts Colleges with 168,250 pupils Of the total population 333,672 are returned as literate The distribution of literacy naturally varies considerably throughout the Province The large number of immigrant coolies and of aboriginal tribes tends to lower the proportion of literates in the Brahmaputra Valley, and a comparatively high standard of literacy in the Hills is due mainly to the progress of education amongst the Khasis of whom a large proportion have been converted to Christianity Amongst the Animists in the Hills the Lushais seem to have an extraordinary keenness for learning, which is the more remarkable, because the administration of their district dates from quite recent times

Administration.

The province of Assam was originally formed in 1874 in order to relieve the Lieutenant-Governor of Bengal of part of the administration of the huge territory then under him In 1903, as the result of further deliberations, it was decided to add to the small Province of Assam the eastern portion of its unwieldy neighbour and to consolidate those territories under a Lieutenant-Governor The Province of Eastern Bengal and Assam as then constituted was again broken up on the 1st of April, 1912 the Eastern Bengal Districts were united with the Bengal Commissionerships of Burdwan and the Presidency to form the Presidency of Bengal under a Governor-in-Council, Bihar, Chota Nagpur and Orissa were formed into a separate province, while the old Province of Assam was re-constituted under a Chief Commissioner

The capital is Shillong, a town laid out with great taste and judgment among the pine woods on the slopes of the Shillong Range which rises to a height of 6,450 feet above the sea It was destroyed in the earthquake of 1897 and has been rebuilt in a way more likely to withstand the Shocks of earthquake.

Chief Commissioners of Assam.

Colonel R H. Keatinge, C S I . .	1874
Sir S C Bayley, K C S I.	1878
C A Elliot, C S.I. ..	1881
W E Ward	1883
Dennis Fitzpatrick, C S I	1887
J. Westland, C.S I .. .	1889
J W. Quinton, C S I	1889
Brig -General Sir H Collett, K C B	1891
W. E Ward, C S I .	1891
C J Lyall, C.S I . .	1894
H J S Cotton, C.S.I. .	1896
J B Fuller, C I E .	1900
J. B Fuller C I E.	1902
C. W. Bolton, C S I .	1903
Note —The Chief Commissionership of Assam was revived 1st April, 1912.	
Sir Archdale Earle, K C I E .. .	1912

Administration.

Chief Commissioner, Sir Archdale Earle, K C I E, appointed 1st April, 1912

Personal Assistant, Lieut H R Willson (114th Marathas)

Chief Secretary, B C Allen

Second Secretary, A W. Botham

Secretary, Public Works Department, W McM Sweet

Inspector General of Registration.—A R Edwards, I-C S

Judges, F J Jeffries, J F Graham

Director of Public Instruction, J R Cunningham

Inspector-General of Police, Lt -Col A E Woods

Sanitary Commissioner, Col H E Banatvala, I M S

Comptroller, Financial Department, W. A T Carnduff

Political Agent in Manipur, Lt -Col H W G Cole, C S I.

Superintendent and Remembrancer of Legal Affairs —Abdul Majid, B A

Director of Land Records and Agriculture, J McSwiney.

Superintendent, Archaeological Survey, Eastern Circle, D B Spooner

Chief Inspector of Factories, R. P Adams, J Cowa), (Ag.)

LEGISLATIVE COUNCIL.

F C Henniker.
W J Reid
W McM. Sweet,
J. R. Cunningham, M A.
J. F. Graham.
Abdul Majid
A. B Hawkins.
Raja Prabhat Chandra Barua.
Ramani Mohan Das.
Srijut Padmanath Barua.
Col. H. E Banatvala
B. C. Allen
A. W. Botham

Baluchistan.

Baluchistan is an oblong stretch of country occupying the extreme western corner of the Indian Empire It is divided into three main divisions, (1) British Baluchistan with an area of 9,476 square miles consisting of tracts assigned to the British Government by treaty in 1879, (2) Agency Territories with an area of 44,345 square miles composed of tracts which have, from time to time, been acquired by lease or otherwise brought under control and placed directly under British officers, and (3) the Native States of Kalat and Las Bela with an area of 78,434 square miles The Province embraces an area of 134,638 square miles and according to the census of 1911 it contains 834,703 inhabitants, divided roughly half and half between the administered districts and States

The country, which is almost wholly mountainous, lies on a great belt of ranges connecting the Safed Koh with the hill system of Southern Persia It thus forms a watershed the drainage of which enters the Indus on the east and the Arabian Sea on the south while on the north and west it makes its way to the inland lakes which form so large a feature of Central Asia Rugged, barren, sun-burnt mountains, rent by high chasms and gorges, alternate with arid deserts and stony plains, the prevailing colour of which is a monotonous sight But this is redeemed in places by level valleys of considerable size in which irrigation enables much cultivation to be carried on and rich crops of all kinds to be raised.

The political connection of the British Government with Baluchistan commenced from the outbreak of the First Afghan War in 1839, it was traversed by the Army of the Indus and was afterwards occupied until 1842 to protect the British lines of communication The districts of Kachi, Quetta and Mastung were handed over to the Amir of Afghanistan and Political Officers were appointed to administer the country At the close of the First Afghan War, the British withdrew and these districts were assigned to the Khan of Kalat The founder of the Baluchistan Province as it now exists was Sir Roberts Sandeman who broke down the close border system and welded the Baluch and Brahui Chiefs into a close federacy In the Afghan War of 1879 Pishin, Sibi, Harnai and Thal-Chotiali were handed over by Yakub Khan to the British Government and retained at Sir Robert Sandeman's strenuous insistence

Industries.

Baluchistan lies outside the monsoon area and its rainfall is exceedingly irregular and scanty. Shahrig which has the heaviest rainfall, records no more than 11¾ inches in a year. In the highlands few places receive more than 10 inches and in the plains the average rainfall is about 5 inches, decreasing in some cases to 3. The majority of the indigenous population are dependent for their livelihood on agriculture, provision and care of animals and transport The Afghan and the Baluch, as a rule, cultivates his own lands The Brahuis dislike agriculture and prefer a pastoral life. Previous to the advent of the British life and property were so insecure that the cultivator was fortunate if he reaped his harvest The establishment of peace and security has been accompanied by a marked extension of agriculture which accounts for the increase in the numbers of the purely cultivating classes The Mekran Coast is famous for the quantity and quality of its fish and the industry is constantly developing Fruit is extensively grown in the highlands and the export is increasing.

Education is imparted in 157 schools with 4,129 scholars The mineral wealth of the Province is believed to be considerable, but cannot be exploited until railways are developed Coal is mined at Khost near Quetta and in the Bolan Pass and chromite is extracted in the Quetta-Pishin District

Administration.

The head of the local administration is the officer styled Agent to the Governor-General and Chief Commissioner Next in rank comes the Revenue Commissioner who advises the Agent to the Governor-General in financial matters and generally controls the revenue administration The keynote of administration in Baluchistan is self-government by the tribesmen, as far as may be, by means of their Jirgas or Councils of Elders along the ancient customary lines of tribal law, the essence of which is the satisfaction of the aggrieved and the settlement of the feud, not retaliation on the aggressor or the vindictive punishment of a crime The district levies which number 2,300 odd play an unobtrusive but invaluable part in the work of the Civil Administration not only in watch and ward and the investigation of crime, but also in the carrying of the mails, the serving of processes and other miscellaneous work In addition to these district levies there are three irregular Corps in the Province: the Zhob Militia (formerly known as the Zhob Levy Corps), the Makran Levy Corps, and the Chagai Levy Corps Their combined strength in the latest returns was 953 cavalry and 892 infantry The Province does not pay for itself and receives large subsidies from the Imperial Government The receipts and expenditure roughly balance each other at 25½ lakhs.

ADMINISTRATION

Agent to the Governor-General and Chief Commissioner, Archer The Hon'ble Lieut.-Colonel C, CSI, CIE, IA

Revenue and Judicial Commissioner, Lieut.-Colonel A McConaghey.

Secretary, Public Works Department, Colonel J C Rimington

First Assistant to the Agent to the Governor-General and Secretary to the Chief Commissioner, Bray, Denys de S, ICS

Second Assistant to the Agent to the Governor-General, Major W. G Hutchinson.

Political Agent, Zhob, Jacob, Major, A. L., IA

Assistant Political Agent, Zhob, Capt. T. G. M. Harris

Political Agent, Kalat and Bolan Pass, Dew; Major A. B, CIE, IA.

Assistant Political Agent, Kalatand Bolan Pass, Captain D M Field

Assistant for Mekran to the Political Agent in Kalat and ex-officio Commandant, Mekran Levy Corps, Capt T H Tucker

Political Agent, and Deputy Commissioner, Quetta and Pishin, Capt H. C. Finnis

Assistant Political Agent and Assistant Commissioner, Quetta and Pishin, Vacant

Political Agent, Chagai, Lieut.-Colonel F C Webb-Ware

Political Agent and Deputy Commissioner, Sibi, Major F McConaghey

Assistant Political Agent, Sibi, Capt J L R Weir

Political Agent, Loralai, Major A D G Ramsay

Assistant Political Agent, Loralai, Hughes, T O

Residency Surgeon and Chief Medical Officer, Duke, Lieut.-Colonel A L, I M S

Civil Surgeon, Quetta, Major W M Anderson

ANDAMAN AND NICOBAR ISLANDS.

This is a group of islands in the Bay of Bengal of which the headquarters are at Port Blair, by sea 780 miles from Calcutta, 740 miles from Madras and 360 miles from Rangoon, with which ports there is regular communication

The land area of the islands under the administration is 3,143 square miles, namely, 2,508 square miles in the Andamans and 635 square miles in the Nicobars The total population of the islands was returned in the census of 1911 as 26,459 The Islands are administered by the Chief Commissioner of the Andaman and Nicobar Islands who is also the Superintendent of the Penal Settlement. The penal settlement, which was established in 1858, is the most important in India

Superintendent of Port Blair, Lieut.-Col M W. Douglas, C I E

Commandant and District Superintendent of Military Police, Captain H W Rowlandson

Medical Superintendent of Jails, Captain R E. Flowerdew.

Senior Medical Officer, Captain J. H. Murray, I M S.

COORG.

Coorg is a small petty Province in Southern India west of the State of Mysore Its area is 1,582 square miles and its population 174,976. Coorg came under the direct protection of the British Government during the war with Sultan Tipu of Seringapatam In May 1834, owing to misgovernment, it was annexed The Province is directly under the Government of India and administered by the Chief Commissioner of Coorg who is the Resident in Mysore with his headquarters at Bangalore In him are combined all the functions of a local government and a High Court The Secretariat is at Bangalore where the Assistant Resident is styled Secretary to the Chief Commissioner of Coorg In Coorg his chief authority is the Commissioner whose headquarters are at Mercara and whose duties extend to every branch of the administration. The chief wealth of the country is agriculture and especially the growth of coffee Although owing to over-production and insect pests coffee no longer commands the profits it once enjoyed, the Indian output still holds its own against the severe competition of Brazil The bulk of the output is exported to France

Resident and Chief Commissioner, Coorg, The Hon Lt.-Col Sir Hugh Daly, K C I E

AJMER-MERWARA.

Ajmer-Merwara is an isolated British Province in Rajputana The Agent to the Governor-General in Rajputana administers it as Chief Commissioner The Province consists of two small separate districts, Ajmer and Merwara, with a total area of 2,711 square miles and a population of 501,395 At the close of the Pindari war Daulat Rao Scindia, by a treaty dated June 25, 1818, ceded the district to the British Fifty-five per cent of the population are supported by agriculture, the industrial population being principally employed in the cotton and other industries The principal crops are maize, millet, barley, cotton, oil-seeds and wheat

Agent to the Governor-General in Rajputana and Chief Commissioner of Ajmer-Merwara, The Hon Lieut.-Col Sir E G. Colvin, K C.S.I.

Aden.

Aden was the first new territory added to the Empire after the accession of Queen Victoria Its acquisition in 1839 was the outcome of an outrage committed by the local Fadhli chief upon the passengers and crew of a British buggalow wrecked in the neighbourhood Various acts of treachery supervened during the negotiations regarding the buggalow outrage and Aden was captured by a force sent by the Bombay Government under Major Baillie The act has been described as one of those opportune political strokes which have given geographical continuity to British possessions scattered over the world

Aden is an extinct volcano, five miles long and three broad, jutting out to sea much as Gibraltar does, having a circumference of about 15 miles and connected with the mainland by a narrow isthmus of flat ground This is nearly covered at one part at high spring tides, but the causeway and aqueduct are always above, though sometimes only just above, water The highest peak on the wall of precipitous hills that surrounds the old crater which constitutes Aden is 1,775 feet above sea level Rugged spurs, with valleys between, radiate from the centre to the circumference of the crater. A great gap has been rent by some volcanic disturbance on the sea surface of the circle of hills and this opens to the magnificent harbour The peninsula of Little Aden, adjacent to Aden proper, was obtained by purchase in 1868 and the adjoining tract of Shaikh Othman, 39 square miles in extent, was subsequently purchased when, in 1882, it was found necessary to make provision for an over-flowing population.

Attached to the settlement of Aden are the islands of Perim, an island of 5 square miles extent in the Straits of Bab-el-Mandeb, in the entrance to the Arabian Sea , Sokotra island, at the entrance to the Gulf of Aden, in the Arabian Sea, acquired by treaty in 1886 and 1,382 miles in extent , and the five small Kuria Muria islands, ceded by the Imam of Maskat in 1854 for the purpose of landing the Red Sea cable, and otherwise valuable only for the guano deposits found upon them They are off the Arabian coast about two-thirds of the way from Aden to Maskat The whole extent of the Aden settlement, including Aden, Little Aden, Shaikh Othman and Perim is approximately 80 miles The 1911 census shows Aden, with Little Aden, Shaikh Othman, and Perim to have a population of 46,165. The population of Perim is a matter of a few hundreds, largely dependent on the Coal Depot maintained there by a commercial firm That of Sokotra is 12,000, mostly pastoral and migratory inland, fishing on the coast.

Strategic Importance.

Aden's first importance is as a naval and military station of strategic importance This aspect was ably discussed by Colonel A. M Murray, in his "Imperial Outposts". He points out that Aden is not a naval base in the same sense that Gibraltar, Malta and Hong Kong were made, but a *point d'appui*, a rendezvous and striking point for the fleet. It was seized in 1839 because of its usefulness as a harbour of refuge for British ships and from a strategist's point of view this is its primary purpose and the *raison d'etre* of its forts and garrison. Aden under British rule has retained its ancient prestige as a fortress of impregnable strength, invulnerable by sea and by land, dominating the entrance to the Red Sea, and valuable to its owners as a commercial emporium, a port of call and a cable centre The harbour extends 8 miles from east to west and 4 from north to south and is divided into two bays by a spit of land The depth of water in the western bay is from 3 to 4 fathoms, across the entrance 4½ to 5 fathoms, with 10 to 12 fathoms 2 miles outside The bottom is sand and mud There are several islands in the inner bay. Strategic control of the Red Sea was rendered complete by the annexation of Perim and Sokotra, which may both be regarded as outposts of Aden, and are under the political jurisdiction of the Resident.

The Arab chiefs of the hinterland of Arabia are nearly all stipendiaries of the British Government Colonel Wahab and Mr G. H. Fitzmaurice, of the Constantinople Embassy, were appointed in 1902 as Commissioners to delimitate the frontier between Turkish Arabia and the British protectorate around Aden A convention was signed in 1905 settling details, the frontier line being drawn from Shaikh Murad, a point on the Red Sea coast opposite Perim, to the bank of the river Bana, the eastern limit of Turkish claims, at a point some 29 miles north-east of Dthala, and thence north-east to the great desert The area left within the British Protectorate was about 9,000 square miles The arrangement gave to Turkey Cape Bab-el Mandeb, which forms the Arabian bank of the eastern channel past Perim into the Red Sea England took this gatepost of the Red Sea from the Turks in November 1914, A sanitorium and small British garrison used to be maintained at Dthala, which is 7,700 feet high, but the garrison was withdrawn in 1906, Lord Morley explaining this step as being in accordance with the policy stated in the House of Lords in 1903,—that His Majesty's Government had never desired to interfere with the internal and domestic affairs of the tribes on the British side of the boundary, but had throughout made it plain that they would not assent to the interference of any other Power with those affairs

British Policy.

There has been much criticism of a policy under which Aden has failed to advance with the same progressive strides which have marked the development of other British dependencies. It is said that the former Persian possessors of Aden built its wonderful water tanks, and the Arabs made an aqueduct 20 miles long, while the British have done nothing except mount guns to protect their coal yards Trade, it is argued, flourishes because this is a natural emporium of commerce but not because of the attention its needs get from Government Lord Roberts, writing on this point a few years ago said: "It is not creditable to British rule to make use of a dependency like Aden for selfish purposes of political necessity without attempting to extend the benefits of civilised Government to the neighbouring native tribes, especially when those tribes are living under the aegis of the British Crown. The Persians, the Turks and even the Arabs did more for Aden in

their time than we have done during our seventy years' occupation. Aden has always suffered under the disadvantage of being an appanage of the Bombay Presidency, with which it has neither geographical, racial nor political affinity. Probably the best solution of the matter would be to hand over the place to the Colonial Office, relieving the Government of Bombay of a charge which is only looked upon as an incubus." Some important steps have been taken in the past few years to satisfy the commercial needs of the port.

Trade

The trade of Aden has developed immensely since British acquisition in 1839, largely through the Government of India declaring it a free port in 1850, since when it has attracted much of the valuable trade between Arabia and Africa formerly monopolised by the Red Sea ports of Hodeida and Mokha. The opening of the Suez Canal was also responsible for a large increase of trade through Aden into the interior. The total imports by sea in the last year for which complete statistics are available (1913-14) amounted to £3,756,964, by land £170,213, treasure, £450,305; exports by sea were £3,267,283, by land, £140,159, treasure £741,687. These statistics are exclusive of Government stores and treasure.

The language of the settlement is Arabic, but several other Asiatic tongues are spoken. The population is chiefly returned as Arabs and Shaikhs. The Somalis from the African coast and Arabs do the hard labour of the port. So far as the settlement is concerned there are no products whatever, with the important exception of salt. The crops of the tribal low country adjoining are jowar, sesamum, a little cotton, madder, a bastard saffron and a little indigo. In the hills, wheat, madder, fruit, coffee and a considerable quantity of wax and honey are obtained. The water supply forms the most important problem. Water is drawn from four sources—wells, aqueducts, tanks or reservoirs and condensers.

Administration

The Aden settlement is subject politically to the Government of Bombay and its administration is conducted by a Resident, who is assisted by four Assistants. The Resident is also military Commandant and is usually an officer selected from the Indian army, as are his assistants. The Resident has jurisdiction as a Judge of the Vice-Admiralty Court in matters connected with slave trading, his court being called the Colonial Court of the Admiralty. The laws in force in the settlement are generally speaking those in force in the Bombay Presidency, supplemented on certain points by special regulations to suit local conditions. The management of the port is under the control of a Board of Trustees formed in 1888. The principal business of the Port Trust has been the deepening of the harbour, so as to allow vessels of all sizes to enter and leave at all states of the tide. The Aden police force numbers slightly over 200 men. There are hospitals and dispensaries in both Aden and Perim in addition to the military institutions of this character. The garrison comprises a troop of engineers, three companies of garrison artillery, one battalion of British infantry, two companies of sappers and miners and one Indian regiment. Detachments from the last named are maintained at Perim and Shaikh Othman respectively.

The average temperature of the station is 87 degrees in the shade, the mean range being from 75 in January to 98 in June, with variations up to 102. The hills between the monsoons, in May and September are very oppressive. Consequently, long residence impairs the faculties and undermines the constitution of Europeans and even Indians suffer from the effects of too long an abode in the settlement and troops are not posted in the station for long periods, being usually sent there one year and relieved the next. But Aden is exceptionally free from infectious diseases and epidemics and the absence of vegetation, the dryness of the soil and the purity of the drinking water constitute efficient safeguards against many maladies common to tropical countries. The annual rainfall varies from ½ inch to 8½ inches, with an irregular average of 3 inches.

The following are the principal officers of the present administration:—

Political Resident, Major-General Shaw.

Assistant Residents, Captain F. C. Bannatyne, (Perim) Lieut.-Colonel H. F. Jacob, Major J. K. Condon, Captain C. C. J. Barrett, Captain B. R. Reilly, Lieutenant John de la Hey Gordon.

The area enclosed within the boundaries of India is 1,773,168 square miles, with a population of 315,132,537 of people—nearly one-fifth of the human race But of this total a very large part is not under British Administration The area covered in the Native States is 675,267 square miles with a population of seventy millions The Native States embrace the widest variety of country and jurisdiction They vary in size from petty states like Lawa, in Rajputana, with an area of 19 square miles, and the Simla Hill States, which are little more than small holdings, to States like Hyderabad, as large as Italy, with a population of thirteen millions They include the inhospitable regions of Western Rajputana, Baroda, part of the Garden of India, Mysore, rich in agricultural wealth, and Kashmir, one of the most favoured spots on the face of the globe In the case of 175 States control is exercised by the Government of India, and of about 500 by the Provincial Governments The four principal states, Hyderabad, Mysore, Baroda and Kashmir, are in direct relation with the Government of India The other States are grouped under the direction of an Agent to the Governor-General, as for Rajputana and Central India, in one case the Provincial Government has been compelled to group its States, those of Kathiawar, under an Agent to the Governor

Relations with the Paramount Power

So diverse are the conditions under which the Native States were established and came into political relation with the Government of India, that it is impossible even to summarise them But broadly it may be said that as the British boundaries expanded, the states came under the influence of the Government and the rulers were confirmed in their possessions To this general policy however there was, for a brief period, an important departure During the regime of Lord Dalhousie the Government introduced what was called annexation through lapse That is to say, when there was no direct heir, the Government considered whether public interests would be secured by granting the right of adoption Through the application of this policy, the states of Satara and of Nagpur fell in to the East India Company, and the kingdom of Oudh was annexed because of the gross misgovernment of its rulers Then came the Mutiny It was followed by the transference of the dominions of the East India Company to the Crown, and an irrevocable declaration of policy toward the Native States In the historic Proclamation of Queen Victoria it was set out that "We desire no extension of our present territorial possessions, and while we will permit no aggression on our dominions or our rights to be attempted with impunity, we shall allow no encroachments on those of others We shall respect the rights, dignity and honour of the Native Princes as our own, and we desire that they, as well as our own subjects, should enjoy that prosperity and that social advancement which can only be secured by internal peace and good government" Since the issue of that proclamation there has been no encroachment on the area under Native rule by the Government of India On the contrary, the movement has been in the opposite direction In 1881 the State of Mysore, which had been so long under British administration that the traditions of Native rule were almost forgotten, was restored to the old Hindu ruling house In 1911 the Maharajah of Benares, the great taluqdar of Oudh, was granted ruling powers over his extensive possessions On many occasions the Government of India has had to intervene, to prevent gross misgovernment, or to carry on the administration during a long minority, but always with the undeviating intention of restoring the territories as soon as the necessity for intervention passed Almost all states possess the right of adoption in default of heirs

Rights of Native States

The rights and obligations of the Native States are thus described by the Imperial Gazetteer The Chiefs have, without exception, gained protection against dangers from without and a guarantee that the protector will respect their rights as rulers The Paramount Power acts for them in relation to foreign Powers and other Native States The inhabitants of the Native States are the subjects of their rulers, and except in case of personal jurisdiction over British subjects, these rulers and their subjects are free from the control of the laws of British India Criminals escaping to a Native State must be handed over to it by its authorities, they cannot be arrested by the police of British India without the permission of the ruler of the State The Native Princes have therefore a suzerain power which acts for them in all external affairs, and at the same time scrupulously respects their internal authority The suzerain also intervenes when the internal peace of their territories is seriously threatened Finally they participate in all the benefits which the protecting power obtains by its diplomatic action, or by its administration of its own dominions, and thus secure a share in the commerce, the railways, the ports, and the markets of British India Except in rare cases, applied to maritime states, they have freedom of trade with British India although they levy their own customs and their subjects are admitted to most of the public offices of the British Government

Obligations of Native States

On the other hand the Native States are under an obligation not to enter into relations with foreign nations or other states, the authority of their rulers has no existence outside their territories Their subjects outside their dominions become for all intents and purposes British subjects Where foreign interests are concerned, the Paramount Power must act so that no just cause of offence is given by its subordinate allies All Native States alike are under an obligation to refer to the British every question of dispute with other states Inasmuch as the Native States have no use for a military establishment other than for police, or display, or for co-operation with the Imperial Government, their military forces, their equipment and armament are prescribed by the Paramount Power Although old and unaltered treaties declare that the British Government will have no manner of concern with any of a Maharajah's dependents or servants, with respect to whom the Maharajah is absolute, logic and public opinion

have endorsed the principle which Lord Canning set forth in his minute of 1860, that the "Government of India is not precluded from stepping in to set right such serious abuses in a Native Government as may threaten any part of the country with anarchy or disturbance, nor from assuming temporary charge of a Native State when there shall be sufficient reason to do so." Of this necessity the Governor-General-in-Council is the sole judge, subject to the control of Parliament Where the law of British India confers jurisdiction over British subjects or other specified persons in foreign territory, that power is exercised by the British courts which possess it The subjects of European Powers and the United States are on the same footing Where cantonments exist in Native territory, jurisdiction both over the cantonment and the civil station is exercised by the suzerain power

Political Officers.

The powers of the British Government are exercised through Political Officers who as a rule reside in the states themselves In the larger states the Government is represented by a Resident, in groups of states by an Agent to the Governor-General, assisted by local Residents or Political Agents These officers form the sole channel of communication between the Native States and the Government of India and its Foreign Department, with the officials of British India and with other Native States They are expected to advise and assist the Ruling Chiefs in any administrative or other matters on which they may be consulted Political Agents are similarly employed in the larger States under the Provincial Governments, but in the petty states scattered over British India the duties of the Agent are usually entrusted to the Collector or Commissioner in whose district they lie All questions relating to the Native States are under the special supervision of the Supreme Government, and in the personal charge of the Governor-General A proposal has been made by the Government of India that, in view of the increasing importance of the Native States, an additional Secretary, styled the Political Secretary, shall be appointed who shall be in special charge, under the Viceroy, of these questions

Closer Partnership.

Events have tended gradually to draw the Paramount Power and the Native States into closer harmony Special care has been devoted to the education of the sons of Ruling Chiefs, first by the employment of tutors, and afterwards by the establishment of special colleges for the purpose These are now established at Ajmere, Rajkot, Indore and Lahore The Imperial Cadet Corps whose headquarters are at Dehra Dun, imparts military training to the scions of the ruling chiefs and noble families. The spread of higher education has placed at the disposal of the Native States the products of the Universities In these ways there has been a steady rise in the character of the administration of the Native States, approximating more closely to the British ideal. Most of the Native States have also come forward to bear their share in the burden of Imperial defence. Following on the spontaneous offer of military assistance when war with Russia appeared to be inevitable over the Penjdeh incident in 1885, the states have raised a portion of their forces up to the standard of the Native troops in the Indian Army. These are termed Imperial Service Troops, they belong to the states, they are officered by Indians, but they are inspected by a regular cadre of British officers, under the general direction of the Inspector-General of Imperial Service Troops Their numbers are approximately 22,000 men; their armament is the same as that of the Indian Army and they have done good service often under their own Chiefs, on the Frontier and in China and in Somaliland Secure in the knowledge that the Paramount Power will respect their rights and privileges, the Ruling Chiefs have lost the suspicion which was common when their position was less assured, and the visits of the Prince of Wales in 1875, of the Prince and Princess of Wales in 1905-06, and of the King and Queen in 1911-12 have tended to seal the devotion of the great feudatories to the Crown The improvement in the standard of native rule has also permitted the Government of India largely to reduce the degree of interference in the internal affairs of the Native States The new policy was authoritatively laid down by Lord Minto, the then Viceroy, in a speech at Udaipur in 1909, when he said —

"Our policy is with rare exceptions, one of non-interference in the internal affairs of the Native State But in guaranteeing their internal independence and in undertaking their protection against external aggression it naturally follows that the Imperial Government has assumed a certain degree of responsibility for the general soundness of their administration and could not consent to incur the reproach of being an indirect instrument of misrule There are also certain matters in which it is necessary for the Government of India to safeguard the interests of the community as a whole as well as those of the paramount power, such as railways, telegraphs and other services of an Imperial character. But the relationship of the Supreme Government to the State is one of suzerainty. The foundation-stone of the whole system is the recognition of identity of interests between the Imperial Government and Durbars and the minimum of interference with the latter in their own affairs"

HYDERABAD.

Hyderabad, the premier Native State in India, is in the Deccan. Its area is 82,698 square miles and population 13,374,676 The general physical characteristics of the State are an elevated plateau, divided geographically and ethnologically by the Manjra and Godaveri rivers. To the North-West is the Trappean region, peopled by Marathas, a country of black cotton soil, producing wheat and cotton. To the South-East is the granatic region of the Telugus and producing rice

HISTORY.—In pre-historic times Hyderabad came within the great Dravidian zone. The date of the Aryan conquest is obscure, but the dominions of Asoka 272 to 231 B. C. embraced the northern and western portions of the State

Three great Hindu dynasties followed, those of the Pallavas. Chalukyas and Yadavas In 1294 the irruption of the Mahomedans under Ala-ud-din Khilji, commenced, and thenceforward till the time of Aurungzebe the history of the State is a confused story of struggles against the surviving Hindu kingdom of the South, and after the fall of Vijayanager, with each other Aurungzebe stamped out the remains of Mahomedan independence of the South, and set up his General, Asaf Jah, of Turcoman descent, as Viceroy, or Subnadar of the Deccan in 1713 In the chaos which followed the death of Aurungzebe, Asaf Jah had no difficulty in establishing and maintaining his independence, and thus founded the present House During the struggle between the British and the French for mastery in India, the Nizam finally threw in his lot with the British, and unshaken even by the excitement of the mutiny, has been so staunch to his engagements as to earn the title of "Our Faithful Ally" The present ruler is H H Sir Usman Ali Khan Bahadur Fateh Jung, G C S I

THE BERARS.—A most important event in the history of the State occurred in November 1902, when the Assigned Districts of Berar were leased in perpetuity to the British Government. These districts had been administered by the British Government on behalf of the Nizam since 1853, under the treaties of 1853 and 1860, they were "assigned" without limit of time to the British Government to provide for the maintenance of the Hyderabad contingent, a body of troops kept by the British Government for the Nizam's use, the surplus revenues, if any, being payable to the Nizam In course of time it had become apparent that the maintenance of the Hyderabad contingent on its old footing as a separate force was inexpedient and unnecessary, and that similarly the administration of Berar as a separate unit was very costly, while from the point of view of the Nizam, the precarious and fluctuating nature of the surplus was financially inconvenient The agreement of 1902 re-affirmed His Highness' sovereignty over Berar, which instead of being indefinitely "assigned" to the Government of India, was leased in perpetuity to an annual rental of 25 lakhs (nearly £167,000), the rental is for the present charged with an annual debit towards the repayment of loans made by the Government of India. The Government of India were at the same time authorised to administer Berar in such manner as they might think desirable, and to redistribute, reduce, re-organise and control the Hyderabad Contingent, due provision being made, as stipulated in the treaty of 1853, for the protection of His Highness' dominions In accordance with this agreement the Contingent ceased in March 1903 to be a separate force and was re-organised and redistributed as an integral part of the Indian Army, and in October 1903 Berar was transferred to the administration of the Chief Commissioner of the Central Provinces.

ADMINISTRATION.—The Nizam is supreme in the State and exercises the power of life and death over his subjects For convenience in administration the Minister is the chief controlling authority in the State. To assist him there are five Assistant Ministers, Financial, Judicial, Military, Public Works and Ecclesiastical All questions of importance are referred to the Council, which is composed of the Minister as President, and the Assistant Ministers as Members Business disposed of by the Council is immediately reported to the Nizam The actual work of the departments is done by six Secretaries Below the Secretariat the State is divided into Subhas or Divisions, Districts and Talukas Fifteen District, 86 Taluk and nine Divisional Boards are at work in the District A Legislative Council, consisting of 21 members, of whom 13 are official and 8 non-official, is responsible for making laws The State maintains its own currency, the Osmania Sicca rupee with a subordinate coinage In 1904 an improved Mahbubia rupee was struck and this exchanges with the British rupee at the ratio of 115 or 116 to 100 It has its own postal system and stamps for internal purposes It maintains its own Army, comprising 19,597 troops, of which 6,064 are classed as Regular and 13,533 as Irregular There are in addition 696 Imperial Service Troops

FINANCE.—After many vicissitudes, the financial position of the State is strong The current budget provides for a revenue of Rs 521 lakhs and a service expenditure of Rs 478 lakhs The principal revenue heads are Land Revenue 279 lakhs, Berar rent (land leased in perpetuity to the British Government and incorporated in the Central Provinces) 25 lakhs, Customs, etc 67 lakhs, Excise 86 lakhs, Interest 34 lakhs.

PRODUCTION AND INDUSTRY.—The principal industry of the State is agriculture, which maintains 56 9 per cent. of the population. The common system of land tenure is ryotwari. As no reliable figures are available to show the gross produce it is impossible to say what proportion the land revenue bears to it, but it is collected without difficulty The principal food crops are millet and rice, the staple money crops cotton, which is grown extensively on the black cotton soils, and oil-seeds The State is rich in minerals The great Warangal coal measures are worked at Singareni, but the efforts to revive the historic gold and diamond mines have met with very qualified success The manufacturing industries are consequent on the growth of cotton, and comprise three spinning and weaving mills and ginning and pressing factories in the cotton tracts

COMMUNICATIONS.—One hundred and thirty-seven miles of the broad gauge line from Bombay to Madras traverse the State At Wadi, on this section, the broad gauge system of the Nizam's Guaranteed State Railway takes off, running East to Warangal and South-East toward Bezwada, a total length of 310 miles. From Hyderabad the metre gauge Godaveri Railway runs North-West to Manmad on the Great Indian Peninsula Company's system 391 miles There are thus 471 miles of broad gauge and 391 of metre in the State. The Barsi Light Railway owns a short extension to Latur The roads are generally inferior.

EDUCATION.—The State maintains two Colleges The Nizam College at Hyderabad (first grade) is affiliated to the Madras University. The Oriental College at Hyderabad prepares students for the local Moulvi and Munshi examinations. There are 28 high schools, 63 middle schools, 917 primary schools, and 24 special schools including a Medical School in the Dominions.

British Resident, The Hon. Mr S. M. Fraser.

MYSORE.

The State of Mysore is surrounded on all sides by the Madras Presidency except on the north and north-west where it is bounded by the districts of Dharwar and North Canara respectively and towards the south-west by Coorg It is naturally divided into two regions of distinct character, the hill country (the Malnad) on the west and the wide-spreading valleys and plains (the Maidan) on the east. The State has an area of 29,461 square miles excluding that of the Civil and Military Station of Bangalore and a population of 5,705,359 of whom over 92 per cent are Hindus Kanarese is the distinctive language of the State

HISTORY —The ancient history of the country is varied and interesting Tradition connects the table-land of Mysore with many a legend enshrined in the great India epics, the Ramayana and the Mahabharata Coming down to historical times, the north-eastern portion of the country formed part of Asoka's Empire in the third century B C Mysore then came under the rule of the Andhra dynasty From about the third to the eleventh century A D Mysore was ruled by three dynasties, the north-western portion by the Kadambas, the eastern and northern portions by the Pallavas and the central and southern portions by the Gangas In the eleventh century, Mysore formed part of the Chola dominion, but the Cholas were driven out early in the twelfth century by the Hoysalas, an indigenous dynasty with its capital at Halebid The Hoysala power came to an end in the early part of the fourteenth century Mysore was next connected with the Vijayanagar Empire At the end of the fourteenth century, Mysore became associated with the present ruling dynasty At first tributary to the dominant empire of Vijayanagar, the dynasty attained its independence after its downfall in 1565 In the latter part of the eighteenth century, the real sovereignty passed into the hands of Haidar Ali and then his son Tippu Sultan In 1709, on the fall of Seringapatam, the British Government restored the State comprised within its present limits, to the ancient dynasty in the person of Maharaja Sri Krishnaraja Wadiyar Bahadur III Owing to the insurrections that broke out in some parts of the country, the management was assumed by the British Government in 1831 In 1881, the State was restored to the dynasty in the person of Sri Chamarajendra Wadiyar Bahadur under conditions and stipulations laid down in the Instruments of Transfer That ruler, with the assistance of Mr (afterwards Sir) K. Seshadri Iyer, K C S I, as Dewan, brought Mysore to a state of great prosperity He died in 1894 and was succeeded by the present Maharaja Sir Sri Krishnaraja Wadiyar Bahadur, G. C S I, who was installed in 1902. In November 1913, the Instrument of Transfer was replaced by a Treaty which indicates more appropriately the relation subsisting between the British Government and the State of Mysore.

ADMINISTRATION —The city of Mysore is the capital of the State, but Bangalore City is the administrative head quarters His Highness the Maharaja is the ultimate authority in the State and the administration is conducted under his control, by the Dewan and three Members of the Council including the Extraordinary Member The Chief Court consisting of three Judges is the highest judicial tribunal in the State A Representative Assembly meets once a year at Mysore when the Dewan places before them the annual statement of finances and the measures of the State after which representations are heard and considered There is also a Legislative Council consisting of 25 members of whom 12 are officials, and 13 non-officials, eight elected and five nominated. The Council has recently been given the privileges of interpellation and discussion of the State budget All the important branches of the administration are controlled by separate heads of departments For administrative purposes, the State is divided into 8 districts and subdivided into 68 talukas, each district being under a Deputy Commissioner and District Magistrate and each taluk under an Amildar and subordinate Magistrate The State maintains a military force of 3,202 including 516 in the Imperial Service Regiment (Cavalry) and 480 in the Imperial Service Transport Corps

FINANCE —The cash balance at the beginning of 1913-14 was Rs 112 lakhs Total receipts during the year were Rs 321 lakhs and total disbursements Rs 332 lakhs The principal revenue heads are Land Revenue Rs 105 lakhs, Mining Royalty and Leases Rs 19 lakhs, Forest revenue Rs 34 lakhs, Excise Rs 51 lakhs and Stamps Rs 11 lakhs Mysore pays an annual subsidy of 35 lakhs to the British Government

ECONOMIC CONFERENCES —The Mysore Economic Conference was organised in June 1911 with the object of creating and keeping alive public interest in matters connected with the economic progress of the State by a frequent interchange of views and discussions among those competent to deal with them and in order to associate men of enlightenment, public spirited citizens prominent agriculturists, merchants and others with the officers of Government in such deliberations. The Conference meets annually at Mysore during the festivities in connection with His Highness the Maharaja's birthday It has three Central Committees dealing with questions connected with Agriculture, Education and Industries and Commerce and District Committees in the several districts

AGRICULTURE —Nearly three-fourths of the population are employed in agriculture and the general system of land tenure is Ryotwari The principal food crops are ragi, rice, jola, millets, gram and sugarcane and the chief fibres are cotton and san-hemp The Department of Agriculture which was recently reorganised on a large scale is popularising agriculture on scientific lines by means of demonstrations, investigations and experiments

INDUSTRIES —A separate department of Industries and Commerce has been created with a view to improve the existing industries and to provide expert advice and other facilities for the starting of new industries in the State The manufacturing industries include 8 cotton ginning mills, 3 cotton presses, 2 cotton mills, 21 cotton spinning and weaving establishments not classed as mills, one silk filature and one woollen mill There are also 4 oil mills, 11

rice mills, 2 sugar factories, 3 brick and tiles factories, 3 cigar factories and 3 tanneries Besides, 28 mines are at work—15 for gold, 3 for manganese, 5 for chrome ore, 2 for mica and 3 for other minerals The value of gold produced last year was nearly 323 lakhs

BANKING —In 1913, a State-aided bank called the Bank of Mysore was started with its head quarters in Bangalore and agencies at many of the important places in the State Besides this there is one central Co-operative Bank started in 1908 and there are now 530 societies working

COMMUNICATIONS —The Railway system radiates from Bangalore, various branches of the Madras and Southern Mahratta Railway running through the State The length of the lines owned by the State and worked under contract by the Company is 411 17 miles of which 9 88 are of broad gauge and the rest metre gauge A District Board Railway from Bowringpet to Kolar (11 miles) was opened in December 1913 Several other projects have been prepared and good progress has been made on some of them

EDUCATION —There are two first grade colleges, the Central College at Bangalore and the Maharaja's College at Mysore, both affiliated to the Madras University They have been efficiently equipped and organised and Honours courses in Physics and History and Economics have been recently instituted There is also a College for women, the Maharani's College at Mysore Primary education has recently been made compulsory in certain selected areas. Schools have been started for imparting education in agricultural, commercial and technical subjects There are 3,001 public and 2,133 private educational institutions in the State This gives one school to every 5 74 square miles of the area and to every 1,111 persons of the population of the State

PLACES OF INTEREST —Mysore City, the capital, is a modern city laid out with fine roads and suburbs. The prominent buildings are the Palace, the Chamrajendra Technical Institute, Government House, the Maharaja's College, the Maharani's College and the Oriental Library

Bangalore, the largest city in the State and the commercial and manufacturing centre, stands on a table land, 3,000 feet above the sea and is noted for its salubrious climate and luxuriant gardens The principal places of interest are the Public Offices, the Central College buildings, the Museum, the Lal Bagh, the Indian Institute of Science and the Indian Sanskrit Institute

The historic town of Seringapatam, the famous Jog Falls, the Kolar Gold Fields, the Sivasamudram and Belur, Somnathpur and Halebid with their temples of exquisite architecture, are some of the other important places of interest in the State

RESIDENT AND CHIEF COMMISSIONER OF COORG —The Hon'ble Col Sir Hugh Daly K C I E, C S I

DIWAN —M Visvesaraya, Esq, B A, C I E

BARODA.

The State of Baroda is situated partly in Gujarat and partly in Kathiawar. It is divided into four distinct blocks. (1) the southern district of Navsari near the mouth of the Tapti river, and mostly surrounded by British territory; (2) central district, North of the Narbada, in which lies Baroda, the capital city, (3) to the North of Ahmedabad, the district of Kadi, and (4) to the West, in the Peninsula of Kathiawar, the district of Amreli, formed of scattered tracts of land. The area of the State is 8,182 square miles: the population is over two millions, of whom over four-fifths are Hindus.

HISTORY —The history of the Baroda State as such dates from the break-up of the Mughal Empire The first Maratha invasion of Gujarat took place in 1705, and in this and later incursions Pilaji Gaikwar, who may be considered as the founder of the present ruling family, greatly distinguished himself Songhad was the Head-quarters till 1766. Since 1723 Pilaji regularly levied tribute in Gujarat His son Damaji finally captured Baroda in 1734, since when it has always been in the hands of the Gaikwars; but Mughal authority in Gujarat did not end until the fall of Ahmedabad, in 1753, after which the country was divided between the Gaikwar and the Peshwa In spite of the fact that Damaji was one of the Maratha chiefs defeated at Panipat by Ahmed Shah, he continued to add to his territory. He died in 1768 leaving the succession in dispute between two rival sons He was succeeded in turn by his sons Sayaji Rao I, Fattesing Rao, Manaji Rao and Govind Rao The last died in 1800, and was succeeded by Anand Rao A period of political instability ensued which was ended in 1802 by the help of the Bombay Government, who established the authority of Anand Rao at Baroda By a treaty of 1805 between the British Government and Baroda, it was arranged *inter alia* that the foreign policy of the State should be conducted by the British, and that all differences with the Peshwa should be similarly arranged Baroda was a staunch ally of the British during the wars with Baji Rao Peshwa, the Pindari hordes and Holkar. But from 1820 to 1841, when Sayaji Rao I was Gaikwar differences arose between the two Governments, which were settled by Sir James Carnac, Governor of Bombay in 1841 Ganpat Rao succeeded Sayaji Rao in 1847 During his rule, the political supervision of Baroda was transferred to the Supreme Government His successor, Khande Rao, who ascended the *Gadi* in 1856, introduced many reforms He stood by the British in the Mutiny. He was succeeded by his brother Malhar Rao, in 1870 Malhar Rao was deposed in 1875 for "notorious misconduct" and "gross misgovernment," but the suggestion that he had instigated the attempt to poison Col. Phayre, the Resident, was not proved, Sayaji Rao III a boy of 13 years of age who was

descended from a distant branch of the family, was adopted as heir of Khande Rao in 1875 and is the present Gaikwar. He was invested with full powers in 1881

ADMINISTRATION—An executive council, consisting of the principal officers of the State, carries on the administration, subject to the control of the Maharaja, who is assisted by a Dewan and other officers A number of departments have been formed, which are presided over by officials corresponding to those in British India The State is divided into four *prants* each of which is subdivided into *Mahals* and *Peta Mahals* of which there are in all 42 Attempts have for some years been made to restore village autonomy, and village panchayats have been formed which form part of a scheme for local self-government There is a Legislative Department, under a Legal Remembrancer, which is responsible for making laws There is also a Legislative Council, consisting of nominated and elected members A High Court at Baroda possesses jurisdiction over the whole of the State and hears all final appeals from the decisions of the High Court, appeals lie in certain cases, to the Maharaja, who decides them on the advice of the Huzur Nyaya Sabha The State Army consists of 5,084 Regular forces and 3,806 Irregular forces

FINANCE—In 1912-13, the total receipts of the State were Rs 221 lakhs, and the disbursements Rs 180 lakhs The principal revenue heads are Land Revenue, Rs 116 lakhs; Abkari, Rs. 19 lakhs, Opium, Rs 40 lakhs, Railways, Rs 11 lakhs; Interest, Rs 6 lakhs, Tribute from other States, Rs. 5 lakhs. British currency was introduced in 1901

PRODUCTION AND INDUSTRY—Agriculture and pasture support 63 per cent of the people. The principal crops are rice, wheat, gram, castor-oil, rapeseed, poppy, cotton, san-hemp tobacco, sugarcane, maize, and garden crops The greater part of the State is held on *ryotwari* tenure The State contains few minerals, except sandstone, which is quarried at Songir, and a variety of other stones which are little worked. There are 30 industrial or commercial concerns in the State registered under the State Companies' Act. There are five Agricultural Banks and 124 Co-operative Credit Societies in Baroda

COMMUNICATIONS—The B. B & C I Railway crosses part of the Navsari and Baroda *prants*, and the Rajputana-Malwa Railway passes through the Kadi *prant*. A system of branch lines has been built by the Baroda Durbar in all the four *prants*, in addition to which the Tapti Valley Railway and the Baroda-Godhra Chord line (B B & C. I) pass through the State The Railways constructed by the State are 369 miles in length and 152 miles are under construction Good roads are not numerous

EDUCATION—The Education Department controls 3,045 institutions of different kinds, in 54 of which English is taught The Baroda College is affiliated to the Bombay University. There are a number of high schools, technical schools, and schools for special classes, such as the jungle tribes and unclean castes The State is "in a way pledged to the policy of free and compulsory primary education" It maintains a system of rural and travelling libraries Ten per cent of the population is returned in the census as literate Total expense on Education is about Rs 16 lakhs

CAPITAL CITY—Baroda City with the cantonment has a population of 99,345 It contains a public park, a number of fine public buildings, palaces and offices, and it is crowded with Hindu temples The cantonment is to the North-west of the city and is garrisoned by an infantry battalion of the Indian Army An Improvement Trust has been formed to work in Baroda City and has set itself an ambitious programme

RULER—His Highness Farzand-i-Khas-i-Dowlat-i-Inglishia Maharaja Sir Sayaji Rao Gaekwar Sena Khas Khel, Samsher Bahadur, G C S I, Maharaja of Baroda

Resident,—W E Jardine, C I E, I C S (*Offg*).
Dewan,—V. P Madhao Rao, C I E (*Retired*).

KASHMIR.

Kashmir (known to Indians as Jammu) lies to the east of the Indus and to the west of the Ravi It is a mountainous country with just a strip of level land along the Punjab frontier, and intersected by valleys of which many are of surpassing beauty and grandeur It may be divided physically into two areas the north-eastern comprising the area drained by the Indus with its tributaries, and the south-western, including the country drained by the Jhelum, the Kishanganga and the Chenab The dividing line between those two areas is the great central mountain range. The area of the State is 84,432 square miles, and the population 3 158,126.

HISTORY—Various poets have left more or less trustworthy records of the history of the valley down to 1586, when it was conquered by Akbar Srinagar, the capital, had by then been long established, though many of the fine buildings erected by early Hindu rulers had been destroyed by the Mahomedan kings who first appeared in the 12th century In the reign of Sikandar the population became almost entirely Mahomedan Akbar visited the valley three times Jehangir did much to beautify it; but after Aurangzebe there was a period of disorder and decay, and by the middle of the eighteenth century the *Subah* of Kashmir was practically independent of Delhi. Thereafter it experienced the oppression of Afghan rule until it was rescued, in 1819, by an army sent by Ranjit Singh. Sikh rule was less oppressive than that of the Afghans The history of the State as at present constituted is practically that of one man, a Dogra Rajput, Gulab Singh of Jammu. For his services to the Sikhs this remarkable man had been made Raja of Jammu in 1820, and he added largely to his territory by conquest. He held aloof from the war between the British and the Sikhs, only appearing as mediator after the battle of Sobraon (1846) when the British made over to him for Rs 75 lakhs the present territories of the State

He had to fight for the valley and subsequently lost part of his State, Gilgit, over which the successors had at a heavy cost to reassert their claims. His son Ranbir Singh, a model Hindu, ruled from 1857 to 1885, when he was succeeded by his eldest son Major-General H H Maharaja Sir Partab Singh, G C S I , G C I E.

ADMINISTRATION —For some years the Maharaja took no part in the administration of the State, but since 1905 he has exercised full powers, assisted by a Chief Minister—Rai Saheb Diwan Amar Nath, C I E —a Home Minister, and a Revenue Minister The four chief executive officers are the Governors of Jammu and of Kashmir, the Wazir Wazarat of Gilgit and the Wazir Wazarat of Ladakh The real administrative power lies with the petty subordinate officers (tahsildars) who exercise revenue, civil, and criminal jurisdiction with regular stages of appeal but distance and the absence of easy communications are practical checks on the use or abuse of appeals The British Resident has his headquarters at Srinagar, there is also a Political Agent at Gilgit responsible to the Government of India for the administration of the outlying petty States, and a British Officer is stationed at Leh to assist in the supervision of Central Asian trade In the Dogras the State has splendid materials for an Army, which consists of 6,961 troops, of whom 3,370 are maintained as Imperial Service troops.

FINANCE —The financial position of the State is strong, and it has more than 46 lakhs invested in Government of India securities The total revenue last year was 93 lakhs, the chief items being land revenue, forests, customs and octroi

PRODUCTION AND INDUSTRY —The population is pre-eminently agricultural and pastoral The system of land tenure has been described as "ryotwari in ruins," great complexity existing owing to the fact that there is no local law of rent and revenue The principal food crop is rice, maize, cotton, saffron, tobacco, hops (autumn crops) and wheat, barley, poppy, beans (spring crops) are also grown Sheep are largely kept The State forests are extensive and valuable Exploration for minerals has not been attempted on sound principles Vast fields of friable, dusty coal have been found Gold has been found at Gulmarg and Sapphires in Padar The industries of manufacture are chiefly connected with sericulture, (the silk filature at Srinagar, the largest in the world, was destroyed by fire in July, 1912) oil-pressing and the manufacture of wine. The woollen cloth, shawls, and wood carving of the State are famous

COMMUNICATIONS —The State contains only 16 miles of railway, on the Tawi-Suchetgarh branch of the N -W Railway The Jhelum is the only navigable river. At present there is much activity in improving road communications, but in many parts of the country wheeled traffic is unknown

PUBLIC WORKS —In 1904, a flood spill channel above Srinagar was constructed with a view to minimising the constant risk of floods, and it was hoped that the danger would be still further reduced by the carrying out of a scheme for lowering a part of the bed of the Jhelum, which has since been taken in hand Good progress has been made with irrigation; but the most important schemes of recent years have been those for an electrical power station on the Jhelum River, and for a Railway into Kashmir It was proposed to supply from this power station electrical energy for various State schemes (including the Jhelum dredging scheme) and for private enterprise and possibly for working the proposed Kashmir Railway The works were completed about 1907, and the scheme according to the latest reports is working very satisfactorily The proposal for a railway to Kashmir had been under discussion for many years, the nature of the country making the question of route a difficult one In 1905, a decision was taken in favour of a line from Srinagar *via* the Jhelum Valley and Abbottabad, but the project has remained in abeyance pending the consideration of further schemes, among which are proposals for lines of ropeway from Jammu to Srinagar and from Srinagar to the western borders *via* the Jhelum Valley

EDUCATION —In educational matters Kashmir is the most backward tract in the whole of India In the State as a whole only 2 in every 100 persons can read and write The number of educational institutions has increased from 45 in 1891 to 379 in 1911

Resident H. V Cobb

Political Agent, at Gilgit, Major A. D Macpherson

BALUCHISTAN AGENCY.

In this Agency are included the Native States of Kalat, Kharan and Las Bela The Khan of Kalat is head of the Baluchistan tribal chiefs whose territories are comprised under the following divisions —Jhalwan, Sarawan, Makran, Kachhi, Domki-Kaheri-Umrani and Nasirabad Niabat. These districts form what may be termed Kalati Baluchistan, and occupy an area of 71,593 square miles. The inhabitants of the country are either Brahuis or Baluchis, both being Mahomedans of the Sunni sect The country is sparsely populated, the total number being about 470,336. It derives its chief importance from its position with regard to Afghanistan on the north-western frontier of British India. The relations of Kalat with the British Government are governed by two treaties, of 1854 and 1876, by the latter of which the Khan agreed to act in subordinate co-operation with the British Government. There are, however, agreements with Kalat in connection with the construction of the Indo-European telegraph, the cession of jurisdiction on the railways and in the Bolan Pass, and the permanent lease of Quetta, Nushki and Nasirabad The Khan is assisted in the administration of the State by a Political Adviser lent by the British Government. The Governor-General's Agent in Baluchistan conducts the relations between the Government of India and the Khan, and exercises his general political supervision over the district. The revenue of the State is about Rs. 7,65,000. The present Khan is, His Highness Amir Sir Mahumud Khan of Kalat, G.C.I.E. He was born in 1864

Kharan extends in a westerly and south-

westerly direction from near Nushki and Kalat to the Persian border Its area is 14,210 square miles, it has a population of 19,610 and an annual average revenue of about Rs 90,000

The Chief of Kharan, Sardar Sir Nauroz Khan, KCIE, died in June 1909, and was succeeded by his son, Sardar Yakub Khan The attitude of the new chief towards Government, and his administration generally were unsatisfactory In 1911, he was murdered by the sepoys of his guard Some trouble was caused by an uncle of the murdered chief, who declared himself Chief, but the Government of India finally recognised the succession of a son, Mir Habibulla Khan, and approved measures for the administration of the State during his minority

Las Bela is a small State occupying the valley and delta of the Purali river, about 50 miles west of the Sind boundary Area 6,442 square miles, population 56,109, chiefly Sumri Mahomedans, estimated revenue about Rs 2,25,000 The Chief of Las Bela, known as the Jam, is bound by agreement with the British Government to conduct the administration of his State in accordance with the advice of the Governor-General's Agent This control is exercised through the Political Agent in Kalat Sentences of death must be referred for confirmation The Jam also employs an approved Wazir, to whose advice he is subject and who generally assists him in the transaction of State business

Agent to the Governor-General for Baluchistan Lieut.-Col C Archer

Political Agent, Kalat and Bolan Pass Major A B Dew

RAJPUTANA AGENCY.

Rajputana is the name of a great territorial circle with a total area of about 130,462 square miles, which includes 18 Native States, two chiefships, and the small British province of Ajmer-Merwara It is bounded on the west by Sind, on the north-west by the Punjab State of Bahawalpur, on the north and north-east by the Punjab, on the east by the United Provinces and Gwalior, while the southern boundary runs across the central region of India in an irregular zig-zag line Of the Native States 17 are Rajput, 2 (Bharatpur and Dholpur) are Jat, and one (Tonk) is Mahomedan The chief administrative control of the British district is vested *ex-officio* in the political officer, who holds the post of Governor-General's Agent for the supervision of the relations between the several Native States of Rajputana and the Government of India. For administrative purposes they are divided into the following groups —Alwar Agency, Bikanir Agency, Eastern Rajputana Agency, 3 States (Bharatpur, Dholpur, Karauli), Haraoti and Tonk Agency, 3 States (principal States Bundi and Tonk), Jaipur Residency, 3 States (principal State, Jaipur), Kotah and Jhalawar Agency, 2 States, Mewar Residency, Southern Rajputana States Agency, 4 States (principal State, Banswara), Western Rajputana States Agency, 3 States (principal States, Marwar and Sirohi)

The Aravalli Hills intersect the country almost from end to end The tract to the north-west of the hills is, as a whole, sandy, ill-watered and unproductive, but improves gradually from being a mere desert in the far west to comparatively fertile lands to the north-east To the south-east on the Aravali Hills lie higher and more fertile regions which contain extensive hill ranges and which are traversed by considerable rivers

COMMUNICATIONS —The total length of railways in Rajputana is 1,576 miles, of which 739 are the property of the British Government The Rajputana-Malwa (Government) runs from Ahmedabad to Bandikui and from there branches to Agra and Delhi Of the Native State railways the most important is the Jodhpur-Bikaner line from Marwar Junction to Hyderabad (Sind) and to Bikaner.

INHABITANTS.—Over 50 per cent of the population are engaged in some form of agriculture, about 20 per cent. of the total population are maintained by the preparation and supply of material substances, personal and domestic service provides employment for about 5 per cent and commerce for 2½ per cent of the population The principal language is Rajasthani Among castes and tribes, the most numerous are the Brahmans, Jats, Mahajans, Chamars, Rajputs, Minas, Gujars, Bhils, Mahs, and Balais The Rajputs are, of course, the aristocracy of the country, and as such hold the land to a very large extent, either as receivers of rent or as cultivators By reason of their position as integral families of pure descent, as a landed nobility, and as the kinsmen of ruling chiefs, they are also the aristocracy of India, and their social prestige may be measured by observing that there is hardly a tribe or clan (as distinguished from a caste) in India which does not claim descent from, or irregular connection with, one of these Rajput stocks

The population and area of the States are as follows —

Name of State	Area in square miles	Population in 1911
Mewar Residency—		
Udaipur	12,953	1,293,776
Banswara	1,946	165,463
Dungarpur	1,447	159,192
Partabgarh	886	62,704
Western States Residency—		
Jodhpur	34,963	2,057,553
Jaisalmer	16,062	88,311
Sirohi	1,964	189,127
Jaipur Residency—		
Jaipur	15,579	2,636,674
Kishangarh	858	87,191
Lawa	19	2,564
Haraoti-Tonk Agency—		
Bundi	2,220	218,730
Tonk	1,114	303,181
Shahpura	405	47,397
Eastern States Agency—		
Bharatpur	1,982	626,665
Dholpur	1,155	270,973
Karauli	1,242	156,786
Kotah-Jhalawar Agency—		
Kotah	5,684	639,089
Jhalawar	810	96,271
Bikaner	23,311	700,983
Alwar	3,141	791,688

Udaipur State, (also called Merwar) was founded in about 1559 The capital city is Udaipur, which is beautifully situated on the slope of a low ridge, the summit of which is crowned by the Maharajah's palace, and to the north and west, houses extend to the banks of a beautiful piece of water known as the Pichola Lake in the middle of which stand two island palaces It is situated near the terminus of the Udaipur-Chitor Railway, 697 miles north of Bombay The present ruler is His Highness Maharajadhiraja Maharana Sir Fateh Singh Bahadur, G S S I, G C I E, who was born in 1849 and succeeded in 1884 He is the head of the Seesodia Rajputs The administration is carried on by the Maharana, assisted by two ministerial officers who, with a staff of clerks, form the chief executive department in the State The revenue and expenditure of the State are now about 26½ and 26 lakhs a year respectively Udaipur is rich in minerals which are little worked Its archaeological remains are numerous, and stone inscriptions dating from the third century have been found

Banswara State, the southernmost in Rajputana, became a separate State about 1527 Towards the end of the eighteenth century Banswara became more or less subject to the Marathas, and paid tribute to the Raja of Dhar In 1812 the Maharawal offered to become tributary to the British Government on condition of the expulsion of the Marathas, but no definite relations were formed with him till the end of 1818 The present ruler is His Highness Maharawal Sri Prithi Singh Bahadur, who was born in 1888 and succeeded his father in 1913 The normal revenue is about 4 lakhs and the expenditure about 3 lakhs

Dongarpur State, with Banswara, formerly comprised the country called the Pagar It was invaded by the Mahrattas in 1818 As in other States, inhabited by hill tribes, it became necessary at an early period of British supremacy to employ a military force to coerce the Bhils The State represents the *Gadhi* of the eldest branch of the Sisodiyas and dates its separate existence from about the close of the 12th Century, when Mahup, the rightful heir to the Chittor Throne migrated to these parts The present Chief is His Highness Rai Rayan Maharawal Shri Sir Bijeysinghji Saheb Bahadur, K C I E, born in 1887 and succeeded in 1898 During his minority the State was administered by a Political Officer, a chief Executive Officer and a Consultative Council of two No railway line crosses the territory, the nearest railway station, Udaipur, being 60 miles distant Revenue about 3 lakhs expenditure 1.4 lakhs

Partabgarh State, formerly called the Kanthal, was founded in the sixteenth century by a descendant of Rana Mokal of Mewar The town of Partabgarh was founded in 1698 by Partab Singh In the time of Jaswant Singh (1775-1844), the country was overrun by the Marathas, and the Maharawal only saved his State by agreeing to pay Holkar a tribute of *Salim Shahi* Rs 72,720, in lieu of Rs 15,000 formerly paid to Delhi The first connexion of the State with the British Government was formed in 1804, but the treaty then entered into was subsequently cancelled by Lord Cornwallis, and a fresh treaty, by which the State was taken under protection, was made in 1818 The tribute to Holkar is paid through the British Government, and in 1904 was converted to Rs 36,360 British currency The present ruler is His Highness Maharawal Sir Raghunath Singh Bahadur, K C I E, who was born in 1859 and succeeded in 1890 The State is governed by the Maharawal with the help of a Minister, and, in judicial matters, of a Committee of eleven members styled the Raj Sabha Revenue 1·7 lakhs expenditure 1·4 lakhs The financial administration is now under the direct supervision of the State

Jodhpur State, the largest in Rajputana, also called Marwar, consists largely of desolate, sandy country The Maharaja of Jodhpur is the head of the Rathor Clan of Rajputs and claims descent from Rama the deified king of Ajodhya The earliest known king of the clan lived in the sixth century from which time onwards their history is fairly clear The foundation of Jodhpur dates from about 1212, and the foundations of Jodhpur City were laid in 1459 by Rao Jodha The State came under British protection in 1818 In 1839 the British Government had to interfere owing to misrule, and the same thing occurred again in 1868 Jaswant Singh succeeded in 1873 and reformed the State His son Sardar Singh was invested with powers in 1898, the minority rule having been carried on by his uncle Maharaja Partab Singh The State is governed by the Maharaja, two ministers, and a Consultative Council Revenue 56 lakhs expenditure 36 lakhs

Jaisalmer State is almost entirely a sandy waste forming part of the great Indian Desert The Chiefs of Jaisalmer belong to the Jadon clan and claim descent from Krishna Jaisalmer City was founded in 1156, and the State was taken under British protection in 1818 In 1844, after the British conquest of Sind the forts of Shahgarh, Garsia, and Ghotaru, which had formerly belonged to Jaisalmer, were restored to the State The present Chief is His Highness Maharajadhiraja Maharawal Shri Jawahar-singhji Bahadur Revenue about four lakhs

Sirohi State is much broken up by hills of which the main feature is Mount Abu, 5,650 feet The Chiefs of Sirohi are Deora Rajputs, a branch of the famous Chauhan clan which furnished the last Hindu kings of Delhi The present capital of Sirohi was built in 1425 The city suffered in the eighteenth century from the wars with Jodhpur and the depredations of wild Mina tribes Jodhpur claimed suzerainty over Sirohi but this was disallowed and British protection was granted in 1853 The present ruler is His Highness Maharajah Dhiraj Maharao Sir Kesri Singh Bahadur, G C I E, K C I E. The State is ruled by the Maharao with the assistance of a Diwan and other officials Revenue about 7 lakhs, expenditure 6 lakhs

Jaipur State is the fourth largest in Rajputana It consists, for the most part, of level and open country The Maharaja of Jaipur is the head of the Kachwaha clan of Rajputs, which claims descent from Kusa, the son of Rama, king of Ajodhya, and the hero of the famous epic poem the Ramayana The dynasty in Eastern Rajputana dates from about the middle of the twelfth century, when Amber was made the capital of a small State. The Chiefs of that State acquired fame as generals

under the Mughals in later centuries, one of the best known being Sawai Jai Singh in the eighteenth century who was remarkable for his scientific knowledge and skill. It was he who moved the capital from Amber and built the present city of Jaipur and elevated the State above the principalities around On his death a part of the State was annexed by the Jats of Bharatpur and internal disputes brought Jaipur to great confusion British protection was extended to Jaipur in 1818, but the State continued to be disturbed and a Council of Regency was appointed, which governed up to 1851, when Maharaja Ram Singh assumed full powers He nominated as his successor Kaim Singh who succeeded in 1880, under the name of Sawai Madho Singh II, and is the present ruler He was born in 1861, and, in consideration of his youth, the administration was at first conducted by a Council under the joint presidency of the Maharaja and the Political Agent He was invested with full powers in 1882 In 1887, his salute was raised from 17 to 19 guns as a personal distinction, followed in 1896 by two additional guns In 1888 he was created a G C S I In 1901 a G C I E, and in 1903 a G C V O In 1904 he was made honorary colonel of the 13th Rajputs, and in 1911 a Major General In 1908 he was presented with the Honorary degree of LL.D of Edinburgh University and in 1912, made a Donat of the Order of the Hospital of St John of Jurusalem Among important events of His Highness's rule may be mentioned the raising of the Imperial Service Transport Corps in 1889-90, the construction of numerous irrigation works, hospitals and dispensaries, and the gift of 20 lakhs as an endowment to the Indian People's Famine Relief Trust Jaipur City is the largest town in Rajputana and is one of the few eastern cities laid out on a regular plan It contains, in addition to the Maharaja's Palace, many fine buildings The administration of the State is carried on by the Maharaja assisted by a Council of ten members The military force consists of an Imperial Service Transport Corps which has twice served in Frontier campaigns and about 5,000 infantry, 700 cavalry and 860 artillerymen. The normal revenue is about 65 lakhs, expenditure about 59 lakhs

Kishangarh State is in the centre of Rajputana and consists practically of two narrow strips of land separated from each other, the northern mostly sandy, the southern generally flat and fertile The Chiefs of Kishangarh belong to the Rathor clan of Rajputs and are descended from Raja Udai Singh of Jodhpur, whose second son founded the town of Kishangarh in 1611 The State was brought under British protection in 1818 After various disputes necessitating British mediation, the State entered into good hands and was well ruled during the latter part of the nineteenth century The present ruler is Major His Highness Maharajadhiraja Sir Madan Singh Bahadur, K C S I, K C I E Umdai Rajhai-Buland Makan, who was born in 1884 and was invested with powers in 1905 He administers the State with the help of a Council of three members Revenue 5 7 lakhs Expenditure 4.6 lakhs

Lawa State, or takurat, of Rajputana is a separate chiefship under the protection of the British Government and independent of any Native States. It formerly belonged to Jaipur and then became part of the State of Tonk. In 1867, the Nawab of Tonk murdered the Thakur's uncle and his followers, and Lawa was then raised to its present State. The Thakurs of Lawa belonged to the Naruka sept of the Kachwaha Rajputs. The present Thakur, Mangal Singh, was born in 1873, and succeeded to the estate in May, 1892. Revenue about Rs 11,000

Bundi State is a mountainous territory in the south-east of Rajputana The Chief of Bundi is the head of the Hara sept of the great clan of Chauhan Rajputs and the country occupied by this sept has for the last five or six centuries been known as Haraoti The State was founded in the early part of the fourteenth century and constant feuds with Mewar and Malwa followed It threw in its lot with the Mahomedan emperors in the sixteenth century In later times it was constantly ravaged by the Marathas and Pindaries and came under British protection in 1818 at which time it was paying tribute to Holkar The present ruler of this State—which is administered by the Maharao Raja and a Council of 5 in an old-fashioned but popular manner—is His Highness Maharao Raja Sir Raghubir Singh Bahadur, G C I E, G C V O, K C S I He was born in 1869 and succeeded in 1889 Revenue about 6 lakhs Expenditure 5 6 lakhs

Tonk State—Partly in Rajputana and partly in Central India, consists of six districts separated from each other The ruling family belongs to the Pathans of Afghans of the Buner tribe The founder or the dynasty was Amir Khan, a General in the army of Holkar at the end of the eighteenth century He received a conditional guarantee of the lands he held under the Afghans from Holkar in 1817 His son was deposed in 1867 owing to misrule The present ruler of the State is His Highness Nawab Sir Muhammad Ibrahim Ali Khan Bahadur, G C I E The administration is conducted by the Nawab and a Council of four members but the Political Agent takes an active part in the guidance of the administration and the finances—owing to the indebtedness of the State. Revenue 11 lakhs Expenditure 9 lakhs

Shahpura Chiefship is a small pastoral State The ruling family belongs to the Secsodia clan of Rajputs. The Chiefship came into existence about 1629, being a grant from the Emperor Shah Jahan to one Sujan Singh. The present Chief is Sir Nahar Singh, K C I E who succeeded by adoption in 1870 and received full powers in 1876 In addition to holding Shahpura by grant from the British Goervnment the Raja Dhiraj possesses the estate of Kachhola in Udaipur for which he pays tribute and does formal service as a great noble of that State Revenue 3 lakhs Expenditure 2.6 lakhs.

Bharatpur State consists largely of an immense alluvial plain, watered by the Banganga and other rivers It passed into the hands of Mahomed Ghori at the end of the twelfth century and for 500 years was held by whatever dynasty ruled in Delhi. The present ruling family are Jats, of the Sinsinwar clan, who trace their pedigree to the eleventh century Bharatpur sided with the Marathas in the war of 1804 and was unsuccessfully besieged by Lord Lake Owing to the appearance of an usurper operations against it were resumed in 1825, and in the following year the capital was captured by Lord Combermere. The present chief is a

minor, Maharaja Sawai Kishna Singh Bahadur, who was born in 1899 and succeeded in the following year, his father, Ram Singh, having been deposed for the murder of one of his servants The administration is carried on by a Council of four members Revenue 31 lakhs Expenditure 28 lakhs

Dholpur State, the easternmost State in Rajputana, has changed hands an unusual number of times It was occupied by the British in 1803 and restored to the Gwalior Chief who formerly owned it, but by a fresh arrangement of 1805 it was constituted a State with other districts and made over to Maharaj Rana Kirat Singh, in exchange for his territory of Gohad which was given up to Sindhia The ruling family are Jats of the Bamraolia clan, the latter name being derived from a place near Agra where the family held land in the twelfth century The present chief—who is assisted in the administration by three Ministers—is H H Maharaj Rana Udaibhan Singh Lokinder Bahadur He was born in 1893 and succeeded in 1911 Revenue 15 lakhs Expenditure 12 lakhs

Karauli State is a hilly tract in Eastern Rajputana, of which the ruler is the head of the Jadon clan of Rajputs who claim descent from Krishna and were at one time very powerful On the decline of the Mughal power the State was subjugated by the Marathas, but by the treaty of 1817 it was taken under British protection Its subsequent history is of interest chiefly for a famous adoption case, in 1852 The present ruler is H H Maharaja Sir Banwar Pal Deo, G C I E, who was born in 1864, installed in 1889, and invested with powers in 1889 He is assisted by a council of five members Revenue 5 lakhs Expenditure 4 4 lakhs

Kotah State belongs to the Hara sept of the clan of Chauhan Rajputs, and the early history of their house is, up to the 17th century, identical with that of the Bundi family from which they are an offshoot Its existence as a separate State dates from 1625 It came under British protection in 1817, but a dispute as to the succession made armed intervention necessary in 1821 when the Maharao was defeated at the battle of Mangrol This dispute (due to the fact that an arrangement had been made by which one person—Zalim Singh—was recognized as the titular chief and another—Umeed Singh—as the guaranteed actual ruler) broke out again in the thirties when it was decided with the consent of the Chief of Kotah to dismember the State and create a new principality of Jhalawar as a separate provision for the descendants of Zalim Singh. The present ruler is H. H Maharao Sir Umed Singh Bahadur, G C S I, G C I E, who was born in 1873 and invested with full powers in 1896 In administration he is assisted by a Diwan. The most important event of his rule has been the restoration, on the deposition of the late chief of the Jhalawar State, of 15 out of the 17 districts which had been ceded in 1838 to form that principality Revenue 31 lakhs Expenditure 26 lakhs.

Jhalwar State (for history see under Kotah) consists of two separate tracts in the south-east of Rajputana The ruling family belongs to the Jhala clan of Rajputs. The last ruler was deposed for misgovernment in 1896, part of the State was reassigned to Kotah, and Kunwar Bhawani Singh, son of Thakur Chhatarsal of Fatehpur, was selected by Government to be the Chief of the new State He was born in 1874 and was created a K C S I. in 1908 He is assisted in administration by a Council, and has done much to extend education in the State Revenue 4 lakhs

Bikaner State, the second largest in Rajputana, consists largely of sandy and ill-watered land It was founded by Bika, a Rathor Rajput, the sixth son of a Chief of Marwar, in the 15th century. Rai Singh, the first Raja, was one of Akbar's most distinguished generals, and built the main fort of Bikaner. Throughout the 18th century there was constant fighting between Bikaner and Jodhpur In 1818 the Maharaja invited the assistance of British troops to quell a rebellion, and subsequently a special force had to be raised to deal with the dacoits on the southern borders of the State The Thakurs of the State continued to give trouble up to the eighties The present chief is Colonel H H Maharajah Sir Ganga Singh Bahadur, G C S I, G C I E, A D C to the King, who was born in 1880 and invested with full powers in 1898 He raised an Imperial Service Camel Corps which served in China and Somaliland, and His Highness served in the former campaign himself, being mentioned in despatches In 1900 he was awarded the first class Kaisar-i-Hind medal for the active part he took in relieving the great famine of 1899-1900 He is an honorary L L D of Cambridge In administration His Highness is assisted by five secretaries, to each of whom are alloted certain departments, and there is a council of five members which is primarily a judicial body, but is consulted in matters of importance. The normal revenue is Rs 26 lakhs and the expenditure 21 lakhs There are no debts. A coal mine is worked at Palana, 14 miles south of the capital

Alwar State is a hilly tract of land in the East of Rajputana. Its chiefs belong to the Lalawat branch of the Naruka Rajputs, an offshoot from the Kachwaha Rajputs, of whom the Maharaja of Jaipur is the head. The State was founded by Pratab Singh, who before his death in 1791 had secured possession of large portions of the Jaipur State. His successor sent a force to co-operate with Lord Lake in the war of 1803 and an alliance was concluded with him in that year, when the boundaries of the State as now recognised were fixed Various rebellions and disputes about succession mark the history of the State during the earlier part of the nineteenth century The present chief, H. H Maharaja Sir Sawai Jai Singh Bahadur, K C S I, K C I E, who was born in 1882, succeeded his father in 1892 and was invested with powers in 1903. He carries on the administration with the assistance of a Council of three members and various heads of departments The normal revenue and expenditure are about Rs 32 lakhs a year. The State maintains an imperial service regiment of cavalry, another of infantry, and an irregular force. The late Maharaja was the first chief in Rajputana to offer (in 1888) aid in the defence of the Empire The capital is Alwar on the Rajputana-Malwa Railway, 98 miles south-west of Delhi

RAJPUTANA
Agent to Governor-General.—Sir E G Colvin.
MEWAR
Resident—Lieut -Col J. L Kaye.
JAIPUR.
Resident—Lieut -Col W. C R Stratton
EASTERN RAJPUTANA STATES
Political Agent—Lieut -Col A. D'A G Bannerman

WESTERN RAJPUTANA STATES.
Resident—Lieut -Col C J Windham
HARAOTI AND TONK
Political Agent—Lieut H B Peacock.
KOTA AND JHALAWAR.
Political Agent.—Major H B Peacock

CENTRAL INDIA AGENCY.

Central India is the name given to the country occupied by the Native States grouped together under the supervision of the Political Officer in charge of the Central India Agency These States lie between 21° 24′ and 26° 32′ N lat and between 74° 0′ and 83° 0′ E long The British districts of Jhansi and Lalitpur divide the agency into two main divisions—Bundelkhand and Baghelkhand lying to the east, and Central India proper to the west The total area covered is 78,772 square miles, and the population (1911) amounts to 9,3,980 The great majority of the people are Hindus The principal States are eight in number—Gwalior, Indore, Bhopal, Rewa, Dhar, Jaora, Datia and Orchal of which two, Bhopal and Jaora, are Mahomedan and the rest are Hindu Besides these there are a multitude of petty States held by their rulers under the immediate guarantee of the British Government, but having feudal relations with one or other of the larger States The total number of States amounts to 153 For administrative purposes they are divided into the following groups Baghelkhand Agency, 12 States (principal State Rewa) Bhopal Agency, 19 States (principal Bhopal) State Bhopawar Agency, 21 States (principal State Dhar), Bundelkhand Agency, 22 States (principal States, Datia and Orcha), Gwalior Agency, 32 States (principal State, Gwalior), Indore Residency, 9 States (principal State, Indore), Malwa Agency, 38 States (principal State, Jaora) The Agency may be divided into three natural divisions, the plateau, lowlying, and hilly The plateau tract includes the Malwa plateau, the Highland tract stretching from the great wall of the Vindhyas to Marwar, the land of open rolling plains . The lowlying tract embraces Northern Gwalior and stretches across into Bundelkhand and Baghelkhand up to the Kaimur Range The hilly tract lies along the ranges of the Vindhyas and the Satpuras There agriculture is little practised, the inhabitants being mostly members of the wild tribes The territories of the different States are much intermingled, and their political relations with the Government of India and each other are very varied Eleven Chiefs have direct treaty engagements with the British Government

The following list gives the approximate size population and revenue of the eight principal States above mentioned —

Name	Area in square miles	Population	Revenue
			Rs lakhs
Gwalior .	25,133	3,102 279	140
Indore	9,506	1,007,856	70
Bhopal	6,902	730 383	30
Rewah	13,000	1,514,843	53
Dhar .	1,783	154,070	9
Jaora ..	568	75,951	8
Datia .	911	154,603	9
Orcha .	2,079	330,032	11

Gwalior.—The house of Sindhia traces its descent to a family of which one branch held the hereditary post of patel in a village near Satara The head of the family received a patent of rank from Aurangzebe The founder of the Gwalior House was Ranoji Sindhia who is said to have been a personal attendant on the Peshwa Baji Rao In 1726 together with Malhar Rao Holkar, the founder of the house of Indore, he was authorised by the Peshwa to collect revenues and he fixed his headquarters at the ancient city of Ujjain, which became the capital of the Sindhia dominions Gwalior subsequently played a leading part in shaping the history of India The reverses which Sindhia's troops met with at the hands of the British in 1778 and 1780 led to the treaty of Salbai (1782), which made the British arbiters in India and recognised Sindhia as an independent Chief and not as a vassal under the Peshwa. Subsequently Sindhia's military power, developed by the French Commander DeBoigne, was completely destroyed by the British victories of Ahmednagar, Assaye, Asargarh and Laswari.

The present ruler is His Highness Mahadhao Rao Sindhia, GCVO, GCSI, ADC. to the King He succeeded in 1886 and obtained powers in 1894 In 1901 he went to China during the war, he holds the rank of honorary Colonel of the British Army and the honorary degree of LLD, Cambridge The administration is controlled by the Maharaja assisted by the Sadr Board of seven members

The northern part of the State is traversed by the G I P. Railway and two branches run from Bhopal to Ujjain and from Bina to Baran. The Gwalior Light Railway runs for 185 miles from Gwalior to Bhind The main industries are connected with cotton which is ginned and pressed in factories at many places. The State maintains three regiments of Imperial Service Cavalry, two battalions of Imperial Service Infantry and a transport corps. Lashkar, the

capital city, is two miles to the south of the ancient city and the fort of Gwalior Annual expenditure 133 lakhs.

Indore.—The Holkars of Indore belong to the shepherd class, the founder of the house, Malhar Rao Holkar, being born in 1693 His soldierly qualities brought him to the front under the Peshwa, who took him into his service and employed him in his conquests When the Maratha power was broken at the battle of Panipat, in 1761, Malhar Rao had acquired vast territories stretching from the Deccan to the Ganges He was succeeded by a lunatic son, who again was succeeded by his mother, Ahlya Bai, whose administration is still looked upon as that of a model ruler Disputes as to the succession and other causes weakened this powerful State, and, when it assumed a hostile attitude on the outbreak of war in 1817 between the British and the Peshwa, Holkar was compelled to come to terms The Treaty of Mandaser in 1818 still governs the regulations existing between the State and the British Government In the mutiny of 1857 when Holkar was unable to control his troops he personally gave every possible assistance to the authorities at Mhow

In 1903 Sivaji Rao abdicated in favour of his son, His Highness Maharaja Tukoji Rao Holkar, the present ruler, who was born in 1890, and was formally invested with ruling powers in November 1911 In the administration His Highness is assisted by his Chief Minister and a Council of 5 Ministers The State Army consists of 519 Imperial Service Troops and 1,629 State forces The capital is Indore City on the Ajmer-Khandwa Section of the Rajputana-Malwa Railway The ordinary revenue for 1914-15 is estimated at Rs 85,49,400 and the ordinary expenditure estimated for that year is about the same amount

Bhopal.—Bhopal State was founded by Dost Muhammad Khan, an Afghan from Tirah, who went to Delhi in 1708 in search of employment Obtaining a lease of the Berasia Perganas he extended his dominions, assumed independence, and adopted the title of Nawab Of subsequent rulers the most noticeable is Mamulla, a lady of remarkable power, who controlled the State for 50 years In the early part of the nineteenth century the State successfully withstood the combined attacks of Gwalior and Nagpur, and, by the agreement of 1817, Bhopal undertook to assist the British with a contingent force and to co-operate against the Pindari bands

The present Begum is Her Highness Nawab Sultan Jahan, G.C.S.I., G.C.I.E., C.I., who succeeded in 1901 and personally conducts the administration of her State assisted by her eldest son, Nawab Mahomed Nasrulla Khan The State Army consists of 1,744 men, including a regiment of Imperial Service Cavalry commanded by a son of the present ruler The capital is Bhopal City, at the Junction of the Midland Section of the G. I P Railway and the Bhopal-Ujjain Railway.

Rewah.—This State lies in the Baghelkhand Agency, and falls into two natural divisions separated by the scarp of the Kaimur range. Its Chiefs are Baghel Rajputs descended from the Solanki clan which ruled over Gujrat from the tenth to the thirteenth century. In 1812 a body of Pindaries raided Mirzapur from Rewah territory and the chief, who had previously rejected overtures for an alliance, was called upon to accede to a treaty acknowledging the protection of the British Government During the Mutiny, Rewah offered troops to the British, and for his services then, various parganas, which had been seized by the Marathas, were restored to the Rewah Chief The present chief is H H Maharaja Sir Venkat Raman Singh, G.C.S.I., who was born in 1876 He is assisted in the administration by two Commissioners, one for revenu matters and one for judicial The State force consist of about 1,700 men The State is famous for its archæological remains and is rich in minerals, coal being mined at Umaria The average expenditure is Rs 11 lakhs

Dhar.—This State, under the Bhopawar Agency, takes its name from the old city of Dhar, long famous as the capital of the Paramara Rajputs, who ruled over Malwa from ninth to the thirteenth century and from whom the present chiefs of Dhar—Ponwar Marathas—claim descent In the middle of the 18th century the Chief of Dhar, Anand Rao, was one of the leading chiefs of Central India, sharing with Holkar and Sindhia the rule of Malwa But in 1819, when a treaty was made with the British, the State had become so reduced that it consisted of little more than the capital The ruler is H H Raja Sir Udaji Rao Ponwar, K.C.S.I., who was born in 1886, and has control of all civil, judicial, and ordinary administrative matters There are 22 feudatories, of whom 13 hold under a guarantee from the British Government The average expenditure is about 8 lakhs

Jaora State.—This State is in the Malwa Agency and has its head quarters at Jaora town The first Nawab was an Afghan from Swat, who had come to India to make his fortune, found employment under the freebooter Amir Khan, and obtained the State after the treaty of Mandasor in 1817 The present chief is H H. Sir Mahomed Iftikar Ali Khan, K.C.I.E., who was born in 1883 and is an honorary major in the Indian army The soil of the State is among the richest in Malwa, being mainly of the best black cotton variety, bearing excellent crops of poppy The average expenditure is four lakhs

Datia State.—The chiefs of this State, in the Bundelkhand Agency, are Bundela Rajputs of the Orchha house The territory was granted by the chief of Orchha to his son Bhagwan Rao in 1626, and this was extended by conquest and by grants from the Delhi emperors The present chief is H H. Maharaja Lokendra Gobind Singh Bahadur, who was born in 1886 and succeeded in 1907 His predecessor had succeeded as a minor in 1857, and the early part of his administration was disturbed by constant disputes with the thakurs of Baroni as to the succession

Orchha State.—The chiefs of this State are Bundela Rajputs claiming to be descendants of the Gaharwars of Benares It was founded as an independent State in 1048 A D It entered into relations with the British by the treaty made in 1812 The present ruler is His Highness Sir Pratap Singh, G.C.S.I., G.C.I.E., who was born in 1854. He has the title of Saramad-i-Rajaha-i-Bundelkhand Maharaja Mahendra Sawai Bahadur. The State has a normal revenue of seven lakhs and the expenditure is about 6·5 lakhs. The

State Army consists of 1,350 men The capital is Tikamgarh · Orchha, the old capital, has fallen into decay but is a place of interest on account of its magnificent buildings of which the finest were erected by Bir Singh Deo, the most famous ruler of the State (1605-1627)

Agent to Governor-General—O V. Bosanquet

INDORE

Resident—C L S Russell

BHOPAL

Political Agent—W S Davis

BUNDELKHAND

Political Agent—Lieut -Col P T A Spence.

BAGHELKHAND,

Political Agent—Lieut -Col S. H Godfrey.

BHOPAWAR

Political Agent—L M Crump

Sikkim.

Sikkim is bounded on the north and north-east by Tibet, on the south-east by Bhutan, on the south by the British district of Darjiling, and on the west by Nepal. The population consists of the races of Lepcha and Bhoti, and the Nepali tribe, Limbu It forms the direct route to the Chumbi Valley in Tibet. The main axis of the Himalayas, which runs east and west, forms the boundary between Sikkim and Tibet The Singalila and Chola ranges, which run southwards from the main chain, separate Sikkim from Nepal on the west, and from Tibet and Bhutan on the east From the eastern flank of the Singalila range rise the great snow peaks of Kinchinjunga (28,146 feet), one of the highest mountains in the world; it throws out a second spur terminating at Tendong. The Chola range which is much lofter than that of Singalila, leaves the main chain at the Dongkya mountain

Tradition says that the ancestors of the rajas of Sikkim originally came from the neighbourhood of Lhasa in Tibet The State was twice invaded by the Gurkhas at the end of the eighteenth century On the outbreak of the Nepal War in 1814, the British formed an alliance with the Raja of Sikkim and at the close of the war the Raja was rewarded by a considerable accession of territory. In 1835 the Raja granted the site of Darjiling to the British and received Rs 3,000 annually in lieu of it. This grant was stopped and a part of the State was annexed for the seizure and detention of Dr. Campbell, the Superintendent of Darjiling, and Dr Hooker, the famous naturalist, in 1849 The State was previously under the Government of Bengal, but was brought under the direct supervision of the Government of India in 1906 The State is thinly populated, the area being 2,818 square miles, and the population 87,920 chiefly Buddhists and Hindus The most important crop is maize There are several trade routes through Sikkim from Darjiling District into Tibet; but owing partly to the natural difficulties of the country, and partly to the jealousy of the Tibetan authorities, trade over these roads has never been fully developed. In the convention of 1890 provision was made for the opening of a trade route, but the results were disappointing, and the failure of the Tibetans to fulfil their obligations resulted in 1904 in the despatch of a mission to Lhasa, where a new convention was signed. Trade with the British has largely increased in recent years, and in 1911-12 reached total value of 24 lakhs A number of good roads have been constructed in recent years The present ruler is His Highness Maharajah Sir Thotub Namgye, K.C I E, who was born in 1860 and succeeded in 1874 The Political Officer stationed at Gangtok advises and assists the Maharajah and his Council, but no rules have been laid down for the civil and criminal administration. The average revenue is Rs 2,85,000

Political Officer in Sikkim C A Bell

Bhutan.

Bhutan extends for a distance of approximately 190 miles east and west along the southern slopes of the central axis of the Himalayas, adjacent to the northern border of Eastern Bengal and Assam Its area is 18,000 square miles and its population, consisting of Buddhists and Hindus, has been estimated at 300,000 The country formerly belonged to a tribe called Tek-pa, but was wrested from them by some Tibetan soldiers about the middle of the seventeenth century. British relations with Bhutan commenced in 1772 when the Bhotias invaded the principality of Cooch Behar and British aid was invoked by that State. After a number of raids by the Bhutanese into Assam, an envoy (the Hon A Eden) was sent to Bhutan, who was grossly insulted and compelled to sign a treaty surrendering the Duars to Bhutan. On his return the treaty was disallowed and the Duars annexed. This was followed by the treaty of 1865, by which the State's relations with the Government of India were satisfactorily regulated The State formerly received an allowance of half a lakh a year from the British Government in consideration of the cession in 1865 of some areas on the southern borders. This allowance was doubled by a new treaty concluded in January 1910, by which the Bhutanese Government bound itself to be guided by the advice of the British Government in regard to its external relations, while the British Government undertook to exercise no interference in the internal administration of Bhutan On the occasion of the Tibet Mission of 1904, the Bhotias gave strong proof of their friendly attitude Not only did they consent to the survey of a road through their country to Chumbi, but their ruler, the Tongsa Penlop, accompanied the British troops to Lhasa, and assisted in the negotiations with the Tibetan authorities For these services he was made a K C I E, and he has since entertained the British Agent hospitably at his capital. The ruler is now known as H H. the Maharaja of Bhutan, Sir Uggen Wangchuk, K C S I, K C I E. At the head of the Bhutan Government, there are nominally two supreme authorities, the Dharma Raja, known as Shapting Renipoche, the spiritual head, and the Deb or Depa Raja, the temporal ruler. The Dharma Raja is regarded as a very high incarnation of Buddha, far higher than the ordinary incarnations in Tibet, of which there are several hundreds. On the death of a Dharma Raja a year or two is allowed to elapse, and his reincarnation then takes place, always in the Choje, or royal family of Bhutan.

Cultivation is backward and the chief crop is maize The Military force consists of local levies under the control of the different chiefs. They are of no military value.

Nepal.

The kingdom of Nepal is a narrow tract of country extending for about 520 miles along the southern slope of the central axis of the Himalayas It has an area of about 54,000 square miles, with a population of about 5,000,000, chiefly Hindus The greater part of the country is mountainous, the lower slopes being cultivated Above these is a rugged broken wall of rock leading up to the chain of snow-clad peaks which culminate in Mount Everest (29,002 feet) and others of slightly less altitude The country before the Gurkha occupation was split up into several small kingdoms under Newar kings The Gurkhas under Prithvi Narayan Shah overran and conquered the different kingdoms of Patan, Kathmandu, and Bhatgaon, and other places during the latter half of the 18th century and since then have been rulers of the whole of Nepal In 1846 the head of the Rana family obtained from the sovereign the perpetual right to the office of Prime Minister of Nepal, and the right is still enjoyed by his descendant In 1850 Jung Bahadur paid a visit to England and was thus the first Hindu Chief to leave, India and to become acquainted with the power and resources of the British nation The relations of Nepal with the Government of India are regulated by the treaty of 1816 and subsequent agreements, but the political status of Nepal is difficult to define It may be said to stand intermediate between Afghanistan and the Native States of India The point of resemblance to Afghanistan is in the complete freedom which Nepal enjoys in the management of its internal affairs, while in both countries foreign relations are controlled by the Indian Government. The analogy to the Native States is that, by treaty, Nepal is obliged to receive a British Resident at Katmandu and cannot take Europeans into service without the sanction of the Indian Government But, for the reasons above given, the functions of the Resident differ from those that are commonly exercised by Residents at Native Courts

Nepal is also brought into relations with China, whose nominal suzerainty she acknowledged. It is an influence that weighs light, and consists in the despatch, every five years, of a mission with presents to the ruling Emperor. This mission, though it may at one time have carried a certain amount of political significance, has now mainly a trading aspect Its expenses are paid by the Chinese from the time it crosses the Nepalese frontier, and a brisk trade is carried on throughout the journey.

From the foregoing account of the history of Nepal it will be seen that the Government of the country has generally been in the hands of the Minister of the day Since the time of Jung Bahadur this system of government has been clearly laid down and defined The sovereign, or Maharaj Dhiraj, as he is called, is but a dignified figure-head, whose position can best be likened to that of the Emperor of Japan during the Shogunate The real ruler of the country is the Minister who, while enjoying complete monopoly of power, couples with his official rank the exalted title of Maharaja. Next to him comes the Commander-in-Chief, who ordinarily succeeds to the office of Minister The present Minister at the head of affairs of Nepal is Maharaja Sir Chandra Shum Shere Jung Bahadur Rana, G C B, G C S.I., G C.V O, D C L and Honorary Major-General in the British Army He has been Prime Minister and Marshal of Nepal since June, 1901

Rice, wheat and maize form the chief crops in the lowlands Mineral wealth is supposed to be great, but, like other sources of revenue, has not been developed Communications in the State are primitive The revenue is about two crores of rupees per annum The standing army is estimated at 45,000, the high posts in it being filled by relations of the Minister The State is of considerable archaeological interest and many of the sites connected with scenes of Buddha's life have been identified in it by the remains of inscribed pillars.

Resident Lieut.-Col. J. Manners Smith, V C C V O , C I E

NORTH-WEST FRONTIER STATES.

The native states of the North-West Frontier Provinces are Amb, Chitral, Dir, Nawaga (Bajaur), and Phulera. The total area is about 7,704 square miles and the population, mainly Mahomedan, is 1,622,094 The average annual revenue of the first four is about Rs 4,65,000, that of Phulera is unknown

Amb.—Is only a village on the western bank of the Indus in Independent Tanawala.

Chitral.—Runs from Dir to the south of the Hindu-Kush range in the north, and has an area of about 4,500 square miles. The ruling dynasty has maintained itself for more than three hundred years, during the greater part of which the State has constantly been at war with its neighbours. It was visited in 1885 by the Lockhart Mission, and in 1889, on the establishment of a political agency in Gilgit, the ruler of Chitral received an annual subsidy from the British Government That subsidy was increased two years latter on condition that the ruler, Amam-ul-Mulk, accepted the advice of the British Government in all matters connected with foreign policy and frontier defence. His sudden death in 1892 was followed by a dispute as to the succession The eldest son Nizam-ul-Mulk was recognised by Government, but he was murdered in 1895 A religious war was declared against the infidels and the Agent at Gilgit, who had been sent to Chitral to report on the situation, was besieged with his escort and a force had to be despatched (April 1895) to their relief

The three valleys of which the State consists are extremely fertile and continuously cultivated. The internal administration of the country is conducted by the Mehtar, and the foreign policy is regulated by the Political Agent

Dir.—The territories of this State, about 5,000 square miles in area, include the country drained by the Panjkora and its affluents down to the junction of the former river with the Bajaur or Rud, and also the country east of this from a point a little above Tirah in Upper Swat down to the Dush Khel Country, following the

right bank of the Swat river throughout The Khan of Dir is the overlord of the country exacting allegiance from the petty chiefs of the clans Dir is mainly held by Yusufzai Pathans, the old non-Pathan inhabitants being now confined to the upper portion of the Panjkora Valley known as the Bashkar.

Bajaur.—Nawagai is a tract of country included in the territories collectively known as Bajaur which is bounded on the north by the Panjkora river, on the east by the Utman Khel and Mohmand territories and on the west by the watershed of the Kuna river which divides it from Afghanistan The political system, if it can be termed system, is a communal form of party government, subject to the control of the Khan of Nawagai, who is nominally the hereditary chief of all Bajaur Under him the country is divided into several minor Khanates, each governed by a chieftain, usually a near relative of the Khan But virtually the authority of the chieftains is limited to the rights to levy tithe, or *ushar* when they can enforce its payment, and to exact military service if the tribesmen choose to render it.

Political Agent for Dir, Swat and Chitral
Major W J Keen

NATIVE STATES UNDER LOCAL GOVERNMENTS.

The Madras Presidency includes 5 Native States covering an area of 10,087 square miles Of these the States of Travancore and Cochin represent ancient Hindu dynasties Pudukattai is the inheritance of the chieftain called the Tondiman Banganapalle and Sandur, two petty States, of which the first is ruled by a Nawab, lie in the centre of two British districts

Name	Area sq miles	Population	Approx Revenue in lakhs of rupee
Travancore	7,129	3,428,975	128
Cochin	1,361	918,110	47
Pudukottai	1,178	411,878	16
Banganapalle	255	39,356	2 8
Sandur	161	13,517	1 7
			1·2

Travancore—This State occupies the south-west portion of the Indian Peninsula, forming an irregular triangle with its apex at Cape Comorin The early history of Travancore is in great part traditional, but there is little doubt that H H the Maharaja is the representative of the Chera dynasty, one of the three great Hindu dynasties which exercised sovereignty at one time in Southern India The petty chiefs, who had subsequently set up as independent rulers within the State, were all subdued, and the whole country, included within its present boundaries, was consolidated and brought under one rule, by the Maharaja Marthanda Varma (1729-58) The English first settled at Anjengo, a few miles to the north of Trivandrum, and built a factory there in 1684 In the wars in which the East India Company were engaged in Madura and Tinnevelly, in the middle of the 18th century, the Travancore State gave assistance to the British authorities Travancore was reckoned as one of the staunchest allies of the British Power and was accordingly included in the Treaty made in 1784 between the East India Company and the Sultan of Mysore. To protect the State from possible inroads by Tippu, an arrangement was come to in 1788 with the East India Company, and in 1795 a formal treaty was concluded, by which the Company agreed to protect Travancore from all foreign enemies In 1805 the annual subsidy to be paid by Travancore was fixed at 8 lakhs of rupees

The present ruler is His Highness Maharaja Sir Balarama Varma, G C S I, G C I E, who was born in 1857 and succeeded in 1885 The government is conducted in his name with the assistance of a Dewan (M Krishnan Nair) The work of legislation is entrusted to a Council brought into existence in 1888 An assembly known as the Sri Mulam Popular Assembly meets once a year, when its members are able to bring suggestions before the Dewan The State supports a military force of 1,474 men. Education has advanced considerably in recent years and the State takes a leading place in that respect The principal food grain grown is rice, but the main source of agricultural wealth is the cocoanut Other crops are pepper, areca-nut, jack-fruit and tapioca Cotton weaving and the making of matting from the coir are the chief industries The State is well provided with roads, and with a natural system of back-waters, besides canals and rivers navigable for country crafts Two lines of railways intersect the country, the Cochin-Shoranore in the north-west and the Tinnevelly Quilon passing through the heart of the State A third line, from Quilon to Trivandrum, is in process of construction The capital is Trivandrum

Political Agent, A T. Forbes

Cochin.—This State on the west coast of India is bounded by the Malabar District of the Madras Presidency and the State of Travancore Very little is known of its early history. According to tradition, the Rajas of Cochin hold the territory in right of descent from Cheraman Perumal, who governed the whole country of Kerala, including Travancore and Malabar, as Viceroy of the Chola Kings about the beginning of the ninth century, and afterwards established himself as an independent Ruler In 1502, the Portuguese were allowed to settle in what is now British Cochin and in the following year they built a fort and established commercial relations in the State. In the earlier wars with the Zamorin of Calicut, they assisted the Rajas of Cochin. The influence of the Portuguese on the west coast began to decline about the latter part of the seventeenth century, and in 1663 they were ousted from the town of Cochin by the Dutch with whom the Raja entered into friendly relations About a century later, in 1759, when the Dutch power began to decline, the Raja was attacked by the Zamorin of Calicut, who was expelled with the assistance of the Raja of Travancore. In 1776, the State was conquered by Hyder Ali, to whom it remained tributary and subordinate, and

subsequently to his son, Tippu Sultan A treaty was concluded in 1791 between the Raja and the East India Company, by which His Highness agreed to become tributary to the British Government for his territories which were then in the possession of Tippu, and to pay a subsidy.

The present ruler is His Highness Sir Sri Rama Varma, G C S I, G C I E, Raja of Cochin, who was born in 1852 and succeeded in 1895 The administration is conducted under the control of the Raja whose chief Minister and Executive Officer is the Dewan (J. W Bhore) The forests of Cochin form one of its most valuable assets They abound in teak, ebony, blackwood, and other valuable trees Rice forms the staple of cultivation Cocoanuts are largely raised in the sandy tracts, and their products form the chief exports of the State Communications by road and back-waters are good, and the State owns a line from Shoranore to Ernakulam, the capital of the State, and a Forest Steam Tramway used in developing the forests The State supports a force of 274 men

Political Agent, A. T Forbes

Pudukottai.—This State is bounded on the north and west by Trichinopoly, on the south by Madura and on the east by Tanjore In early times a part of the State belonged to the Chola Kings and the southern part to the Pandya Kings of Madura Relations with the English began during the Carnatic wars During the siege of Trichinopoly by the French in 1752, the Tondiman of the time did good service to the Company's cause by sending them provisions, although his own country was on at least one occasion ravaged as a consequence of his fidelity to the English In 1756 he sent some of his troops to assist Muhammad Yusuf, the Company's sepoy commandant, in settling the Madura and Tinnevelly countries Subsequently he was of much service in the wars with Haidar Ali His services were rewarded by a grant of territory subject to the conditions that the district should not be alienated (1806) Apart from that there is no treaty or arrangement with the Raja The present ruler is Sri Brihadamba Sir Marthanda Bhairava Tondiman Bahadur, G C I E, who is eighth in descent from the founder of the family He succeeded in 1886. The Collector of Trichinopoly is ex-officio Political Agent for Pudukottai The administration of the State, under the Raja, is entrusted to a State Council of three members, a Superintendent (Mr J. T. Gwynn, I C S) Dewan, and Councillor. The various departments are constituted on the British India model The principal food crop is rice The forests, which cover about one-seventh of the State, contain only small timber There are no large industries The State is well provided with roads, but Pudukottai is the only town in the State

Political Agent, A L Vibert

Banganapalle.—This is a small State in two detached portions which in the eighteenth century passed from Hyderabad to Mysore and back again to Hyderabad. The control over it was ceded to the Madras Government by the Nizam in 1800, and subsequently passed through a long period of mismanagement ending in the removal of the Nawab Fatch Ali Khan in 1905 The present ruler is Nawab Sayid Gulam Ali Khan, a Mahomedan of the Shia Sect, who administers the State with the assistance of the Dewan, Khaja Akbar Hussain The chief food grains grown are rice, wheat and cholam Roads have recently been constructed and the capital, Banganapalle, is being gradually opened up with broad thoroughfares The Nawab pays no tribute and maintains no military force Sericulture, lac cultivation and weaving industries have lately been started in the State by the Superintendent of Industries

Political Agent, H A B Vernon, I C S

Sandur.—This is a small State surrounded by the District of Bellary the Collector of which is the Political Agent Its early history dates from 1728 when it was first seized by an ancestor of the present Raja, a Maratha named Sidhoji Rao It subsequently became a vassal to the Peshwa, after whose downfall a formal title for the State was granted by the Madras Government to one Siva Rao The present ruler is H H Raja Srimant Venkata Rao, who was born in 1891 The State is administered by the Raja and the Dewan (M R R A Subaya Modhar Avergal) The Raja pays no tribute and maintains no military force The most important staple crop is cholam Teak and sandal wood are found in small quantities in the forests

The minerals of the State possess unusual interest The hematites found in it are probably the richest ore in India An outcrop near the southern boundary forms the crest of a ridge 150 feet in height, which apparently consists entirely of pure steel grey crystalline hematite (specular iron) of intense hardness Some of the softer ores used to be smelted, but the industry has been killed by the cheaper English iron Manganese deposits have also been found in three places, and in 1911-12 over 83,000 tons of manganese ore were transported by one company.

Political Agent, A F G Moscardi.

UNDER THE GOVERNMENT OF BOMBAY.

More than a half of the total number of the very various units counted as Native States in India are under the Government of Bombay The characteristic feature of the Bombay States is the great number of petty principalities; the peninsula of Kathiawar alone contains nearly two hundred separate States The recognition of these innumerable jurisdictions is due to the circumstance that the early Bombay administrators were induced to treat the *de facto* exercise of civil and criminal jurisdiction by a landholder as carrying with it a quasi-sovereign status As the rule of succession by primogeniture applies only to the larger principalities, the minor states are continually suffering disintegration. In Bombay, as in Central India, there are to be found everywhere the traces of disintegration and disorder left by the eighteenth century In no part of India is there a greater variety of principalities. The bulk of them are of modern origin, the majority having been founded by Marathas in the general scramble for power in the middle of the eighteenth century, but several Rajput

houses date from earlier times Interesting traces of ancient history are to be found at Sachin, Janjira and Jafarabad, where chiefs of a foreign ancestry, descended from Abyssinian admirals of the Deccan fleets, still remain A few aboriginal chiefs, Bhils or Kolis, exercise an enfeebled authority in the Dangs and the hilly country that fringes the Mahi and the Narbada rivers.

The control of the Bombay Government is exercised through Political Agents, whose positions and duties vary greatly. In some of the more important States their functions are confined to the giving of advice and the exercise of a general surveillance, in other cases they are invested with an actual share in the administration, while States whose rulers are minors—and the number of these is always large—are directly managed by Government officers. Some of the States are subordinate to other States, and not in direct relations with the British Government, in these cases the status of the feudatories is usually guaranteed by Government The powers of the chiefs are regulated by treaty or custom, and range downwards to a mere right to collect revenue in a share of a village, without criminal or civil jurisdiction, as in the case of the petty chiefs of Kathiawar.

The native States in the Bombay Presidency number 377. Area 65,761 square miles Population (1911) 7,411,675 They are divided for administrative purposes into the following agencies.—Bijapur Agency, 2 states, Cutch Agency, 1 state; Dharwar Agency, 1 state (Savanur), Kaira Agency, 1 state (Cambay), Kathiawar Agency, 187 states (principal states, Bhavnagar, Dhrangadhra, Gondal, Junagadh, Nawanagar), West Khandesh Agency (20 states), Kolaba Agency, 1 state (Janjira), Kolhapur Agency, 9 states (principal state, Kolhapur, with 9 feudatory states), Mahi Kantha Agency, 51 states (principal state, Idar); Nasik Agency, 1 state ((Surgana), Palanpur Agency, 17 states (principal state, Palanpur); Poona Agency, 1 state (Bhor), Rewa Kantha Agency, 62 states (principal State, Rajpipla); Satara Agency, 2 states, Savantvadi Agency, 1 state, Sholapur Agency, 1 state, Sukkur Agency, 1 state (Khairpur), Surat Agency, 17 states, Thana Agency,1 state (Janhar) The table below gives details of the area, etc of the more important States —

State.	Area in miles sq	Population.	Approx Revenue in lakhs of rupees.
Bhavnagar .	2,860	441,367	47
Cutch	7,616	513,429	25
Dhrangadhra .	1,156	79,142	12
Gondal .	1,024	161,916	15
Idar ..	1,669	202,811	6
Junagadh ..	3,284	434,222	26
Khairpur ..	6,050	223,788	15
Kolhapur .	3,165	833,441	57
Navanagar .	3,791	349,400	22
Palanpur ..	1,750	226,250	5
Rajpipla .	1,517	161,588	9

Bijapur Agency.—This comprises the Satara jaghir of Jath and the small state of Daphlapur (total area 980 square miles), the latter (which has an area of 96 square miles) being an integral part of the State of Jath to which it will lapse on the demise of the present Rani, the widow of the late chief On the annexation of Satara, in 1849, Jath and Daphlapur, like other Satara Jagirs, became feudatories of the British Government The latter has more than once interfered to adjust the pecuniary affairs of the Jath Jagir, and in consequence of numerous acts of oppression on the part of the then ruler, was compelled to assume direct management from 1874 to 1885 The Chief of Jath, who belongs to the Maratha caste, is a Treaty Chief and ranks as a first class Sardar He is styled Deshmukh He holds a sanad of adoption, and the succession follows the rule of primogeniture. The small State of Daphlapur is managed by a Rani, aided by her *karbhari*. The gross revenue of the Agency is about 3 lakhs chiefly derived from land revenue. The Jath State pays to the British Government Rs 6,400 per annum in lieu of a horse contingent and Rs 4,840 on account of Saideshmukhi rights

Political Agent, Jahangir Kaikhosru Navroji Kabraji, Collector of Bijapur

Cutch.—The State is bounded on the north and north-west by Sind, on the east by the Palanpur Agency, on the south by the Peninsula of Kathiawar and the Gulf of Cutch and the south-west by the Indian Ocean Its area, exclusive of the great salt marsh called the Rann of Cutch, is 7,616 square miles The capital is Bhuj, where the ruling Chief (the Rao) His Highness Maha Rao Sri Khengarji Savai Bahadur, G C I E, resides From its isolated position, the special character of its people, their peculiar dialect, and their strong feeling of personal loyalty to their ruler, the peninsula of Cutch has more of the elements of a distinct nationality than any other of the dependencies of Bombay The earliest historic notices of the State occur in the Greek writers Its modern history dates from its conquest by the Sind tribe of Samma Rajputs in the fourteenth century The section of the Sammas forming the ruling family in Cutch were known as the Jadejas or 'children of Jada' The British made a treaty with the State in 1815, but three years later the conduct of the ruler made it necessary to occupy the capital and depose him. There is a fair proportion of good arable soil in Cutch, and wheat, barley and cotton are cultivated. Both iron and coal are found but are not worked. Cutch is noted for its beautiful embroidery and silverwork and its manufactures of silk and cotton are of some importance. Trade is chiefly carried by sea. The ruling chief is the supreme authority A few of the Bhayads are invested with jurisdictional powers in varying degrees in their own Estates and over their own ryots A notable fact in connection with the administration of the Cutch State is the number and position of the Bhayad These are Rajput nobles forming the brotherhood of the Rao. They were granted a share in the territories of the ruling chief as provision for their maintenance and are bound to furnish troops on an emergency. The number of these chiefs is 137, and the total number of the Jadeja tribe in Cutch is about 16,000. The British military force having been withdrawn from Bhuj, the State now pays Rs. 82,257 annually to the British Government. The military force consists of

about 1,000 in addition to which, there are some irregular infantry, and the Bhayads could furnish on requisition a mixed force of four thousand.

Political Agent, Major R. S. Pottinger.

Dharwar Agency—This comprises only the small State of Savanur The founder of the reigning family who are Mahomedans of Pathan origin was a jagirdar of Emperor Aurangzebe At the close of the last Maratha War the Nawab of Savanur whose conduct had been exceptionally loyal was confirmed in his possessions by the British Government The State pays no tribute The principal crop is cotton The area is 70 square miles and population 17,909 The revenue is about one lakh The present chief is Abdul Majidkhan Dilerjang Bahadur

Political Agent, J. A. G Wales, I C S.

Kaira Agency.—This includes only the State of Cambay at the head of the Gulf of the same name. Cambay was formerly one of the chief ports of India and of the Anhilvada Kingdom At the end of the thirteenth century it is said to have been one of the richest towns in India, at the beginning of the sixteenth century also it formed one of the chief centres of commerce in Western India Factories were established there by the English and the Dutch It was established a distinct State about 1730, the founder of the present family of Chiefs being the last but one of the Mahomedan Governors of Gujarat The present ruler is His Highness Nawab Jaffar Ali Khan, who is a Mahomedan of the Shiah Sect, and was born in 1848 and succeeded in 1880 He pays a tribute of Rs. 21,924 to the British Government Wheat and cotton are the principal crops. There is a broad gauge line from Cambay to Petlad, connecting with the B B & C I Railway at Anand The Nawab exercises full jurisdiction within the State Revenue is about 5½ lakhs. The area of the State is 350 square miles, population 72,656

Political Agent, J Gosal, I C S.

Kathiawar Agency.- Kathiawar is the peninsula or western portion of the Province of Gujarat, Bombay. Its extreme length is about 220 miles and its greatest breadth about 165 miles, the area being 23,445 square miles Of this total about 20,882 square miles with a population of 2,496,057 is the territory forming the Political Agency subordinate to the Government of Bombay, established in 1822, having under its control nearly 200 separate States whose chiefs divided amongst themselves the greater portion of the peninsula. The Kathiawar Agency is divided for administrative purposes into four prants or divisions—Jhalawar, Halai, Sorath and Gohelwar—and the States have since 1863 been arranged in seven classes. Since 1882 political authority in Kathiawar has been vested in the Political Agent subordinate to the Government of Bombay In 1903 the designations of the Political Agent and his Assistants were changed to those of Agent to the Governor and Political Agents of the prants Before 1863, except for the criminal court of the Agent to the Governor, established in 1831, to aid the Darbars of the several States in the trial of heinous crimes, interference with the judicial administration of the territories was diplomatic, not magisterial, and the criminal jurisdiction of the first and second-class chiefs alone was defined. In 1863, however, the country underwent an important change The jurisdiction of all the chiefs was classified and defined. that of chiefs of the first and second classes was made plenary, that of lesser chiefs was graded in a diminishing scale The four Political Agents of the prants resident in the four divisions of Kathiawar, now exercise residuary jurisdiction with large civil and criminal powers Each Political Agent of a prant has a deputy, who resides at the headquarters of the prant or division, and exercises subordinate civil and criminal powers. Serious criminal cases are committed by the deputies to the court of the Agent to the Governor, to whom also civil and criminal appeals lie. The Agent to the Governor is aided in this work by an officer known as the Political Agent and Judicial Assistant, who is usually a member of the Indian Civil Service Appeals from his decisions lie direct to the Governor of Bombay in Council in his executive capacity. An officer styled the Superintendent of Managed Estates, who is ex-officio an Assistant Political Agent, and two Deputy-Assistants also help the Agent.

Agent of the Governor in Kathiawar, J. Sladen

Bhavnagar.—This State lies at the head and west side of the Gulf of Cambay. The Gohel Rajputs, to which tribe the Chief of Bhavnagar belongs, are said to have settled in the country about the year 1260, under Sajakji from whose three sons—Ranoji, Saranji and Shahji—are descended respectively the chiefs of Bhavnagar, Lathi and Palitana An intimate connexion was formed between the Bombay Government and Bhavnagar in the eighteenth century when the chief of that State took pains to destroy the pirates which infested the neighbouring seas. The State was split up when Gujarat and Kathiawar were divided between the Peshwa and the Gaekwar, but the various claims over Bhavnagar were consolidated in the hands of the British Government in 1807. The State pays an annual tribute of Rs. 128,060 to the British Government, Rs. 3,581-8-0 as Peshkash to Baroda, and Rs 22,858 as Zortalbi to Junagadh H. H. Maharaja Raol Shri Bhavsinghji, K C S I, is the supreme and final authority in the State The general administration is conducted under His Highness's directions by the Dewan (Tribhuvandas K Trivedi, Acting Dewan), who is assisted by the Naib Dewan, the Personal Assistant and the Judicial Assistant. One noteworthy feature in the administration is the complete separation of judicial from executive functions and the decentralisation of authority is another The authority and powers of all the Heads of Departments have been clearly defined, and each within his own sphere is independent of the others, being directly responsible to the Dewan

The chief products of the State are grain, cotton and salt The chief manufactures are oil, copper and brass vessels and cloth The Bhavnagar State Railway is 205 miles in length, and the management of it undertakes also the working of the Dhrangadhra State Railway for a length of 21 miles. The capital of the State is the town and port of Bhavnagar, which has a good and safe harbour for shipping and carries

on an extensive trade as one of the principal markets and harbours of export for cotton in Kathiawar. Bhavnagar supports 300 Imperial Service Lancers and 282 Infantry or Armed Police.

Dhrangadhra State is an uneven tract of land (intersected by small streams) which consists of hilly and rocky ground where stone is quarried The chief of Dhrangadhra belongs to the Jhala tribe, originally a sub-division of the Makvana family This tribe is of great antiquity, and is said to have entered Kathiawar from the north, establishing itself first at Patri in the Ahmedabad District, thence moving to Halvad and finally settling in its present seat The greater part of this territory was probably annexed at one time by the Mahomedan rulers of Gujarat. Subsequently, during the reign of the Emperor Aurangzebe (1658–1707), the sub-division of Halvad, then called Muhammadnagar, was restored to the Jhala family The petty States of Limbdi, Wadhwan, Chuda, Sayla, and Than-Lakhtar in Kathiawar are offshoots from Dhrangadhra, and the house of Wankaner claims to be descended from an elder branch of the same race His Highness the Maharana Shri Ghanshyamsinhji is the ruling chief, who is the head of the Jhala Rajput family The State pays a tribute of Rs 40,671 to the British Government, and Rs 4,006 to Junagadh State The administration is conducted under the Maharaja's directions by the Dewan (Mansinh S Jhala) The principal crops are cotton and grain The Capital town is Dhrangadhra, a fortified town, 75 miles west of Ahmedabad

Gondal State—The Chief of Gondal is a Rajput of the Jadeja stock with the title of Thakur Sahib, the present Chief being Sir Bhagvat Sinhji, G C I E The early founder of the State, Kumbhoji I, had a modest estate of 20 villages Kumbhoji II 'the most powerful Chief of the House, widened the territories to almost their present limits by conquest, but it was left to the present ruler to develop its resources to the utmost, and in the words of Lord Reay, Governor of Bombay, by its "importance and advanced administration" to get it recognised as a First Class State The State pays a tribute of Rs 1,10,721 The chief products are cotton and grain and the chief manufactures are cotton and woollen fabrics and gold embroidery. Gondal has always been pre-eminent amongst the States of its class for the vigour with which public works have been prosecuted, and was one of the earliest pioneers of railway enterprise in Kathiawar, having initiated the Dhasa-Dhoraji line· it subsequently built other lines in partnership with other Native States in Kathiawar The Capital is Gondal, a fortified town on the line between Rajkot and Jetalsar.

Junagadh State—This State has an area of 3,284 square miles and is bounded on the north by the Barda and Halar and on the west and south by the Arabian Sea The river Saraswati, famous in the sacred annals of the Hindus, passes through the State. A densely wooded tract called the Gir, is contained in the State and is well known as the last haunt in India of the lion Until 1472, when it was conquered by Sultan Mahmud Begra of Ahmedabad, Junagadh was a Rajput State, ruled by Chiefs of the Chudasama tribe During the reign of the Emperor Akbar it became a dependency of Delhi, under the immediate authority of the Mughal Viceroy of Gujarat about 1735, when the representative of the Mughals had lost his authority in Gujarat, Sher Khan Babi, a soldier of fortune, expelled the Mughal Governor, and established his own rule The ruler of Junagadh first entered into engagements with the British Government in 1807 The Chief bears the title of Nawab, the present Nawab being tenth in succession from the founder of the family He is His Highness Mahabat Khan, who was born in 1900 and succeeded in 1911 The agricultural products are cotton, shipped in considerable quantities from Veraval to Bombay, wheat and other grains The coast line is well supplied with fair weather harbours The State pays a tribute of Rs 65,604 to the Gaekwar of Baroda and the British Government, but the Nawab receives contributions, called zortalbi, amounting to Rs 92,421 from a number of chiefs in Kathiawar—a relic of the days of Mahomedan supremacy The State maintains 100 Imperial Service Lancers The Capital is Junagadh, situated under the Girnar and Datar hills, which is one of the most picturesque towns in India, while in antiquity and historical interest it yields to none The Uparkot, or old citadel, contains interesting Buddhist caves, and the whole of the ditch and neighbourhood is honeycombed with caves or their remains There are a number of fine modern buildings in the town

Administrator, H D Rendall, I C S

Navanagar State, on the southern shore of the Gulf of Cutch, has an area of 3,791 square miles. The Jam of Navanagar is a Jadeja Rajput by caste, and belongs to the same family as the Rao of Cutch. The Jadejas originally entered Kathiawar from Cutch, and dispossessed the ancient family of Jethwas (probably a branch of Jats) then established at Ghumli The town of Navanagar was founded in 1540. The present Jam Sahib is the well-known cricketer, H H Jam Sahib Shri Ranjitsinhji Vibhaji, who was born in 1872 and succeeded in 1907 The principal products are grain and cotton, shipped from the ports of the State A small pearl fishery lies off the coast The State pays a tribute of Rs. 1,20,093 per annum jointly to the British Government, the Gaekwar of Baroda and the Nawab of Junagadh The State maintains a squadron of Imperial Service Lancers. The Capital is Navanagar (or Jamnagar) a flourishing place, nearly 4 miles in circuit, situated 5 miles east of the port of Bedi.

Kolaba Agency,—This Agency includes the State of **Janjira** in the Konkan, a country covered with spurs and hill ranges and much intersected by creeks and backwaters. The ruling family is said to be descended from an Abyssinian in the service of one of the Nizam Shahi Kings of Ahmednagar at the end of the fifteenth century The most noticeable point in its history is the successful resistance that it alone, of all the states of Western India, made against the determined attacks of the Marathas The British on succeeding the

Marathas as masters of the Konkan refrained from interfering in the internal administration of the State The chief is a Sunni Mahomedan, by race a Sidi or Abyssinian, with a title of Nawab. He has a sanad guaranteeing succession according to Mahomedan law and pays no tribute. Till 1868 the State enjoyed singular independence, there being no Political Agent, and no interference whatever in its internal affairs. About that year the maladministration of the chief, especially in matters of police and criminal justice, became flagrant; those branches of administration were in consequence taken out of his hands and vested in a Political Agent. The present ruler is H H. Nawab Sidi Sir Ahmed Khan, GCLH, who was born in 1862 The area of the State is 377 square miles, and the population 101,090 The average revenue is 6 lakhs The State maintains a military force of 227 The capital is Janjira, 44 miles south of Bombay Island

Kolhapur Agency —Kolhapur is a State with an area of 3,217 square miles and population of 833,441 Subordinate to Kolhapur are nine feudatories, of which the following five are important. Vishalgarh, Bavda, Kagal (senior), Kapsi and Ichalkaranji. The present ruling chief Sir Shahu Chhatrapati Maharaja, GCSI, GCIE, GCVO, traces his descent from a younger son of Shivaji, founder of the Maratha power. The prevalence of piracy from the Kolhapur port of Malvan compelled the Bombay Government to send expeditions against Kolhapur in 1765, and again in 1792, when the Raja agreed to give compensation for the losses which British merchants had sustained since 1785, and to permit the establishment of factories at Malvan and Kolhapur Internal dissensions and wars with neighbouring States gradually weakened the power of Kolhapur. In 1812 a treaty was concluded with the British Government, by which, in return for the cession of certain ports, the Kolhapur Raja was guaranteed against the attacks of foreign powers; while on his part he engaged to abstain from hostilities with other States, and to refer all disputes to the arbitration of the British Government. The principal articles of production are rice, jawari and sugar-cane and the manufactures are coarse cotton and woollen cloths, pottery and hardware The State pays no tribute, and supports a military force of 690 The nine feudatory estates are administered by their holders Except in the case of two whose holders are minors Kolhapur proper is divided into six pethas or talukas and four mahals and is managed by the Maharaja, who has full powers of life and death The Southern Mahratta Railway passes through the State and is connected with Kolhapur City by a line which is the property of the State

Resident and Senior Political Agent for Kolhapur and the Southern Mahratta Country Lt -Col F W Wodehouse, CIE

Southern Maratha Country States.—The Agency consists of the following eight States —

Name of State	Area in square miles	Population	Tribute to British Government	Average revenue
			Rs	Rs.
Sangli ..	1,112	227,146	1,35,000	10,75,756
Miraj (Senior) . .	339	80,281	12,557	3,12,980
Miraj (Junior) . ..	210	36,490	7,388	2,55,263
Kurundwad (Senior) . .	185	38,375	. .	1,54,369
Kurundwad (Junior)	114	34,084	9,618	1,73,669
Jamkhandi . .	524	100,304	20,515	9,41,105
Mudhol ..	368	62,831	2,671	3,52,916
Ramdrug . .	169	36,610		1,50,729
Total	3,021	616,121	1,87,749	34,16,787

Mahi Kantha.—This group of States has a total area of 3,124 square miles and a population of 412,631. The revenue is about 14 lakhs. The Agency consists of the first class State of Idar and 62 small States The Native State of Idar covers more than half the territory; eleven other States are of some importance; and the remainder are estates belonging to Rajput or Koli Thakurs, once the lawless feudatories of Baroda, and still requiring the anxious supervision of the Political Officer. H. H. Major-General Sir Partab Singh, a Rajput of the Rathor Clan, having been appointed regent of the State of Jodhpur, resigned the gadi of Idar in June 1911 and was succeeded by his adopted son Daulatsinhji. Many relatives of the Maharaja and feudal chiefs whose ancestors helped to secure the country for the present dynasty, now enjoy large estates on service tenures, and there are numerous petty chiefs or *bhumias* who have held considerable estates from the time of the Raos of Idar, or earlier, and are under no obligation of service The revenues of the State are shared by the Maharaja with these feudal chiefs. The Maharaja receives about Rs. 8,600 annually from several chiefs in Mahi Kantha, and pays Rs 30,340 as tribute to the Gaekwar

of Baroda through the British Government Many chiefs subordinate to Idar, known locally as pattawats, hold their estates on condition of military service, the quota being three horsemen for every 1,000 Rupees of Revenue; but for many years this service has not been exacted and no military force is maintained at present.

Political Agent. Lt Col. J. R. B Graham Carter.

Nasik Agency.—This consists of one State Surgana, lying in the north-west corner of the Nasik District. Surgana has an area of 360 square miles and a population of 15,180 The ruling chief is Prataprav Shankarrao Deshmukh, who is descended from a Maratha Pawar family He rules the State subject to the orders of the Collector of Nasik. The revenue of the State is about Rs 23,000.

Palanpur Agency.—This group of States in Gujarat comprises two first class States, Palanpur and Radhanpur, and a few minor States and petty talukas Its total area is 6,393 square miles and the population is 515,092 The gross revenue is about 14½ lakhs The territory included in the Agency has, like the more central parts of Gujarat, passed during historical times under the sway of the different Rajput dynasties of Anhilvada, the early Khilji and Tughlak Shahi dynasties of Delhi, the Ahmedabad Sultans, the Mughal Emperors, the Mahrattas, and lastly the British The State from which the Agency takes its name is under the rule of H H Nawab Sher Muhammad Khan, G C I E, who is entitled the Dewan of Palanpur He is descended from the Lohanis, an Afghan tribe who appeared in Gujarat in the fourteenth century The connection of the British Government with the State dates from 1819 in which year the chief was murdered by a body of nobles Two high roads from Ahmedabad pass through the State and a considerable trade in cotton cloth, grain, sugar and rice is carried on. The State maintains a military force of 600 and pays tribute of Rs. 38,000 to the Gackwar of Baroda. The capital is Palanpur, situated at the junction of the Palanpur-Deesa Branch of the B. B. & C. I Railway. It is a very old settlement of which mention was made in the eighth century.

Political Agent: Major N. S. Coghill

Radhanpur is a State, with an area of 1,150 square miles, which is now held by a branch of the Babi family, who since the reign of Humayun have always been prominent in the annals of Gujarat. The present chief is H. H Jalal-ud-din Khanji, the Nawab of Radhanpur He has powers to try his own subjects even for capital offences without permission from the Political Agent. The State maintains a military force of 200. The principal products are cotton, wheat and grain. The capital is Radhanpur town, a considerable trade centre for Northern Gujarat and Cutch.

Rewa Kantha Agency.—This Agency, with an area of 4,956 square miles and a population of 665,099, comprises 61 States, of which Rajpipla is a first class State, 5 are second class, one is third class and the rest are either petty States or talukas. Among those petty States are Kadana and Sanjeli in the north, Bhadarva and Umeta in the west, Narukot in the south-east, and three groups of Mehwas The 26 Sankheda Mehwas petty estates lie on the right bank of the Narbada, while the 24 Pandu Mehwas petty estates including Dorka, Anghad and Raika, which together form the Dorka Mehwas are situated on the border of the Mahi

The following are the statistics of area and population for the principal States :—

Taluka or Petha.	Area in square miles	Population.
Balasinor .. .	189	40,563
Bariya	813	115,350
Chhota Udaipur . .	873	103,639
Lunavada	388	75,998
Narukot (Jambhughoda)	143	8,485
Rajpipla ..	1,517	161,588
Sunth ..	394	59,350
Other Jurisdictional States Civil Stations and Thana Circles .. .	639	100,126

Under the first Anhilvada dynasty (746-961), almost all the Rewa Kantha lands except Champaner were under the government of the Bariyas, that is, Koli and Bhil chiefs In the eleventh, twelfth and thirteenth centuries chiefs of Rajput or part Rajput blood, driven south and east by the pressure of Muhammadan invasions, took the place of the Koli and Bhil leaders The first of the present States to be established was the house of the Raja of Rajpipla

Political Agent J P. Brander.

Rajpipla.—This State lies to the south of the Narbada. It has an area of 1,517 square miles, and largely consists of the Rajpipla Hills which form the watershed between the Narbada and Tapti rivers. The family of the Raja of Rajpipla, H. H Maharana Shri Sir Chhatrasinhji Ghambhirsinhji, K C I E, is said to derive its origin from a Rajput of the Gohal clan. The State pays an annual tribute of Rs 50,000 to the Gackwar of Baroda. Cotton is the most important crop in the State. In the south there are valuable teak forests. The capital is Nandod, which is connected with Anklesvar by railway built by the State.

Satara Jagirs.—Under this heading are grouped the following six States :—

State.	Area in sq. miles.	Population.	Revenue in lakhs.
Aundh ..	501	68,995	3
Phaltan ..	397	55,996	2
Bhor ..	925	144,601	5
Akalkot ..	498	89,082	4
Jath .	884	69,810	2
Daphlapur .	96	8,833	·20

These were formerly feudatory to the Raja of Satara In 1849 five of them were placed under the Collector of Satara, and Akalkot under the Collector of Sholapur. Subsequently, the Jagir of Bhor was transferred to the Collector of Poona and Jath and Daphlapur to the Southern Mahratta country The last two are now under the Collector of Bijapur. The ruling chiefs are as follows :—

State	Ruling Chiefs	Tribute to British Government
		Rs
Aundh	Bhavanrav Shrinivasrao *alias* Baba Saheb, Pant Pratinidhi	.. .
Phaltan	Mudhojirav Janrav Nimbalkar .	9,600
Bhor	H H Shankarrav Chimnaji, Pant Sachiv	4,684
Akalkot	Fatehsinh Shahaji Raje Bhonsle *alias* Bapu Saheb	14,592
Jath	Ramrav Amritrav *alias* Aba Saheb Daphle . .	6,400
Daphlapur .	Rani Bai Saheb Daphle, widow of Ramchandrarav Venkatrav Chavan Daphle	.. .

Savantwadi.—This State has an area of 926 square miles and population of 217,240 The average revenue is 5½ lakhs. It lies to the north of the Portuguese territory of Goa, the general aspect of the country being extremely picturesque Early inscriptions take the history of the State back to the sixth century. So late as the nineteenth century the ports on this coast swarmed with pirates and the country was very much disturbed The present chief is Khem Savant V, alias Bapu Saheb Bhonsle Rice is the principal crop of the State, and it is rich in valuable teak The sturdy Marathas of the State are favourite troops for the Indian Army and supply much of the immigrant labour in the adjacent British districts The Capital is Savantvadi, also called Sundar Vadi, or simply Vadi.

Sholapur Agency.—This contains the State of Akalkot which forms part of the tableland of the Deccan It has an area of 498 square miles and a population of 89,082 In the beginning of the eighteenth century the Akalkot territory, which had formerly been part of the Mussulman kingdom of Ahmednagar was granted by the Raja of Satara to a Maratha Sardar, the ancestor of the present chief, subject to the supply of a contingent of horse. In 1849 after the annexation of Satara, the Akalkot Chief became a feudatory of the British Government

The Sukkur Agency.—This includes Khairpur State, a great alluvial plain in Sind It has an area of 6,050 square miles and a population of 225,788, and revenue of 15 lakhs. The present chief, H. H Mir Sir Imam Buksh Khan Talpur, G C I E, belongs to a Baloch family called Talpur Previous to the accession of this family on the fall of the Kalhora dynasty of Sind in 1783, the history of Khairpur belongs to the general history of Sind In that year Mir Fateh Ali Khan Talpur established himself as Rais or ruler of Sind, and subsequently his nephew, Mir Sohrab Khan Talpur, founded the Khairpur branch of the Talpur family In 1832 the individuality of the Khairpur State, as separate from the other Talpur Mirs in Sind was recognised by the British Government in a treaty, under which the use of the river Indus and the roads of Sind were secured to the British The chief products of the State are fuller's earth, carbonate of soda, cotton, wool and grain The manufactures comprise cotton fabrics and various kinds of silverware and metal work The Railway from Hyderabad to Rohri runs through the whole length of the State The rule of the Mir is patriarchal, but many changes have been made in recent years introducing greater regularity of procedure into the administration. The Wazir, an officer lent from British service, conducts the administration under the Mir The State supports a military force of 564 including an Imperial Service Camel and Baggage Corps which is 139 strong.

Political Agent the Collector of Sukkur, C. S Campbell.

Surat Agency.—This is a small group of three second class States under the superintendence of the Collector of Surat, F. G. H Anderson.

State.	Ruling Chiefs	Area in sq miles.	Population
Dharampur ..	Maharana Shri Mohandevji Narayandevji	704	114,995
Bansda ..	Maharaval Shri Indrasinhji Pratapsinhji	215	44,594
Sachin ..	Nawab Sidi Ibrahim Muhammad Yakut Khan Mubazarat Daula Nasrat Jung Bahadur	42	18,903

The joint revenue of these states is 12½ lakhs Tribute is paid to the British Government of Rs. 9,154. There is also attached to this Agency a tract of country known as the Dangs, which has an area of 999 square miles and a population of 29,353 and a revenue of Rs. 30,000 The country is divided into 14 Dangs or States of very unequal area, each under the purely nominal rule of a Bhil Chief with the title of Raja, Naik, Pradhan or Powar

Thana Agency.—This includes the State of Jawhar, in the Thana District, on a plateau above the Konkan plain It has an area of 310 square miles and a population of 53,489 and revenue of 2 lakhs. Up to 1294, the period of the first Mahomedan invasion of the Deccan, Jawhar was held by a Varli, not a Koli chief. The first Koli chief, obtained his footing in Jawhar by a device similar to that of Dido, when she asked for and received as much land as the hide of a bull would cover The Koli chief cut a hide into stripes, and thus enclosed the territory of the State The present chief is Raja Krishnashah Patangshah who administers the State, assisted by a Karbhari under the supervision of the Collector of Thana, E G Turner

UNDER THE GOVERNMENT OF BENGAL.

Cooch Behar.—This State is a low-lying plain in North Bengal It has an area of 1,307 square miles, a population of 5,93,052 and revenue of 27 lakhs The ruling chief is H. H Maharaja Jitendra Narayan Bhup Bahadur, who succeeded in 1913 His family is of Tibetan or Dravidian origin He administers the State with the assistance of the State Council Cooch Behar once formed part of the famous kingdom of Kamarupa. British connexion with it began in 1772 when the succession was disputed and the assistance of the East India Company invited. The chief products of the State are rice, jute and tobacco It maintains a military force of 194. The capital is Cooch Behar, which is reached by the Cooch Behar State Railway, a branch from the Eastern Bengal State Railway System

Hill Tippera.—This State lies to the south of the district of Sylhet and consists largely of hills covered with bamboo jungles It has an area of 4,086 square miles and a population of 229,613. The revenue from the State is about 10 lakhs and from the Zemindari in British territory a slightly smaller sum. The present Raja is Birendra Kishore Deb Barman Manikya, who is a Kshatriya by caste and comes of the Lunar race. The military prestige of the Tippera Rajas dates back to the fifteenth century and a mythical account of the State takes the history to an even earlier date Both as regards its constitution and its relations with the British Government, the State differs alike from the large Native States of India, and from those which are classed as tributary. Besides being the ruler of Hill Tippera, the Raja also holds a large landed property called Chakla Roshnabad, situated in the plains of the Districts of Tippera, Naokhali and Sylhet This estate covers an area of 600 square miles, and is held to form with the State an indivisible Raj Disputes as to the right of succession have occurred on the occasion of almost every vacancy in the Raj, producing in times gone by disturbances and domestic wars, and exposing the inhabitants of the hills to serious disorders and attacks from the Kukis, who were always called in as auxiliaries by one or other of the contending parties. The principles which govern succession to the State have recently, however, been embodied in a sanad which was drawn up in 1904. The chief products of the State are rice and cotton, the traffic being carried chiefly by water The administration is conducted by the Minister at Agartala assisted by the Dewan

Political Agent Captain O. C Pulley.

UNDER THE GOVERNMENT OF BIHAR AND ORISSA.

Under this Government there are the Chota Nagpur political States of Kharsawan and Seraikela, and the Orissa feudatory States, 24 in number. The total area is 28,648 square miles, and the total population 3,942,972 The revenue is about 54 lakhs. The inhabitants are hill-men of Kolarian or Dravidian origin, and their condition is still very primitive The chief of Kharsawan belongs to a junior branch of the Porahat Raja's family. The State first came under the notice of the British in 1793, when, in consequence of disturbances on the frontier of the old Jungle Mahals, the Thakur of Kharsawan and the Kunwar of Saraikela were compelled to enter into certain agreements relating to the treatment of fugitive rebels The chief is bound, when called upon, to render service to the British Government, but he has never had to pay tribute His present sanad was granted in 1899. He exercises all administrative powers, executive and judicial, subject to the control of the Deputy Commissioner of Singhbhum and the Commissioner of Chota Nagpur. The Bengal Nagpur Railway runs through a part of the State. The adjoining State of Seraikela is held by the elder branch of the Porahat Raja's family.

Orissa Feudatory States.—This group of 22 dependent territories is situated between the Mahanadi Delta and the Central Provinces, and forms the mountainous background of Orissa. The names of the individual States are Athgarh, Talcher, Mayurbhanj, Nilgiri, Keonjhar, Pal Lahara, Dhenkanal, Athmallik, Hindol, Narsinghpur, Baramba, Tigiria, Khanpara, Nayagarh, Ranpur, Daspalla and Baud. To these there were added in 1905 the following States Bamra, Rairakhol, Sonpur, Patna and Kalahandi from the Central Provinces, and Gangpur and Bonai from the Chota Nagpur States The total population in 1911 was 3,798,038 with a revenue of about 45 lakhs The Tributary States have no connected or authentic history. Comprising the western and hilly portion of the province of Orissa they were never brought under the

central government, but from the earliest times consisted of numerous petty principalities which were more or less independent of one another. They were first inhabited by aboriginal races, who were divided into innumerable communal or tribal groups each under its own chief or headman These carried on incessant warfare with their neighbours on the one hand and with the wild beasts of the forests on the other. In course of time their hill retreats were penetrated by Aryan adventurers, who gradually, overthrew the tribal chiefs and established themselves in their place Tradition relates how these daring interlopers, most of whom were Rajputs from the north, come to Puri on a pilgrimage and remained behind to found kingdoms and dynasties It was thus that Jai Singh became ruler of Mayurbhanj over 1300 years ago, and was succeeded by his eldest son, while his second son seized Keonjhar The chiefs of Baud and Daspalla are said to be descended from the same stock, and a Rajput origin is also claimed by the Rajas of Athmallik, Narsinghpur, Pal Lahara, Talcher and Tigiria Nayagarh, it is alleged, was founded by a Rajput from Rewah, and a scion of the same family was the ancestor of the present house of Khandpara. On the other hand, the chiefs of a few States, such as Athgarh, Baramba and Dhenkanal, owe their origin to favourites or distinguished servants of the ruling sovereigns of Orissa The State of Ranpur is believed to be the most ancient, the list of its chiefs covering a period of over 3,600 years It is noteworthy that this family is admittedly of Khond origin, and furnishes the only known instance in which, amid many vicissitudes, the supremacy of the original settlers has remained intact The States acknowledged the suzerainty of the paramount power and were under an implied obligation to render assistance in resisting invaders, but in other respects neither the ancient kings of Orissa nor their successors, the Mughals and Marathas, ever interfered with their internal administration All the States have annals of the dynasties that have ruled over them, but they are made up in most part of legend and fiction and long genealogical tables of doubtful accuracy, and contain very few features of general interest. The British conquest of Orissa from the Marathas, which took place in 1803, was immediately followed by the submission of ten of the Tributary States the chiefs of which were the first to enter into treaty engagements.

The staple crop in these States is rice. The forests in them were at one time among the best timber producing tracts in India, but until lately forest conservancy was practically unknown The States have formed the subject of frequent legislation of a special character. The relations with the British Government are governed mainly by the sanads granted in similar terms to all the chiefs in 1894. They contain ten clauses reciting the rights, privileges, duties and obligations of the chiefs, providing for the settlement of boundary disputes, and indicating the nature and extent of the control of the Political Agent who is also the Commissioner of the Orissa Division.

Political Agent —L. E B Cobden-Ramsay.

UNDER THE GOVERNMENT OF THE UNITED PROVINCES.

Three States Rampur, Tehri and Benares are included under this Government —

State	Area Sq Miles	Population.	Revenue in lakhs.
Rampur	892	531,898	45
Tehri (Garhwal)	4,200	299,853	6
Benares .	988	...	. .

Rampur in Rohilkhand is a level fertile tract of country Its early history is that of Rohilkhand The adopted son of a Rohilla, who had distinguished himself in the Maratha wars, obtained the title of Nawab and the grant of the greater part of Rohilkhand in 1790 Subsequently the State was divided amongst his sons and on the cession of Rohilkhand to the British Government in 1801 the family holding Rampur were confirmed in their possessions The Nawab at the time of the Mutiny received a grant of land for his unswerving loyalty. The present Nawab is Colonel H. H. Sir Hamid Ali Khan Bahadur, G C.I E., G.C.V.O, A -D.C., who was born in 1875 and succeeded in 1889. Since that date a native official of the United Provinces, called the Minister, has been lent to the State He presides over a Legislative Committee first formed in 1902 The principal crops are maize, wheat, rice and sugar cane. The most important industry is the weaving of cotton cloths. The Oudh and Rohilkhand Railway crosses the State. Three squadrons of cavalry are maintained, of which two, 317 strong, are Imperial Service Lancers The local force includes about 1,900 infantry and 200 artillery The capital is Rampur on the left bank of the Kosi, 851 miles by rail from Calcutta. Income, 45 lakhs.

Political Agent: the Commissioner of Rohilkhand.

Tehri State.—(or Tehri Garhwal). This State lies entirely in the Himalayas and contains a tangled series of ridges and spurs radiating from a lofty series of peaks on the border of Tibet The sources of the Ganges and the Jumna are in it The early history of the State is that of Garhwal District, the two tracts having formerly been ruled by the same dynasty Parduman Shah, the last Raja of the whole territory, was killed in battle, fighting against the Gurkhas; but at the close of the Nepalese War in 1815, his son received from the British the present State of Tehri. During the Mutiny the latter rendered valuable assistance to Government. He died in 1859 without issue, and was succeeded by his near relative Bhawani Shah; and he subsequently received a sanad giving him the right of adoption The present Raja Sir Kirti Shah, K C S.I, was installed in 1894. The principal product is rice, grown on terraces on the hill-sides. The State forests are very valuable and there is considerable export of timber. The Raja has full powers within the State, executive authority being vested in an officer called the Wazir A military force of 113 strong is maintained.

The capital is Tehri, the summer capital being Pratapnagar 8,000 feet above the sea level.

Political Agent the Commissioner of Kumaon.

Benares.—The founder of the ruling family of Benares was one Mansa Ram, who entered the service of the Governor of Benares under the Nawab of Oudh in the early eighteenth century. In 1794, owing to the maladministration of the estates which had accumulated under the Raja of Benares, an agreement was concluded by which the lands held by the Raja in his own right were separated from the rest of the province, of which he was simply administrator. The direct control of the latter was assumed by the Government, and an annual income of one lakh of rupees was assured to the Raja, while the former constituted the Domains. Within the Domains the Raja had revenue powers similar to those of a Collector in a British District, which were delegated to certain of his own officials. There was thus constituted what for over a century was known as the Family Domains of the Maharaja of Benares On the 1st of April 1911 these Domains became a State consisting of the parganas of Bhadohi (or Konrh) and Chakia (or Kera Mangraur) with the fort of Ramnagar The Maharaja's powers are those of a ruling chief, subject to certain conditions, of which the most important are the maintenance of all rights acquired under laws in force prior to the transfer, the reservation to Government of the control of the postal and telegraph systems, of plenary criminal jurisdiction within the State over servants of the British Government and European British subjects, and of a right of control in certain matters connected with excise The present ruler is H H. Maharaja Sir Prabhu Narayan Singh Bahadur, G.C.I E, who was born in 1855 and succeeded to the Estates in 1889.

UNDER THE GOVERNMENT OF THE PUNJAB.

Under this Government there are 34 states, varying considerably in size and importance Area, 36,532 square miles Population (1911), 4,212,794 Revenue, about £1,000,000

The Punjab states may be grouped under three main classes The hill States, 23 in number, lie among the Punjab Himalayas and are held by some of the most ancient Rajput families in all India Along the western half of the southern border lies the Muhammadan state of Bahawalpur The remaining States, including the Sikh principalities of Patiala, Jind Nabha, Kapurthala, Faridkot and Kalsia, and the Muhammadan chiefships of Maler Kotla, Pataudi, Loharu and Dujana, lie east of Lahore, and, with insignificant exceptions, occupy the centre of the eastern plains of the province.

The list below gives details of the area, population, and revenue of the more important states —

Name.	Area square miles	Population.	Revenue Approx in lakhs
Bahawalpur ..	15,000	780,394	27
Chamba ..	3,216	134,351	7
Faridkot ..	642	136,374	8
Jind ..	1,259	271,728	15
Kapurthala ..	630	268,244	25
Maler Kotla ..	167	71,144	4
Mandi ..	1,200	181,110	5
Nabha .	928	248,892	15
Patiala ..	5,412	1,407,659	72
Sirmur (Nahan) .	1,198	138,564	8

Bahawalpur.—This State, which is about 300 miles in length and about 40 miles wide, is divided lengthwise into three great strips Of these, the first is a part of the Great Indian Desert; the central tract is chiefly desert, not capable of cultivation, identical with the Bar or Pat uplands of the Western Punjab; and the third, a fertile alluvial tract in the river valley, is called the Sind The ruling family claims descent from the Abbasid Khalifs of Egypt. The tribe originally came from Sind, and assumed independence during the dismemberment of the Durrani empire. On the rise of Ranjit Singh, the Nawab made several applications to the British Government for an engagement of protection These, however, were declined, although the Treaty of Lahore in 1809, whereby Ranjit Singh was confined to the right bank of the Sutlej, in reality effected his object The first treaty with Bahawalpur was negotiated in 1833, the year after the treaty with Ranjit Singh for regulating traffic on the Indus It secured the independence of the Nawab within his own territories, and opened up the traffic on the Indus and Sutlej. During the first Afghan War the Nawab rendered assistance to the British and was rewarded by a grant of territory and life pension. On his death the succession was disputed and for a time the State was in the hands of the British The present Nawab is H H. Nawab Sadiq Muhammad Khan, who was born in 1904 and succeeded in 1907 During his minority the State is managed by a Council of Regency The chief crops are wheat, rice and millet. The Lahore-Karachi branch of the North-Western State Railway passes through the State The State supports an Imperial Service Silladar Camel Transport Corps consisting of 355 men and 1,144 camels, in addition to other troops The capital is Bahawalpur, a walled town built in 1748.

Political Agent: Major A. J. O'Brien.

Chamba.—This State is enclosed on the west and north by Kashmir, on the east and south by the British districts of Kangra and Gurdaspur, and it is shut in on almost every side by lofty hill ranges The whole country is mountainous and is a favourite resort of sportsmen. It possesses a remarkable series of copper plate inscriptions from which its chronicles have been completed

Founded probably in the sixth century by Marut, a Surajbansi Rajput, who built Brahmapura, the modern Brahmapur, Chamba was extended by Meru Varma (680) and the town of Chamba built by Sahil Varma about 920. The State maintained its independence, until the Moghal conquest of India

Under the Moghals it became tributary to the empire, but its internal administration was

not interfered with, and it escaped almost unscathed from Sikh aggression. The State first came under British influence in 1846 The part, west of the Ravi, was at first handed over to Kashmir, but subsequently the boundaries of the State were fixed as they now stand, and it was declared independent of Kashmir. The present chief is H. H. Raja Sir Bhure Singh, K.C.S.I., C.I.E., who was born in 1869 and succeeded in 1904. The principal crops are rice, maize and millets. There are some valuable forests which were partly leased to Government in 1864 for a term of 99 years, but the management of them has now been retroceded to the Chamba Durbar. The mountain ranges are rich in minerals which are little worked. The principal road to Chamba town is from Pathankot, the terminus of the Amritsar Pathankot branch of the North-Western Railway. The Raja is assisted in the administration by the Wazir, who is the chief executive officer and head of the judicial department Chamba town, on the right bank of the Ravi, contains a number of interesting temples, of which that of Lakshmi Narayan, dating possibly from the tenth century, is the most famous

Faridkot.—The ruling family of this sandy level tract of land belongs to the Sidhu-Barar clan of the Jats, and is descended from the same stock as the Phulkian houses. Their occupation of Faridkot and Kot Kapura dates from the time of Akbar, though quarrels with the surrounding Sikh States and internal dissensions have greatly reduced the patrimony.

The present chief, H H. Raja Brij Indar Singh Bahadur, was born in 1896 and succeeded in 1906 During his minority the administration is carried on by a council under the presidency of an Extra Assistant Commissioner The State supports one company of Imperial Service Sappers.

Jind—The three Native States of Jind, Patiala and Nabha form collectively the Phulkian States, the most important of the Cis-Sutlej States. This area is the ancestral possession of the Phulkhian houses. It lies mainly in the great natural tract called the Jangal (desert or forest), but stretches north-east into that known as the Pawadh and southwards across the Ghaggar into the Nardak, while its southernmost tract, round the ancient town of Jind, claims to lie within the sacred limits of Kurukshetra. This vast tract is not, however, the exclusive property of the States, for in it lie several islands of British territory, and the State of Maler Kotla enters the centre of its northern border. On the other hand, the States hold many outlying villages surrounded by British territory

The history of Jind as a separate State dates from 1763 when the confederated Sikhs captured Sirhind town and partitioned the whole Jind Province. The Maharaja of Jind, H. H Maharaja Sir Ranbir Singh, K.C.S.I., was born in 1879 and succeeded in 1887. He is descended from the ancestors of the Phulkian family. During the Sikh War and the Mutiny the Raja of Jind was of great service to the British and was rewarded with a grant of nearly 600 square miles of land. The principal crops are wheat, barley and gram. The only industries of importance are the manufactures of gold and silver ornaments, leather and woodwork and cotton cloth. The capital is Sangrur which is connected by a State Railway with the North-Western Railway. The administration of the State is divided between four departments under heads of departments which form together a State Council controlled by the Maharaja.

Kapurthala—This State consists of three detached pieces of territory in the great plain of the Doab The ancestors of the chief of Kapurthala at one time held possessions both in the cis and trans-Sutlej and also in the Bari Doab. In the latter lies the village of Ahlu, whence the family springs, and from which it takes the name of Ahluwalia Some of these States were confiscated after the first Sikh War and when the Jullundur Doab came under the dominion of the British Government in 1846, the estates north of the Sutlej were maintained in the independent possession of the Ahluwalia chieftain, conditional on his paying a commutation in cash for the service engagements by which he had previously been bound to Ranjit Singh The Bari Doab estates have been released to the head of the house in perpetuity, the civil and police jurisdiction remaining in the hands of the British authorities. For good services during the Mutiny, the Raja was rewarded with a grant of other States in Oudh in which, however, he exercises no ruling powers, though in Oudh he is, to mark his superiority, addressed as Raja-i-Rajagan The present chief is H. H. Maharaja Sir Jagatjit Singh Bahadur, G.C.S.I., who was born in 1872 and succeeded in 1877. He was granted the title of Maharaja as an hereditary distinction in 1911 The chiefs of Kapurthala are Sikhs Sardar Jassa Singh was always known as Jassa Kalal; but the family claim descent from Rana Kapur, a semi-mythical member of the Rajput house of Jaisalmer, who is said to have left his home and founded Kapurthala 900 years ago Only a small proportion of the population however are Sikhs, the majority being Mahomedans The chief crops are wheat, gram, maize, cotton and sugar-cane. The town of Sultanpur in this State is famous for hand-painted cloths. The main line of the North-Western Railway passes through part of the State and the Grand Trunk Road runs parallel to it. A branch railway from Jullundur City to Ferozepur passes through the State Kapurthala maintains a battalion of Imperial Service infantry and a small force of local troops. The capital is Kapurthala, which is said to have been founded in the eleventh century.

Agent to the Lieutenant-Governor for Kapurthala, the Commissioner of the Jullunder Division.

Maler Kotla.—This State consists of a level sandy plain bounded by the district of Ludhiana on the north and by Patiala territory elsewhere The Nawabs of Maler Kotla are of Afghan descent, and originally held positions of trust in the Sirhind province under the Moghal Emperors. As the Empire sank into decay during the eighteenth century, the local chiefs gradually became independent The result was constant feuds with the adjacent Sikh States. After the victory of Laswari, gained by the British over Sindhia in 1803 and the subjugation and flight of Holkar in 1805, when the Nawab of Maler Kotla joined

the British army, the British Government succeeded to the power of the Marathas in the districts between the Sutlej and the Jumna The final treaty which affirmed the dependence of the State on the British Government was signed after the submission of Ranjit Singh in 1809. The present Nawab is H H Nawab Ahmud Ali Khan Bahadur, who was born in 1881 and succeeded in 1908. The chief products are cotton, sugar and opium The State supports one company of Imperial Service Sappers The capital is Maler Kotla

Mandi.—This is a mountainous State in the upper reaches of the Beas. It has a history of considerable length, as it once formed part of the Suket State Its relations with the British were determined after the battle of Sobraon in 1846 The present minor chief H. H. Raj Jogindra Sen was installed in 1913. The administration is carried on by Mr A L, Gordon Walker, I C S, the Superintendent and Sardar Amar Singh. The principal crops are rice, maize, wheat and millet About three fifths of the State are occupied by forest and grazing lands It is rich in minerals The capital is Mandi, founded in 1527, which contains several temples and other buildings of interest and is one of the chief marts for commerce with Ladakh and Yarkhand

Nabha—Nabha is one of the Phulkian States. It consists of two distinct parts, the main portion comprising 12 separate pieces of territory scattered among the other two Phulkian States of Patiala and Jind The second portion forms the *nizamat* of Bawal in the extreme south-east of the Punjab It became a separate State in 1763 After the victory of Sobraon, the chief was deposed and about a quarter of his territory was confiscated For his loyalty during the Mutiny the chief was rewarded with territory which forms the present Bawal Nizamat. The present chief is H H. Maharaja Ripudaman Singh Malwandar Bahadur, who was born in 1883 and succeeded in 1911. He is assisted in the administration by a council of three members which also acts as a court of appeal The State supports one battalion of Imperial Service Infantry. The State is traversed by the main line and by three branches of the North-Western Railway The Rajputana Malwa Railway crosses Bawal The chief crops are gram, wheat and pulses, the chief industries are manufactures of silver and gold ornaments and brass utensils

Patiala,—This is the largest of the Phulkian States, but its territory is scattered and interspersed by small estates and even single villages belonging to other villages and British districts Its history as a separate State begins in 1762 During the Sikh War and the Mutiny the Maharaja was loyal and was substantially rewarded The present Chief H. H. Maharajadhiraja Sri Sir Bhupindar Singh Mahindar Bahadur, G C I E, was born in 1891 and succeeded in 1900. During his minority his administrative functions were exercised by a council of regency consisting of three members The principal crops are gram, barley and wheat Cotton and tobacco are also grown in parts of the State. It possesses valuable forests The State is rich in antiquities especially at Pinjaur, Sunam and Sirhind The North-Western Railway traverses the State It contains an Imperial Service contingent, of a regiment of cavalry and two battalions of infantry.

In 1900 it was decided by the Government of India to appoint a Political Agent for Patiala, and the other two Phulkian States of Jind and Nabha were included in the Agency, to which was afterwards added the Mahomedan State of Bahawalpur. The headquarters of the Agency are at Patiala

Sirmur (Nahan)—This is a hilly State in the Himalayas under the Political control of the Commissioner of Ambala Division. Its history is said to date from the 11th century. In the eighteenth century the State was able to repulse the Gurkha invasion, but in 1793 the Gurkhas were invited to aid in the suppression of an internal revolt in the State and they in turn had to be evicted by the British. In 1857 the Raja rendered valuable services to the British, and during the second Afghan War he sent a contingent to the North-West Frontier The present chief is H H. Raja Amar Parkash Bahadur, who was born in 1888 and succeeded in 1911 The main agricultural feature of the State is the recent development of the Kiarda Dun, a fertile level plain which produces wheat, gram, rice, maize and other crops The State forests are valuable and there is an iron foundry at Nahan which was started in 1867 but, being unable to compete with the imported iron, is now used for the manufacture of sugar-cane crushing mills. The State supports an Imperial Service Corps of Sappers and Miners which served in the Tirah Expedition of 1897.

UNDER THE GOVERNMENT OF BURMA.

Under this Government there are four Shan States, two in the Mandalay Division (Hkmati Long and Mong Mit), and two in the Sagaing Division (Hsawnghsup and Singkaling Hkmati), the area of which is 7,374 square miles and the population about 67,051, consisting chiefly of Buddhists There are in addition 48 petty States, 5 in the Northern Shan States, 43 in the Southern Shan States, with an area of 58,835 square miles and a population of 1,358,498 consisting of Buddhists and Animists.

The Shan States—though a portion of British India, do not form part of Burma proper and are not comprised in the regularly administered area of the Province. They lie for the most part to the east of Upper Burma They owed allegiance to the Burmese Government, but were administered by their own rulers (Sawbwas) and the British Government has continued to a certain extent the semi-independence which it found existing in 1885. As at present defined, the Shan States are divided into—

1. States under the supervision of the Superintendent, Northern Shan States, whose head quarters are at Lashio; area 14, 294 square miles and population 58,952.
2. States under the supervision of the Superintendent and Political Officer, Southern Shan States, whose head-quarters are at Taunggyi; area 40,434 square miles and population 900,202;

There are five States in the Northern and 38 in the Southern Shan States There are in addition two Shan States under the supervision of the Commissioner of the Mandalay Division, namely, Hkmati Long in the unadministered territory to the north of the Myitkyina District and Mong Mit lying northeast of the Ruby Mines District In the northwest of the Upper Chindwin District towards Manipur there are two small Shan States, Hsawnghsup and Singkaling Hkamti, whose administration is supervised by the Commissioner of the Sagaing Division

The Northern Shan States are North Hsenwi in the north, South Hsenwi near the Salween in the east, Manglon in the south-east, Hsipaw in the south-west, and Tawngpeng in the northwest The Wa States east of the Salween can hardly be said to be under British control In ordinary matters the States are administered by their Sawbwas, who are assisted by amats, or ministers, in various departments The Superintendent exercises general control over the jurisdiction of justice and is vested with wide revisionary powers In revenue matters the Sawbwas administer their States in accordance with local customs which have been but little modified Of prime importance in the economy of the country is the Mandalay Lashio railway, 180 miles in length, of which 126 miles lie within the Northern Shan States The line is a single track, and was constructed in the face of considerable engineering difficulties, of which not the least notable was the Gokteik gorge, now spanned by a viaduct It had been proposed to continue the railway about 90 miles farther east to the Kunlong, where is a ferry over the Salween, and eventually to penetrate into Yunnan; but this extension is for the present in abeyance.

The most important of the Southern Shan States are Kengtung and Yawnghwe. Under the supervision of the Superintendent and Political Officer and his Assistants, the chiefs—known as Sawbwas, Myozas, and Ngwegunhmus—control their own States, exercising revenue, civil and criminal jurisdiction therein There are in all 9 Sawbwas, 18 Myozas and 11 Ngwegunhmus

Karenni—This district consists of five States, with a total area of approximately 4,200 square miles and a population of about 64,000, lying on the frontier south of the Shan States The largest State is Kantarawadi with an area of 3,000 square miles, a population of nearly 40,000, and a gross revenue of about 1¼ lakhs of rupees More than half of the inhabitants belong to the Red Karens, a people low in the scale of civilisation An Assistant Political Officer is posted at Loikaw as Agent of the British Government, and a certain amount of control is exercised through him over the chiefs The principal wealth of the country is teak timber, and the considerable alien population is largely supported by the timber trade, which, however, has declined greatly in the last few years The Karens themselves are distinguished as hunters

UNDER THE GOVERNMENT OF ASSAM.

The only State of importance under the Chief Commissioner of Assam is **Manipur**, which has an area of 8,456 square miles and a population of 346,222, of which about 60 per cent are Hindus, and 36 per cent animistic forest tribes Manipur consists of a great tract of hilly country and a valley, about 30 miles long 20 miles wide, which is shut in on every side. The State adopted Hinduism in the early eighteenth century, when it came under a Naga Raja who subsequently made several invasions into Burma On the Burmese retaliating, Manipur negotiated a treaty of alliance with the British, in 1762 The Burmese again invaded Manipur during the first Burmese War and on the conclusion of peace, in 1826, Manipur was declared independent. The chief event in its subsequent history was the intervention of the British in 1891 to establish the claim of Kula Chandra Singh as Maharaja, followed by the treacherous murder of the Chief Commissioner, Mr Quinton and the officers with him and the withdrawal of the escort which accompanied him From 1891 to 1908 the State was administered by a Political Agent and Superintendent of the State during the minority of H H Raja Chura Chand Singh The Raja was invested with ruling powers in 1908. The administration of the State is now conducted by the Durbar, consisting of the Raja as President, a vice-president, a member of the Indian Civil Service whose services are lent to the State three ordinary and three additional members who are all Manipuris, The staple crop of the country is rice Forests of great variety cover the whole of the hill ranges

Khasi and Jaintia Hills—These petty chiefships, 25 in number, with a total area of about 3,900 square miles and a population of 126,000, are included under the Government of Assam Most of the States have treaties or engagements with the British Government The largest of them is Khyrim, the smallest is Nonglewai, which has a population of 169 Most of them are ruled by a chief or Siem The Siemship usually remains in one family, but the succession was originally controlled by a small electoral body constituted from the heads of certain priestly clans Of recent years there has been a tendency to broaden the elective basis, and the constitution of a Khasi State has always been of a very democratic character, a Siem exercising but little control over his people. Among many of the north-east frontier tribes there is little security of life and property, and the people are compelled to live in large villages on sites selected for their defensive capabilities. The Khasis seem, however, to have been less distracted by internal warfare, and the villages as a rule, are small.

UNDER THE GOVERNMENT OF CENTRAL PROVINCES.

The Central Provinces include fifteen feudatory States subordinate to the administration, with an area of 31,174 square miles and a population of 2,117,002. One of the States, Makrai, lies within Hoshangabad District: the remainder are situated in the Chhattisgarh Division, to the different Districts of which they were formerly attached. Their relations with Government are controlled by a Political Agent. The States vary greatly in size and importance,

Sakti the smallest, having an area of 138 square miles and Bastar the largest an area of 13,062 square miles. They are administered by hereditary chiefs, who hold on conditions of loyalty and good government set forth in patents and acknowledgments of fealty, but are nominally free from direct interference save in the case of sentences of death, which require the Chief Commissioner's confirmation. But, as a fact, the Government has exercised a very large amount of control, owing mainly to the frequency with which the States have been taken under direct management, because of either the minority or the misconduct of the chief

The States pay a tribute to Government which amounts in the aggregate to about 2½ lakhs

Statistics relating to the chief States are contained in the following table —

State	Area.	Population 1911.	Revenue (approximate) in Lakhs
	Sq Miles		Rs.
Bastar .	13,062	433,310	3
Jashpur	1,963	174,458	1
Kanker	1,429	127,014	2
Khairagarh	931	155,471	3
Nandgaon	871	167,362	4
Raigarh .	1,486	218,860	2
Surguja ..	6,055	248,703	2
Eight other States	5,377	411,824	6
Total	31,174	2,117,002	23

Bastar.—This State, which lies to the south-east corner of the Provinces, is the most important of the group It has an area of 13,002 square miles and a population of 433,310 The family of the Raja is very ancient, and is stated to belong to the Rajputs of the Lunar race. Up to the time of the Marathas, Bastar occupied an almost independent position, but a tribute was imposed on it by the Nagpur government in the eighteenth century At this period the constant feuds between Bastar and the neighbouring State of Jeypore in Madras kept the country for many years in a state of anarchy The chief object of contention was the Kotapad tract, which had originally belonged to Bastar, but had been ceded in return for assistance given by Jeypore to one of the Bastar chiefs during some family dissensions The Central Provinces Administration finally made this over to Jeypore in 1863, on condition of payment of tribute of Rs. 3,000, two-thirds of which sum was remitted from the amount payable by Bastar. By virtue of this arrangement the tribute of Bastar was, until recently, reduced to a nominal amount The cultivation of the State is extremely sparse Rice is the most important crop The State is ruled by the feudatory Chief The Dewan of the State is an extra Assistant Conservator of Forests who has three assistants under him After a recent period of disturbance the State has returned to complete tranquillity and precautions are being taken to remove all causes of unrest by better supervision over the minor State officials and a very considerate forest policy The chief town is Jagdalpur on the Indravati River

Surguja.—Until 1905 this was included in Chota Nagpur State of Bengal The most important feature is the Manipat, a magnificent tableland forming the southern barrier of the State The early history of Surguja is obscure, but according to a local tradition in Palamau, the present ruling family is said to be descended from a Raksel Raja of Palamau In 1758 a Maratha army overran the State, and compelled its chief to acknowledge himself a tributary of the Bhonsla Raja. At the end of the eighteenth century, in consequence of the chief having aided a rebellion in Palamau against the British, an expedition entered Surguja, and, though order was temporarily restored, disputes again broke out between the chief and his relations, necessitating British interference Until 1818 the State continued to be the scene of constant lawlessness; but in that year it was ceded to the British Government under the provisional agreement concluded with Mudhoji Bhonsla of Berar, and order was soon established The principal crops are rice and other cereals The population is mainly aboriginal, the wild Korwa tribe being a perpetual source of trouble A band of them committed several murders and robberies in 1910

Native States' Tribute.

Many of the States pay tribute, varying in amount according to the circumstances of each case, to the British Government. This tribute is frequently due to exchanges of territory or settlement of claims between the Governments, but is chiefly in lieu of former obligations to supply or maintain troops The actual receipts in the form of tribute and contributions from Native States in the year 1911-12 are summarised in the following table. The relations of the States to one another in respect of tributes are complicated, and it would serve no useful purpose to enter upon the question. It may, however, be mentioned that a large number of the States of Kathiawar and Gujarat pay tribute of some kind to Baroda, and that Gwalior claims tribute from some of the smaller States of Central India

STATES PAYING TRIBUTE DIRECTLY TO THE GOVERNMENT OF INDIA

	£	£
Tribute from Jaipur	26,667	
,, ,, Kotah	15,648	
,, ,, Udaipur	13,333	
,, ,, Jodhpur	6,533	
,, ,, Bundi	4,222	
,, ,, Other States	15,170	
		81,573
Contribution of Jodhpur towards cost of Erinpura Irregular Force	7,667	
,, of Kotah towards cost of Deoli Irregular Force	13,333	
,, of Bhopal towards cost of Bhopal Levy	10,753	
,, of Jaora towards cost of United Malwa Contingent	19,711	
Contributions towards cost of Malwa Bhil Corps	5,816	
		57,279
Fees on succession		3,437
Total		142,290
Central Provinces and Berar.		
Tribute from various States		15,696
Burma		
Tributes from Shan States	28,893	
,, ,, other States	33	
		28,927
Eastern Bengal and Assam.		
Tribute from Manipur	3,333	
,, ,, Ramrai	13	
		3,347
Bengal.		
Tribute from various States	....	3,483
United Provinces.		
Tribute from Benares	12,148	
,, ,, Kapurthala (Bahraich)	8,733	20,882
Punjab.		
Tribute from Mandi	6,667	
,, ,, other States	3,086	
Fees on succession	133	
		9,886
Madras		
Tribute from Travancore	52,207	
Peshkash and subsidy from Mysore	233,333	
,, ,, ,, ,, Cochin	13,339	
,, ,, ,, ,, Travancore	888	
		299,768
Bombay.		
Tribute from Kathiawar	31,129	
,, ,, various petty States	2,825	
Contribution from Baroda State	22,068	
,, ,, Jagirdars, Southern Mahratta Country	5,765	
Subsidy from Cutch	5,484	
Fees on succession	3,457	
		70,727
Grand Total	....	595,005

It was announced at the Coronation Durbar of 1911 that there would in future be no Nazarana payments on successions

Foreign Possessions in India.

Portugal and France both hold small territorial possessions in the Indian Peninsula

The Portuguese possessions in India consist of the province of Goa, situated within the limits of the Bombay Presidency, on the Arabian Sea coast, the small territory of Daman on the Gujarat coast, at the entrance to the Gulf of Cambay, and the little island of Diu, lying off the southern extremity of the Kathiawar Peninsula

GOA.

Goa forms a compact block of territory surrounded by British districts Savantwadi State lies to the north of it, the Arabian Sea on the west and North Kanara on the south, and the eastern boundary is the range of the Western Ghats, which separates it from the British districts of Belgaum and North Kanara The extreme length from north to south is 62 miles and the greatest breadth from east to west 40 miles The territory has a total area of 1,301 square miles and comprises the island of Goa, acquired by the Portuguese in 1510, the division of Velhas Conquistas, or old Conquests, comprising the neighbouring districts of Bardez and Salsette, acquired in 1543, and the Novas Conquistas, or New Conquests, comprising the districts of Pernem, Bicholim or Bataguam, Satari, Ponda or Antruz, Zambaulim or Panchmal, and Canacona or Advota, acquired in the latter half of the 18th century The small island of Andjiv, situated opposite the port of Karwar, in the British district of North Kanara, forms administratively a portion of the province of Goa This was acquired in 1505 The whole country is hilly, especially the western portion, the predominating physical feature being the Western Ghats, which besides bounding the country along the north-east and south-east, jut off westward and spread across the country in a succession of spurs and ridges There are several conspicuous isolated peaks, of which the highest, Sonsagar, is 3,827 feet high

The country is intersected by numerous rivers running westward from the Ghats, and the principal eight, which are all navigable, are in size of some importance Goa possesses a fine harbour, formed by the promontaries of Bardez and Salsette Half-way between these extremities lies the *cabo*, or cape, which forms the extremity of the island of Goa This divides the whole bay into two anchorages, known as Aguada and Marmagao Both are capable of accommodating the largest shipping from September to May, but Aguada is virtually closed during the south-west monsoon, owing to the high winds and sea and to the formation of sand bars across the estuary of the Mandavi river, which opens into Aguada Marmagao is accessible at all times and is therefore the harbour of commercial importance It is the terminus of the railway running to the coast from the inland British system of lines, a breakwater and port have been built there and the trade is considerable, being chiefly transit trade from British territory.

The People.

The total population in the whole Goa territory was 475,513 at the census of 1900. This gives a density of 343 persons to the square mile and the population showed an increase of 6 per cent since the census ten years previously In the Velhas Conquistas 91 per cent of the population is Christian In the Novas Conquistas Christians and Hindus are almost equally numerous The Moslems in the territory are numbered in a few thousands. The Christians still very largely adhere to caste distinctions, claiming to be Brahmans, Charados and low castes, which do not intermarry. The Hindus are largely Maratha and do not differ from those of the adjacent Konkan districts of Bombay All classes of the people, with the exception of Europeans, use the Konkani dialect of Marathi, with some admixture of Portuguese words The official language is Portuguese, which is commonly spoken in the capital and the principal towns, as well as by all educated people Nearly all the Christians profess the Roman Catholic religion and are spiritually subject to an archbishop, who has the titles of Primate of the East and Patriarch of the East Indies and exercises ecclesiastical jurisdiction also over a great portion of British India (The Christians of Daman and Diu are subject to a Bishop who bears the titles of Bishop of Daman and Archbishop of Cranganore) There are numerous churches in Goa, mostly built by the Jesuits and Franciscans prior to the extinction of the religious orders in Portuguese territory The churches are in charge of secular priests. Hindus and Mahomedans now enjoy perfect freedom in religious matters and have their own places of worship In the early days of Portuguese rule the worship of Hindu gods in public and the observance of Hindu usages were strictly forbidden and rigorously suppressed

The Country.

One-third of the entire territory of Goa is stated to be under cultivation A regular land survey was only recently made. The fertility of the soil varies considerably according to quality, situation and water-supply. The Velhas Conquistas are as a rule better cultivated than the Novas Conquistas. In both these divisions a holding of fifteen or sixteen acres would be considered a good sized farm, and the majority of holdings are of smaller extent. The staple produce of the country is rice, of which there are two good harvests, but the quantity produced is barely sufficient to meet the needs of the population for two-thirds of the year Next to rice, the culture of cocoanut palms is deemed most important, from the variety of uses to which the products are applied. Hilly places and inferior soils are set apart for the cultivation of cereals and several kinds of fruits and vegetables are cultivated to an important extent. The condition of the agricultural classes in the Velhas Conquistas has improved during recent years, owing to the general rise in the prices of all classes of agricultural produce and partly to the current of emigration to British territory The people in the Novas Conquistas have long been reported as reduced to great want through the oppression of the landowners. Stately forests are found in the Novas Con-

quistas They cover an area of 116 square miles and are under conservation and yield some profit to the administration. Iron is found in parts of the territory, but has not been seriously worked Manganese also exists and was worked to an important extent a few years ago

Commerce.

In the days of its glory, Goa was the chief entrepot of commerce between East and West and was specially famous for its trade in horses with the Persian Gulf It lost its commercial importance with the downfall of the Portuguese mpire and its trade is now insignificant Few manufacturing industries of any moment exist, and most manufactured articles in use are imported Exports chiefly consist of cocoanuts, betel nuts, mangoes and other fruits and raw produce A line of railway connects Marmagao with the Madras and Southern Maratha Railway Its length from Marmagao o Castle Rock, above the Ghats, where it joins the British system, is 51 miles, of which 49 are in Portuguese territory The railway s under the management of the Madras and Southern Maratha Railway administration, and the bulk of the trade of Marmagao port is what it brings down from and takes to the nterior The telegraphs in Goa territory are worked as part of the system of British India, and are maintained jointly by the British and Portuguese Governments The Goa territory was formerly subject to devastating famines and the people now suffer heavy losses in times of drought They are then supplied, though at great cost, with rice from British territory.

The Capital.

Nova Goa, the present capital of Portuguese India, comprehends Panjim and Ribandar, as well as the old city of Goa, and is six miles in extent Old Goa is some five miles distant from the new city Panjim occupies a narrow strip of land leading up to the Cabo, the cape dividing the Aguada bay from that of Marmagoa, and mainly slopes down to the edge of the Aguada It was selected as the residence of the Portuguese Viceroy in 1759, and in 1843 it was raised to its present rank as the capital of Portuguese India The appearance of the ity, with its row of public buildings and elegant private residences, as seen from the water, is very picturesque and this impression is not belied by a closer inspection of its neat and spacious roads, bordered by decent, tidy houses The most imposing public structures are the barracks, an immense quadrangular building the eastern wing of which accommodates the Lyceum, the Public Library and the Government Press Other noticeable buildings are the Cathedral and various churches, the viceregal palace, the High Court and so on The square in the lower part of the town is adorned with a life-sized statue of Albuquerque standing under a canopy

History.

Goa was captured for the Portuguese by Alfonso de Albuquerque in 1510 Albuquerque promptly fortified the place and established Portuguese rule on a firm basis. From this time Goa rapidly rose in importance and became the metropolis of Portuguese power in the East. There was constant fighting with the armies of the Bijapur kingdom, but the Portuguese held their own and gained the surrounding territory now known as the Velhas Conquistas

The subsequent history of the town is one of luxury, ostentation and decay Goa reached its summit of prosperity at the end of the sixteenth century The accounts of travellers show that the Goa of those days presented a scene of military, ecclesiastical and commercial magnificence which has had no parallel in the British capitals of India But the Portuguese based their dominion in India on conquest by the sword and they laboured to consolidate it by a proselytizing organisation which throws the missionary efforts of every other European power in India into the shade Old Goa, as the ruins of the old capital are called to-day, had a hundred churches, many of them of magnificent proportions, and the Inquisition was a power in the land The result showed how rotten was this basis and how feebly cemented the superstructure reared upon it

After the genius of Albuquerque and the energies of the early Viceroys had spent themselves, their armies constituted a vast idle population in the capital The work of conquest was over and it left behind it a gay and wealthy city of conquerors who had nothing to do

Modern Times.

The Portuguese were unable to hold their own against the native banditti There was frequently recurring fighting and in 1741 the Marathas invaded the neighbourhood of Goa and threatened the city itself An army of 12,000 men arrived from Portugal at the critical moment The invaders were beaten off, and the Novas Conquistas were added to the Portuguese possessions In 1844 the shelter given by Goa to fugitives from justice in British territory threatened to bring about a rupture with the British Government at Bombay In 1852 the Ranes of Satari, in the Novas Conquistas revolted In 1871 the native army in Goa mutinied and the king's own brother came from Lisbon to deal with the trouble and having done so disbanded the native army, which has never been reconstituted But another outbreak among the troops took place in 1895 and the Ranes joining them the trouble was again not quieted until the arrival of another special expedition from Lisbon The Ranes again broke out in 1901 and again in 1912, troops being again imported to deal with the last outbreak, which was only reported concluded in the summer of 1913

Administration.

Goa is regarded as an integral portion of the Portuguese Empire and, with Daman and Diu, forms for administrative purposes one province subject to a Governor-General, who is appointed directly by the Lisbon Government and holds office for five years Besides his civil functions, he is invested with supreme military authority in the province

The Governor-General is aided in his administration by a Council composed of a Chief Secretary, the Archbishop of Goa or, in his absence, the chief ecclesiastical authority exercising his functions, the Judges of the

High Court, the two highest military officers in Goa, the Attorney-General, the Inspector da Fazenda, the Health Officer and the President of the Municipal Chamber or Corporation of the capital (Camara Municipal das Ilhas), which is the oldest Municipal body in the East. As a rule, all the members give their opinions and vote in every matter on which they are consulted by the Governor-General There are five other juntas, or councils, called the Junta Geral da Provincia (general council of the province), the Conselho da Provincia (the council of the province), the Conselho Technico das Obras publicas, the Conselho-Inspector de Instruccao publica, and the Conselho da Agricultura. The first of these is composed of the Chief Secretary, the Archbishop or his substitute, the Attorney-General the Inspector da Fazenda of Public Works, the Health Officer a Professor of the Medico-Surgical College, a Professor of the Lyceum, or educational College, a Professor of the Normal School and a representative from each of the Municipal Corporations of the province.

In addition to this machinery of administration there are subordinate agencies for the local government of every district.

DAMAN.

The settlement of Daman lies at the entrance to the Gulf of Cambay, about 100 miles north of Bombay. It is composed of two portions, namely, Daman proper, lying on the coast, and the detached pargana of Nagar Havili, separated from it by a narrow strip of British territory and bisected by the B B & C I Railway. Daman proper contains an area of 22 square miles and 26 villages and has a population (1900) of 17,391 Nagar Havili has an area of 60 square miles and a population (1900) of 24,280 The town of Daman was sacked by the Portuguese in 1531, rebuilt by the natives and retaken by the Portuguese in 1558, when they made it one of their permanent establishments in India They converted the mosque into a church and have since built eight other places of worship Of the total population the number of Christians is 1,563. The number of houses is 8,971, according to the same census. The native Christians adopt the European costume, some of the women dressing themselves after the present European fashion, and others following the old style of petticoat and mantle once prevalent in Spain and Portugal

The soil of the settlement is moist and fertile, especially in the pargana of Nagar Havili, but despite the ease of cultivation, only one-twentieth part of the territory is under tillage. The principal crops are rice, wheat, the inferior cereals of Gujarat and tobacco The settlement contains no minerals There are stately forests in Nagar Havili, and about two-thirds of them consist of teak, but the forests are not conserved and the extent of land covered by each kind of timber has not been determined. Before the decline of Portuguese power in the East, Daman carried on an extensive commerce, especially with the east coast of Africa In those days it was noted for its dyeing and weaving

The territory forms for administrative purposes a single district and has a Municipal Chamber and Corporation. It is ruled by a Governor invested with both civil and military functions, subordinate to the Governor-General of Goa The judicial department is administered by a judge, with an establishment composed of a delegate of the Attorney-General and two clerks In Nagar Havili the greater part of the soil is the property of the Government, from whom the cultivators hold their tenures direct A tax is levied on all lands whether alienated or the property of the State The chief sources of revenue are land-tax, forests, excise and customs duties.

DIU.

Diu is an island lying off the southern extremity of the Kathiawar Peninsula, from which it is separated by a narrow channel through a considerable swamp. It has a small but excellent harbour, where vessels can safely ride at anchor in two fathoms of water and owing to the great advantages which its position offers for trade with Arabia and the Persian Gulf, the Portuguese were fired at an early period with a desire to obtain possession of it. This they gained, first by treaty with the Sultan of Gujarat and then by force of arms Diu became opulent and famous for its commerce. It has now dwindled into insignificance The extreme length of the island is about seven miles and its breadth, from north to south, two miles. The area is 20 square miles The population of the town of Diu, from which the island takes its name, is said to have been 50,000 in the days of its commercial prosperity. The total population of the island is according to the census of 1900 is 14,614, of whom 343 were Christians.

FRENCH POSSESSIONS.

The French possessions in India comprise five Settlements, with certain dependent lodges, or plots They aggregate 203 square miles, and had a total population in 1912 of 282,386 The first French expedition into Indian waters, with a view to open up commercial relations, was attempted in 1603 It was undertaken by private merchants at Rouen but it failed, as also did several similar attempts which followed. In 1642 Cardinal Richelieu founded the first Campagnie d'Orient, but its efforts met with no success. Colbert reconstituted the Company on a larger basis in 1664, granting exemption from taxes and a monopoly of the Indian trade for fifty years. After having twice attempted, without success, to establish itself in Madagascar, Colbert's Company again took up the idea of direct trade with India and its President, Caron, founded in 1668 the Comptoir, or agency, at Surat But on finding that city unsuited for a head establishment he seized the harbour of Trincomalee in Ceylon from the Dutch. The Dutch, however, speedily retook Trincomalee; and Caron, passing over to the Coromandel coast, in 1672 seized ST. THOME, a Portuguese town adjoining Madras

which had for twelve years been in the possession of Holland He was, however, compelled to restore it to the Dutch in 1674

The ruin of the Company seemed impending when one of its agents, the celebrated Francois Martin, suddenly restored it Rallying under him a handful of sixty Frenchmen, saved out of the wreck of the settlements at Trincomalee and St Thome, he took up his abode at Pondicherry, then a small village, which he purchased in 1683 from the Raja of Gingee He built fortifications, and a trade began to spring up, but he was unable to hold the town against the Dutch who wrested it from him in 1693, and held it until it was restored to the French by the Peace of Ryswick in 1697 Pondicherry became in this year, and has ever since remained, the most important of the French Settlements in India Its foundation was contemporaneous with that of Calcutta Like Calcutta, its site was purchased by a European Company from a native prince, and what Job Charnock was to Calcutta Francois Martin proved to Pondicherry On its restitution to the French by the Peace of Ryswick in 1697, Martin was appointed Governor, and under his able management Pondicherry became an entrepôt of trade

Chandernagar, in Lower Bengal, had been acquired by the French Company in 1688, by grant from the Delhi Emperor, Mahe, on the Malabar Coast, was obtained in 1725-6, under the government of M Lenoir, Karikal, on the Coromandel Coast, under that of M Duma, in 1739 Yanam, on the coast of the Northern Circars, was taken possession of in 1750, and formally ceded to the French two years later.

Administration.

The military command and administration-in-chief of the French possessions in India are vested in a Governor, whose residence is at Pondicherry The office is at present held by an Acting Governor, who is M H Lejeune He is assisted by a minister of the interior, secretaries in the different administrative departments, and a principal judicial officer. In 1879 local councils and a council-general were established, the members being chosen by a sort of universal suffrage within the French territories Ten municipalities or communal boards were erected under a decree issued in 1880, namely, at Pondicherry, Oulgaret, Villenour, Bahur, Karikal, La Grande Aldee, Nedungadu, Chandernagar, Mahe and Yanam. On municipal boards natives are entitled to a proportion of the seats Civil and criminal courts, courts of first instance, and a court of appeal compose the judicial machinery. The army and establishments connected with the Governor and his staff at Pondicherry, and those of the local governors or *chefs de service* at Chandernagar, Yanam, Mahe and Karikal, together with other headquarters charges, necessarily engross a large proportion of the revenue All the state and dignity of an independent Government, with four dependent ones, have to be maintained This is effected by rigid economy, and the prestige of the French Government is worthily maintained in the East Pondicherry is also the scene of considerable religious pomp and missionary activity It forms the seat of a Preteture Apostolique, founded in 1828, consisting of a Prefet Apostolique and a body of priests for all French India, and of the Missions Etrangeres, the successors of the Mission du Carnatic founded by the Jesuits in 1776 But the chief field of this mission lies outside the French Settlements, a large proportion of its Christians are British subjects and many of the churches are in British territory. The British rupee is the only legal tender within French territories A line of railway running *via* Villenour, from Pondicherry to Villupuram on the South Indian Railway, maintains communication with Madras and the rest of British India, and Karikal is linked to the same railway by the branch from Peralam A Chamber of Commerce consisting of fourteen members, nine of them Europeans or persons of European descent, was reorganised in 1879 The capital, Pondicherry, is a very handsome town, and presents, especially from the sea, a striking appearance of French civilisation.

People and Trade.

The Settlements are represented in Parliament at Paris by one senator and one deputy These are at the present time Mons. E Flandin and Mons P. Bluysen, respectively At Pondicherry the birth-rate in 1911 was 42.7, and the death-rate 34.3 per 1,000 There were in 1911, 53 primary schools and 4 colleges, all maintained by the Government, with 266 teachers and 5,240 pupils (1,918 being girls) Local revenue and expenditure (budget of 1913) 1,740,575 rupees; expenditure of France (budget of 1913), 138,000 rupees Outstanding debt, January 1, 1912, 470 400 francs The principal crops are paddy, groundnut, and ragi There are at Pondicherry 5 cotton mills, and at Chandernagar 1 jute mill, the cotton mills have, in all, 1,622 looms and 73,092 spindles, employing 12,020 persons There are also at work 2 oil factories and a few oil presses for ground nuts, 2 ice factories and a cocoatine factory The chief exports from Pondicherry are oil seeds At the ports of Pondicherry, Karikal, and Mahe in 1912 the imports amounted to 9,031,780 francs, and the exports to 37,218,209 francs At these three ports in 1912, 368 vessels of 704,311 tons entered and 360 of 786,492 tons cleared. Pondicherry is visited by French steamers sailing monthly between Colombo and Calcutta in connection with the Messageries Maritimes The figures contained in this paragraph are the latest available up to November, 1914, when this chapter was corrected.

PONDICHERRY.

Pondicherry is the chief of the French Settlements in India and its capital is the headquarters of their Governor. It is situated on the Coromandel Coast, 105 miles from Madras by road and 122 by the Villupuram-Pondicherry branch of the South Indian Railway

The area of the Settlement is 115 square miles and its population in 1912 was 184,754. It consists of the four communes of Pondicherry, Oulgaret, Villenour and Bahur. The Settlement was founded in 1674 under Francois Martin In 1693 it was captured by the Dutch,

but was restored in 1699. It was besieged four times by the English The first siege under Admiral Boscawen in 1748 was unsuccessful The second, under Eyre Coote in 1761, resulted in the capture of the place, which was restored in 1765 It was again besieged and captured in 1778 by Sir Hector Munro, and the fortifications were demolished in 1779 The place was again restored in 1785 under the Treaty of Versailles of 1783 It was captured a fourth time by Colonel Braithwaite in 1793, and finally restored in 1816

The Settlement comprises a number of isolated pieces of territory which are cut off from the main part and surrounded by the British District of South Arcot, except where they border on the sea This fact occasions considerable difficulty in questions connected with crime, land customs and excise The Collector of South Arcot is empowered to deal with ordinary correspondence with the French authorities on these and kindred matters, and in this capacity is styled the Special Agent At Pondicherry itself is a British Consular Agent accredited to the French Government, who is usually an officer of the Indian Army The town is compact, neat and clean, and is divided by a canal into two parts, the Ville blanche and the Ville noire. The Ville blanche has a European appearance, the streets being laid at right angles to one another, with trees along their margins reminding the visitor of continental boulevards, and the houses being constructed with courtyards and embellished with green venetians All the cross streets lead down to the shore, where a wide promenade facing the sea is again different from anything of its kind in British India. In the middle is a screw-pile pier, which serves, when ships touch at the port, as a point for the landing of cargo, and on holidays as a general promenade for the population. There is no real harbour at Pondicherry, ships lie at a distance of about a mile from the shore, and communication with them is conducted by the usual *masula* boats of this coast. Facing the shore end of the pier is a statue of the great Dupleix, to whom the place and the French name owed so much

CHANDERNAGAR.

Chandernagar is situated on the bank of the Hooghly, a short distance below Chinsura Population (1912) 25,293 The town was permanently occupied by the French in 1688, though previously it had been temporarily occupied by them at a date given as 1672 or 1676. It did not, however, rise to any importance till the time of Dupleix It changed hands between British and French various times during the Napoleonic wars and was finally restored to the French in 1816

The former grandeur of Chandernagar has disappeared, and at present it is little more than a quiet suburban town with little external trade The railway station on the East Indian Railway is just outside French territory 22 miles from Calcutta (Howrah) The chief administrative officer is the Administrator, who is subordinate to the Governor of the French Possessions The peculiar situation of Chandernagar affords unusual facilities for the escape from British territory of thieves and for the operations of smugglers in opium and other excisable articles Considerable trouble was experienced a few years ago by the escape of political refugees there The chief public institution is the College Dupleix, formerly called St Mary's Institution, founded in 1882 and under the direct control of the French Administrator

KARIKAL.

Karikal lies on the Coromandel Coast between the Tanjore District of Madras and the Bay of Bengal The Settlement is divided into three communes, containing 110 villages in all, and covering an area of 53 square miles It is governed by an Administrator subordinate to the Governor at Pondicherry. The population has in recent years rapidly decreased In 1883 it was 93,055, in 1891, 70,526, in 1901 56,595 and 1912, 56,579, but the density is still very high, being 1,068 persons per square mile Kumbakonam is the only taluk in Tanjore District which has a higher density Each of the three communes—namely, Karikal, La Grande Aldee, and Nedungadu—possesses a mayor and council The members are all elected by universal suffrage, but in the municipality of Karikal half the number of seats are reserved for Europeans or their descendants. The country is very fertile, being irrigated by seven branches of the Cauvery, besides many smaller channels

The capital of the settlement is situated on the north bank of the river Arasalar, about 1½ miles from its mouth It has a brisk trade in rice with Ceylon, and to a less extent with the Straits Settlements It has no commerce with France, and very little with other French colonies The port is merely an open roadstead, provided with a light-house 142 feet high, the light in which has a range of from 8 to 10 miles Indian labourers emigrate from Karikal to the French colonies in large numbers. In 1899 Karikal was connected with Peralem on the Tanjore District Board Railway Karikal finally came into French possession on the settlement after 1815.

The Indian Frontiers.

By one of the dramatic moves which characterise Asiatic politics, the Indian frontier problem has suddenly changed For nearly seventy years it was dominated by one obsession, the fear of Russian invasion through Afghanistan By the Anglo-Russian treaty of 1907 that bogie was laid; whether it will ever be revived none can now say But the old isolation of India has been so largely broken down; she has been brought into such close contact with the world movements of the West and East, that there is no rest The North-West has almost ceased to trouble the Indian Foreign Office, but the condition of Persia and the resuscitation of the land route to India have brought problems no less acute in their train.

Lord Curzon epitomised these changes in one of his budget speeches, when he said —

"I doubt if even the thoughtful public has at all realised the silent but momentous change that is going on, and that will one day have an effect upon India that is at present but dimly discerned In the old days, and it may almost be said up to the last fifteen years, the foreign relations of India were practically confined to her dealings with Afghanistan, and to the designs or movements of the great Power beyond, and the foreign policy of India had little to do with any other foreign nation It is true that we had territories or outposts of influence that brought us into contact with Persia and Turkey, and that we had occasional dealings with the Arabian tribes Now all that is changed, and events are passing which are gradually drawing this country, once so isolated and remote, into the vortex of the world's politics, and that will materially affect its future The change has been due to two reasons Firstly, as our own dominion has expanded, and our influence upon our frontier consolidated, we have been brought into more direct and frequent relations with the countries lying immediately beyond For instance, the annexation of Upper Burma brought us into contact with an important corner of the Chinese Empire, and created a batch of frontier and other political problems of its own. But the second reason is much more important Europe has woken up, and is beginning to take a revived interest in Asia Russia with her vast territories, her great ambitions, and her unarrested advance, has been the pioneer in this movement, and with her and after her have come her competitors, rivals and allies. Thus, as all these foreigners arrive upon the scene and push forward into the vacant spots, we are slowly having a European situation recreated in Asia, with the same figures upon the stage. The great European Powers are also becoming the great Asiatic Powers Already we have Great Britain, Russia, France, Germany and Turkey; and then, in place of all the smaller European kingdoms and principalities, we have the Empires and States of the East, Japan, China, Tibet, Siam, Afghanistan, Persia—only a few of them strong and robust, the majority containing the seeds of inevitable decay. There lie in these events and in this renewed contact or collision, as the case may be, between the East and the West, omens of the greatest significance to this country"

Duel with Russia.

A sketch of the frontier difficulties of the Indian Government since the British began to assume territorial power in India is really a reflection of the history of Europe. Our earliest dangers were either internal, or came from the sea. The sea menace was not of long duration The defeat of the Portuguese and the Dutch left us with only one serious rival, the French, and when the sea power of France had been shattered by the foiling of the gallant Suffren, her schemes for dominion broken by the feeble support given to the great Dupleix, and her hopes of advantage in India finally dispersed by the overthrow of Hyder Ali, then the foreign menace lapsed for well-nigh half a century. Meantime the process of internal consolidation advanced so rapidly that when renewed pressure came from the North, there was no rival to the British in India, and only one considerable military power, the Sikhs under Ranjit Singh Such were the conditions when fears of Russian intrigues in Afghanistan, and the belief that the Amir Dost Mahomed was lending a ready ear to them, induced the disastrous attempts to set the exiled Shah Shuja on the throne of Afghanistan, and inaugurated the most deplorable episode in Indian frontier policy, the war of 1838 That was the first stage in the long duel between Great Britain and Russia for influence in Central Asia and on the confines of India There are no pages in British history which are so unpleasant to turn. Our policy may be summed up in a sentence—impotent opposition to the Russian advance in Central Asia Russian policy was much more simple In part her advance sprang from the inevitable clash of a higher civilisation with a lower, in part, no doubt, her officers were not loth to pay off, by setting us in a ferment in Central Asia, scores made on the heights of Balaclava and at the Berlin Conference It was not until war was avoided by a hair's breadth that relations began to improve The Russo-Afghan affray at Penjdeh in 1885 brought both countries to a realisation of what they were nearly fighting over After that there was a slow improvement The Russo-Afghan boundaries were delimited The frontiers on the Pamirs were settled There were alarums and excursions during the Russo-Japanese war, when erroneous accounts were circulated of great Russian concentrations in Central Asia, and again, when intrigues with Tibet forced Lord Curzon to send the Younghusband Expedition to Lhasa. But the ground was gradually prepared for the Anglo-Russian Agreement, and since the conclusion of that instrument the Frontier question, as it used to be understood, has faded into the background; it has ceased to be an international question, and has descended into a local issue between the Government of India and the Amir of Afghanistan and the Tribesmen.

Land Route Revived.

The new frontier question lies further west; it is wrapped up in the revival of the land route to India There are few parallels in history to

the closing of these ancient highways. Twenty-two centuries ago, when Alexander set out on his career of conquest, there was an easy high road from Mesopotamia to Seistan, and not a very difficult one to Mekran, and so it came about that migratory movements, either compulsory or voluntary, continued through centuries, ever extending their scope till checked by the deserts of the Indian frontier, or the highlands of the Pamirs and Tibet, or the cold wastes of Siberia. Over the broad highway from Europe to India there was for centuries a great restless human tide ever on the move. The closing of this road was due to the eruption of the Afghan, the Turk and the Mongol, and in particular to the final downfall of the Empire of the Khalifs before the destroying hordes of Chenghiz Khan and Tamerlane. A few adventurous travellers make their way to Europe through Turkish Arabistan, or *viâ* Persia, or even across the Karakoram or the Pamirs to join the Russian railways. But the only land route for goods is the recently improved caravan track from Nushki to Meshed through Seistan, and the sea route which was opened by Vasco da Gama has so well served India that until a decade ago only one attempt was made to improve land communications—the abortive proposal for a railway up the Euphrates Valley.

International Railways.

All this is in process of rapid transformation. The landward isolation of India is doomed. In a very few years there will be through rail connection from Haidar Pasha, opposite Constantinople, with Baghdad, if not Basra, at the head of the Persian Gulf. It is impossible yet to say what will be the influence on the character of this railway of the Great War now raging between Great Britain, France and Russia on one side, and Germany and Austria-Hungary on the other, especially since Turkey has wantonly thrown herself into the scale against Great Britain and Russia. Prior to the outbreak of the war the Railway was, in all save name a purely German enterprise. The Russians are not content to permit their position to be turned. They have a concession to connect any line which they may build to Teheran with a branch of the Baghdad Railway from Baghdad to the Persian frontier at Khannikin, indeed they are under an obligation to construct it. But their ambitions go farther. They desire to extend their present railhead at Baku right across Persia to connect with the Indian system at Karachi, as a joint Russo-British enterprise. Even if this scheme does not mature railway construction in Persia is inevitable, a British Syndicate is pressing for a line from Muhammerah to the Teheran-Khannikin line at Khoramabad. These changes taken in conjunction with the decay of Persia, are profoundly affecting Indian frontier policy, they constitute the real frontier question to-day.

THE PERSIAN GULF.

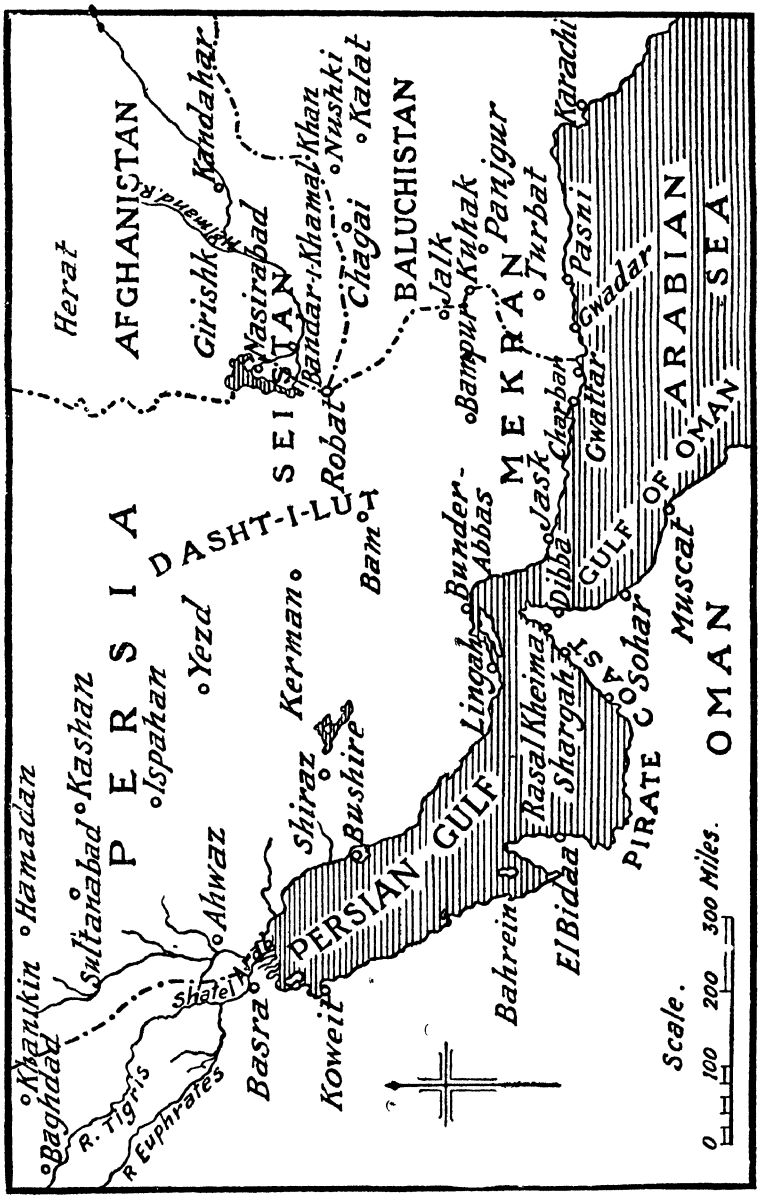
The situation in the Persian Gulf, which is at present the corner stone of the Indian frontier problem, is one of baffling indefiniteness. Our first appearances in these waters was in connection with the long struggle for supremacy with the Portuguese, the French and the Dutch, who had established trading stations there. With the capture and destruction of the great entrepot which the Portuguese had established at Ormuz, and the supersession of the land route by the sea route, coupled with the appearance of anarchy in the interior, the importance of the Gulf declined. The Indian Government remained there primarily to preserve the peace, and this task it has since successfully performed. Piracy, which was as destructive as the ravages of the Barbary corsairs, was stamped out, the Trucial Chiefs who occupy the Pirate Coast were gradually brought into close relations with the British Government, and the vessels of the Royal Navy have since kept watch and ward in the Gulf, whilst our Consuls have regulated the external affairs of the Arab rulers on the Arabian Coast.

A Policy of Abnegation.

In return for these services Great Britain has claimed no selfish advantages. The waters of the Gulf are as free to the navigation of other flags as to the Red Ensign. The only territorial possession is the tiny station of Bassidu. Point after point has at one time or another been occupied by British troops. Muhammerah and the lower valley of the Karun valley were occupied during the war with Persian in 1857. Bushire was long held in the same connection, and still bears marks of our regime in the one tolerable road. The Island of Kharak was occupied from 1838 to 1842, and again in 1857. We had a military station at Kais during the Pirate wars, and a military and naval station at Kishm from 1820 to 1879. Jask was occupied as a cable station, but subsequently returned to Persia. The only surveys of the waters are British, the only cables are British; the few navigation marks are maintained by the British India Company, and two steamship services, a fast mail service and a slow trading service, are run by the same corporation. Apart from these direct acts, Great Britain might at any time have seized the whole Arabian Coast and the Persian shore. But in pursuit of a resolute self-denying ordinance, she has kept the peace and demanded no reward.

European Intrusions.

Left to herself, Great Britain would desire no other policy. But the affairs of the Persian Gulf have passed into the region of international politics, and the past quarter of a century has witnessed successive efforts to turn the British position. Basing her interference on a treaty which gives her equal rights with Great Britain, France attempted to acquire a coaling station at Jissa, near Maskat, and subsequently obstructed British efforts to stamp out the slave trade, and the arms traffic, which was supplying weapons of precision to the tribes on our North-Western Frontier. Turkey, whether acting on her own volition, or as the *avant courier* of Germany, threatened the territory of the Sheikh of Bahrein, who is in special relations with us, and of the Sheikh of Koweit, who owns the only harbour which would make a Gulf terminus of the Baghdad Railway. Persia, stirred from Teheran, when Russian influence at the court of


Khanukin
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the Shah in Shah was supreme, established a foreign Customs service in the Gulf, and pressed our good friend, the Sheikh of Muhammerah Russia and Germany sent heavily-subsidised merchant ships into the Gulf, in order to establish trading rights, and posted Consuls, where there was neither trade nor legitimate interest The last of these machinations, a German attempt to wring a concession from the Sheikh of Shargah, was comparatively recently defeated The collapse of authority in Persia has raised, in an acute form, the whole future of the Persian shore In short, the situation has changed from one where the influence of Great Britain was supreme, to one where it is challenged at every point, more especially by the indirect process of commercial strategy, at which a nation, brought up in the traditions of free trade, is handicapped.

The Gulf and the Empire

With these attacks there has come a closer appreciation of the bearing of the Persian Gulf on the defence of the Indian Empire The strategic importance of these waters has been laid down by a writer of unchallenged authority and unbiassed mind Writing in the *National Review*, Admiral Mahan said, "Concession in the Persian Gulf, whether by formal arrangement (with other Powers) or by neglect of the local commercial interests which now underlie political and military control, will imperil Great Britain's naval situation in the Farther East, her political position in India, her commercial interests in both, and the Imperial tie between herself and Australasia" Following this, successive British Governments have made declarations of policy which are satisfactory, as far as words can go Speaking in the House of Lords on May 5, 1903, Lord Lansdowne, then Secretary of State for Foreign Affairs, said "We (*i. e.*, His Majesty's Government) should regard the establishment of a naval base or of a fortified port in the Persian Gulf by any other Power as a very grave menace to British interests which we should certainly resist with all the means at our disposal" This declaration of policy has since been endorsed by Sir Edward Grey But the question which arises is whether, in view of the intrusion of foreign Powers with aggressive designs, and the changing conditions on the littoral, the purely negative policy which has hitherto satisfied Great Britain will suffice It is a hard fact; but a true one, that if British authority disappeared to-morrow, it would leave no other relic than a few consular buildings and the tradition of justice and fair dealing That is a question which can best be considered after a brief survey of the various jurisdictions which are established in the Gulf

Maskat.

Maskat, which is reached in about forty-eight hours from Karachi, is outside the Persian Gulf proper. It lies three hundred miles south of Cape Musandim, which is the real entrance to the Gulf, but its natural strength and historical prestige combine to make it inseparable from the politics of the Gulf, with which it has always been intimately associated.

The approach to Maskat is dramatic The mail steamer gently feels her way along a coast more black and forbidding even than the iron-bound littoral of the Gulf of Suez, which is so familiar to the eastward passenger Suddenly there appears on the coast the white houses of the trading settlement of Mattra, which lies to the north of Maskat. Then with a sharp turn the bow of the steamer passes under a gaunt rock painted with the names of the warships which have visited Maskat for half a century, and enters the landlocked harbour. Twin fortresses erected by the Portuguese command the heights which overlook the town, the town itself clusters on the shore and climbs the high ground behind it, and itself is shut off from the Arabian desert by a stout wall on the landward side Formerly Maskat was part of a domain which embraced Zanzibar, and the Islands of Kishm and Larak, with Bunder Abbas on the Persian shore Zanzibar was separated from it by agreement, and the Persians succeeded in establishing their authority over the possessions on the eastern shore Sultan Syed Feyzul, the intelligent Arab ruler, who reigned over Maskat only, though he claimed a shadowy suzerainty over the chiefs on the coast of Oman, died in October 1913

The relations between Britain and Maskat have been intimate for a century and more It was under British auspices that the separation between Zanzibar and Maskat was effected, the Sheikh accepted a British subsidy in return for the suppression of the slave trade and in 1892 sealed his dependence upon us by concluding a treaty pledging himself not to cede any part of his territory without our consent Foreign intrigues with Maskat did not commence until 1894, when the French, in pursuit of the pin-pricking policy through which they were avenging Egypt, and perhaps to assist Russia, established a consulate there The Sultan was induced to cede to France a coaling station at Jissa, but this was such a clear violation of the Treaty of 1892 that it could not make good, and France had to accept the poor alternative of a leased depot A more serious dispute arose over the use of the French flag to cover the slave trade Native craft would secure the protection of the French flag by registering at Jibutil, and then defy the Sultan of Maskat, and they were enabled to traffic in slaves with impunity, inasmuch as there was rarely a French warship in the neighbourhood to search them In April 1903 the trouble came to a head, and the French flagship Infernet was sent to Maskat to demand the release of dhows which had been arrested for a flagrant breach of the quarantine rules This emphasised the necessity of a permanent settlement, and the question was referred to the Hague Tribunal, and a working compromise arranged. It was adjudged by the Hague tribunal in 1905 that "after January 2, 1892, France was not entitled to authorise vessels belonging to subjects of H H. the Sultan of Maskat to fly the French flag," except on condition that then "owners or fitters-out had established, or should establish, that they had been considered and treated by France as her protégés before the year 1863," though "owners of dhows who before 1892 had been authorised by France to fly the French flag retained this authorisation as long as France renewed it to the grantee" The conclusion of the *entente* with France put an end to these pinpricks, but one

important issue remained outstanding until 1914 France claimed under the Anglo-French Treaty of 1862 freedom of trade with Maskat There was carried on for years a lucrative arms traffic with the Gulf, rifles and ammunition being shipped from Europe to Maskat, and thence distributed all over the littoral and even to the North-West Frontier of India The extent of this evil compelled the British Government to intervene, and elaborate arrangements were made to check the traffic by arresting the dhows carrying arms and by harrying the gunrunners ashore This is more fully considered under Gunrunning (q v) In effect, the British warships had to witness the dumping of cargoes on the shore at Maskat, see them loaded into dhows, and trust to their own vigilance to arrest these consignments on the high seas Prompted by the Colonial Party, the French Government refused to yield one jot of their treaty rights, in the hope that Great Britain would buy them out by surrenders at Gambia The difficulty was largely overcome by the establishment of a bonded warehouse for arms at Maskat, where all consignments have to be deposited, and whence they are only issued under certificates of destination, and by an agreement negotiated in 1914 the French Government recognised the new Arms Traffic Regulations and abandoned the privileges and immunities secured to them by Treaty. Compensation was paid by the British Government to those French merchants whose stocks were rendered valueless by the Regulations

The present troubles of the Sultan of Maskat are domestic rather than external His hold over the tribesmen outside the city is precarious In May 1913 the principal Ibadi Sheikh, Abdullah-bin-Hamdas Salimi, rose in revolt, defeated the Sultan's troops, and threatened the capital, which was protected by Indian Troops During April they occupied ports at Kuriyat and Barba, and were dislodged by a bombardment from H M Ships The probability of such protection being required will always have to be faced

British Consul, Lt.-Col R A E Benn *Agency Surgeon*, Capt A N Dickson I M S

The Pirate Coast.

Turning Cape Musandim and entering the Gulf Proper, we pass the Pirate Coast, controlled by the six Trucial Chiefs The ill-name of this territory has now ceased to have any meaning, but in the early days it had a very real relation to the actual conditions The pirates were the boldest of their kind, and they did not hesitate to attack on occasion, and not always without success, the Company's ships of war. Large expeditions were fitted out to break their power, with such success that since 1820 no considerable punitive measures have been necessary The Trucial Chiefs are bound to Great Britain by a series of engagements, beginning with 1806 and ending with the perpetual treaty of 1853 by which they bound themselves to avoid all hostilities at sea, and the subsequent treaty of 1873 by which they undertook to prohibit altogether the traffic in slaves. The relations of the Trucial Chiefs are controlled by the British Resident at Bushire, who visits the Pirate Coast every year on a tour of inspection The German attempt to obtain a concession from the Sheikh of Shargarh has been mentioned. A more serious question arose in 1912 when a landing party from H M S Fox, searching for contraband arms at Debai, was fired at by the resident Arabs and five men killed and nine wounded The Sheikh made ample amends to the British Resident, and submitted to a fine There was at first the suspicion that this *emeute* arose from the spread of pan-Islamism on the coast, studiously fostered from Constantinople, and that it indicated a weakening respect for British authority But fuller enquiries tended to show that it arose from an unfortunate series of misunderstandings The commercial importance of the Pirate Coast is increasing through the rise of Debai Formerly Lingah was the entrepot for this trade, but the exactions of the Belgian Customs officials in the employ of Persia has driven this traffic from Lingah to Debai The Trucial Chiefs are—Debai, Abu Thabee, Shargah, Ajman, Um-al-Gawain and Ras-el-Kheyma

Bahrein.

North of the Pirate Coast lies the little archipelago which forms the chiefship of the Sheikh of Bahrein Of this group of islands only those of Bahrein and Maharak are of any size, but their importance is out of all proportion to their extent This is the great centre of the Gulf pearl fishery, which, in a good year, may be worth half a million pounds sterling The anchorage is wretched, and at certain states of the tide ships have to lie four miles from the shore, which is not even approachable by boats, and passengers, mails and cargo have to be landed in on the donkeys for which Bahrein is famous But this notwithstanding the trade of the port is valued at over a million and a quarter sterling, and the customs revenue, which amounts to some eighty thousand pounds, makes the Sheikh the richest ruler in the Gulf

Bahrein has passed through more than usually chequered experiences Not the least formidable of these are the efforts of the Turks to threaten its independence These took definite form in the third quarter of the last century, when Midhat Pasha, Vali of Basra, occupied the promontory of El Kater, as well as El Katif, over against Bahrein, and converted El Hasa into a district The war with Russia put an end to these designs, but they were revived and the Turks at El Kater are still a menace to Bahrein, but negotiations for their withdrawal are pending. The Sheikh by the treaty of 1861, entered into special engagements with the British Government, by whom his rights are guaranteed

In the neighbourhood of Bahrein is the vast burying ground which has hitherto baffled archæologists The generally accepted theory is that they are relics of the Phœnicians, who are known to have traded in these waters.

Political Agent, Major A P Trevor

Koweit.

In the north-west corner of the Gulf lies the port which has made more stir than any place of similar size in the world The importance of Koweit lies solely in the fact that it is the one possible Gulf terminus of the Baghdad

Railway. This is no new discovery, for when the Euphrates Valley Railway was under discussion, General Chesney selected it under the alternative name of the Grane—so called from the resemblance of the formation of the Bay to a pair of horns—as the sea terminus of the line Nowhere else would Koweit be called a good or a promising port The Bay is 20 miles deep and 5 miles broad, but so shallow that heavy expense would have to be incurred to render it suitable for modern ocean-going steamers It is sheltered from all but the westerly winds, and the clean thriving town is peopled by some 20,000 inhabitants, chiefly dependent on the sea, for the mariners of Koweit are noted for their boldness and hardihood

The political status of Koweit would baffle the ingenuity of the international jurist to find a definition Nominally the Sheikh owns allegiance to the Sultan of Turkey from whom he has accepted the honorary title of Kaimakam, or Local Governo.. In practice, he has always been independent In 1898, the Turks attempted to convert their nominal sovereignty into something more actual, but the Sheikh Mubarak approached the British Government and placed his interests under their special protection. When, however, the German surveyors earmarked Koweit for the terminus of their line, the position of the Sheikh was indirectly attacked To the north of Koweit there is a deep indentation in the lowlying shore chiefly occupied by the swampy island of Bubyan Here a long narrow channel runs to Umm Khasa, the Khor Abdulla It is sometimes held to be an alternative to Koweit as a Gulf Terminus, and with a view to earmarking it, the Turks have established military posts at Umm Khasa and on Bubyan Island Threatened by domestic feuds, raids by sea, and attack by land, Sheikh Mubarak, with a British backing, has fended off all assaults on his position, and with realisation of the fact that Basra must, in any circumstances, be the commercial terminus of the Baghdad Railway, the importance of Koweit has tended to recede.

Political Agent, Lt -Col. W G Grey.

Muhammerah

On the opposite side of the entrance to the Shatt-el-Arab lie the territories of a Sheikh who stands to the Persian Government in much the same relation as does Sheikh Mubarak of Koweit to the Government of Turkey—Sheikh Khazzal of Muhammerah Nominally, he is subject to Teheran, on whose behalf he governs his territories as Governor, in practice he is more like a semi-independent vassal In personal characteristics, too, Sheikh Khazzal has much in common with Mubarak; he has proved that he possesses many of the qualities of an administrator, and has resisted Persian encroachments on his authority in all directions save one—despite his strong antipathy to the agents of a centralised government, the Persians have installed an officer of their Belgian Customs service at Muhammerah The town, favourably situated near the mouth of the Karun River, has grown in importance since the opening of the Karun River route to trade through the enterprise of Messrs Lynch Brothers. This route provides the shortest passage to Ispahan and the central tableland, and already competes with the older route by way of Bushire and Shiraz This importance has grown since the Anglo-Persian Oil Company established refineries at Muhar merah for the oil which they win in the rich fields which they have tapped near Ahwaz Its importance will be still further accentuated, if the scheme for a railway to Khorremabad by way of Dizful matures A concession for a road by this route has long been held by a British Company, and surveys for a railway are being made There is a tacit assurance from the Persian Government that if a practicable scheme is put forward, they will facilitate the work Such a line, meeting the projected branch from Teheran to Khannikin, would intercept the trade of Central Persia and make Muhammerah the principal outlet for the commerce of the country Sheikh Khazzal is believed to have formed an excellent working understanding with his rother chief across the water, and as the head of the great Kaab tribe he is no mean power in south-western Persia

Consul at Ahwaz, Captain A J H. Grey,
Coasul for Arabistan (Muhammerah), Major L B H Haworth.

Basra.

In a sense Basra and Turkish Arabistan can hardly be said to come within the scope of the frontiers of India, yet they are so indissolubly associated with the politics of the Gulf that they must be considered in relation thereto. Basra is the inevitable sea terminus of the Baghdad Railway It stands on the Shatt-el-Arab, sixty miles from its mouth, favourably situated to receive the whole water-borne trade of the Tigris and Euphrates Rivers This is already considerable, although Turkish obstruction has closed the Euphrates to navigation, as well as the Tigris above Baghdad—between Basra and Baghdad there are two services of river steamers, one controlled by Messrs Lynch Brothers and the other by a Turkish Company The local traffic is valuable for the richness of the date groves on either side of the Shatt-el-Arab is indescribable, there is a considerable entrepot traffic, whilst Basra is the port of entry for Baghdad and for the trade with Persia, which follows the caravan route *via* Kermanshah and Hamadan When the Baghdad Railway is open, Basra must absorb the whole trade of the eastern zone, that is the trade which finds an easier outlet on the east than at Alexandretta on the Mediterranean That is without taking account of the possibilities of the irrigation scheme prepared by Sir William Willcocks, which should revive the glories of ancient Mesopotamia, and make Arabistan another Egypt Even now ocean-going steamers trade regularly with Basra and load grain in bulk from its wharves The one obstacle to the development of the port is the bar at the entrance to the Shatt-el-Arab, where there are no more than ten feet of water at low tide, and where steamers drawing more than sixteen to eighteen feet have, even at high tide, to discharge part of their cargoes into lighters before making the river The cost of dredging the bar would not be large, and that done a first class port is almost ready made at Basra Nothing can prevent it from becoming the port of the Middle East, and if ever the Baghdad Railway is extended to the Gulf it will be for political not for commercial reasons.

Political Resident and H M Consul-General for Turkish Arabia (Baghdad), vacant
Residency Surgeon, and Assistant to the Resident, Captain N. E H Scott, I M S.
British Consul, Mr. F E Crow.

The Persian Shore.

The Persian shore presents fewer points of permanent interest The importance of Bushire is administrative rather than commercial It is the headquarters of Persian authority, the residence of the British Resident, and the centre of many foreign consuls It is also the main entrepot for the trade of Shiraz, and competes for that of Ispahan But the anchorage is wretched and dangerous, the road to Shiraz passes over the notorious kotals which preclude the idea of rail connection, and if ever a railway to the central tableland is opened, the commercial value of Bushire will dwindle to insignificance Further south lies Lingah, reputed to be the prettiest port on the Persian coast, but its trade is being diverted to Debai on the Piuate Coast In the narrow channel which forms the entrance to the Gulf from the Arabian Sea is Bunder Abbas Here we are at the key of the Gulf Bunder Abbas is of some importance as the outlet for the trade of Kerman and Yezd It is of still more importance as a possible naval base To the west of the town between the Island of Kishm and the mainland, lie the Clarence Straits which narrow until they are less than three miles in width, and yet contain abundance of water Here, according to sound naval opinion, there is the possibility of creating a naval base which would command the Gulf The great obstacle is the climate, which is one of the worst in the world On the opposite shore, under the shadow of Cape Musandim, lies another sheltered deep-water anchorage, Elphinstone's Inlet, where the climate conditions are equally vile But between these two points there is the possibility of controlling the Gulf just as Gibraltar controls the Mediterranean For many years Bunder Abbas loomed large in public discussions as the possible warm water port for which Russia was seeking. Now it has reappeared in connection with the Trans-Persian railway It is understood that the British Admiralty insist on that line meeting the sea at Bunder Abbas, where it would enter the British zone, and whence, along the Coast of Mekran, it would be commanded from the sea The Russian concessionaires wish the line to strike the sea much further east either at the actual British frontier, Gwettur, or at Chahbar, where there are believed to be the makings of a deep-water port So far the project has not passed beyond the stage of academic discussion. (q v **Railways to India**) On the Mekran coast, there is the cable station of Jask, and the possible port of Chahbar, but here Persian authority is for all practicable purposes non-existent, and the British Government steps in when occasion demands.

The Admiralty Oil Contract.

A further complexity was introduced into the position in Southern Persia, and inferentially into Gulf politics when the British Government, on behalf of the British Admiralty, entered into partnership with the Anglo-Persian Oil Company for the development of their oil fields in the neighbourhood of Maiden-i-Naphtun.

The Concession.—The concession which the company was formed in 1909 to work was originally obtained in 1901 from the Persian Government by Mr W K D'Arcy It granted the exclusive right for 60 years "to drill for, produce, pipe, and carry away oil and petroleum products throughout the Persian Empire except in the provinces of Azerbadjan, Ghilan Mazendaran, Asdrabad, and Khorassan" The area covered is about 500,000 square miles. In 1903 a First Exploitation Company was formed as a preliminary with a capital of £600,000, of which £544,000 has been issued, £20,000 in shares in this company was allotted to the Persian Government, as well as £20,000 in cash, in return for the concession When the Anglo-Persian Company was started in 1909 the actual holding of this Exploitation Company was limited to one square mile in the Maidan-i-Naphtun field, situated in territory belonging to the Bakhtiari Khans Under the terms of a separate agreement the latter received 3 per cent of the shares in any company formed to work oil in their country, and a second subsidiary company was then created, known as the Bakhtiari Oil Company, with a capital of £400,000, in order to cover the area within their territory outside the square mile allotted to the First Exploitation Company In the First Exploitation Company the Anglo-Persian Company now owns £478,460, or 87 95 per cent, of the capital, and Persian shareholders £65,540 or 12 05 per cent, in the Bakhtiari Company the Anglo-Persian Company owns £388,000, or 97 per cent The Persian Government is paid a royalty of 16 per cent on the net yearly profits The fact that both the Government and the Bakhtiari tribes are interested in the prosperity of the company is regarded as an important factor in securing its position in a country otherwise rather unruly

The Fields—Oil has so far been found in quantity at Maidan-i-Naphtun, at depths of 1 200 ft to 1,300 ft, in hard porous limestone, and has been proved at Kasr-i-Shirin, surface indications of petroleum, which are very highly thought of, have also been observed at White Oil Springs, Kishm, Dalki, Ahmadi, Rudan Kuh Champa, and other places The present production of the company is obtained entirely from the Maida-i-Naphtun area, where 30 wells have been drilled, it lies 140 miles N N E of Muhammerah, which is at the junction of the Shatt-al-Arab and Karun rivers The oil is conveyed 150 miles by pipe-line to ...e refinery at Abadan, while materials have to be transported to the field by river and across a difficult country by mules The workings are entirely under the charge of British subjects, the skilled labour is mainly recruited from India, and the unskilled labourers are largely Persians, no difficulty having been experienced in securing an adequate supply The Bakhtiari Khans "police" the field works and upper sections of the pipe-line, and an agreement has been made with the Sheikh of Muhammerah for the protection of the refinery and the lower section.

The Contract.—Under the agreement the Government are to subscribe for £2,000,000 in ordinary shares of the company, £1,000 in

preference shares, and £199,000 in debentures, which will bring the aggregate capital in shares and debentures to £4,799,000 The existing ordinary shares are £1,000,000 and preference £999,000 so that under the new arrangement the Government will hold the preponderating interest in the share capital The debentures already existing amount to £600,000 The Six per cent Preference shares, which participate to the extent of 2 per cent in dividends after payment of 6 per cent on the ordinary, rank equally for voting purposes The price at which the Admiralty will obtain the oil itself is kept a secret "The supply contract," says the Admiralty Memorandum, "will be regarded in the public interests as confidential" But it is stated that "provision is made for the supply for a term of years on a favourable scale of price of a reasonable proportion of the total estimated annual requirements of the Admiralty on the present basis of policy of oil consumption, and with due allowance for expansion. The contract is for oil only, and the Admiralty will make its own arrangements for transport" The agreement was criticised in some quarters on the ground that it involved the British Government in indefinite commitments in Southern Persia, and that it might be necessary to employ troops to defend Government property on foreign soil, that of Persia. But on the whole the agreement was well received, in the belief that it secured the British Navy an abundant supply of cheap oil fuel Since the conclusion of the Agreement the storage capacity at Abadan has been very largely increased.

Political Resident in the Persian Gulf, Sir Percy Cox, KCIE, CSI

Second Assistant, Lieut P G Loch

Residency Surgeon at Bushire, Major J McPherson

Consul at Kerman, Captain D L R Lorimer

Consul at Bunder Abbas and Assistant to the Resident, Captain H V Biscoe

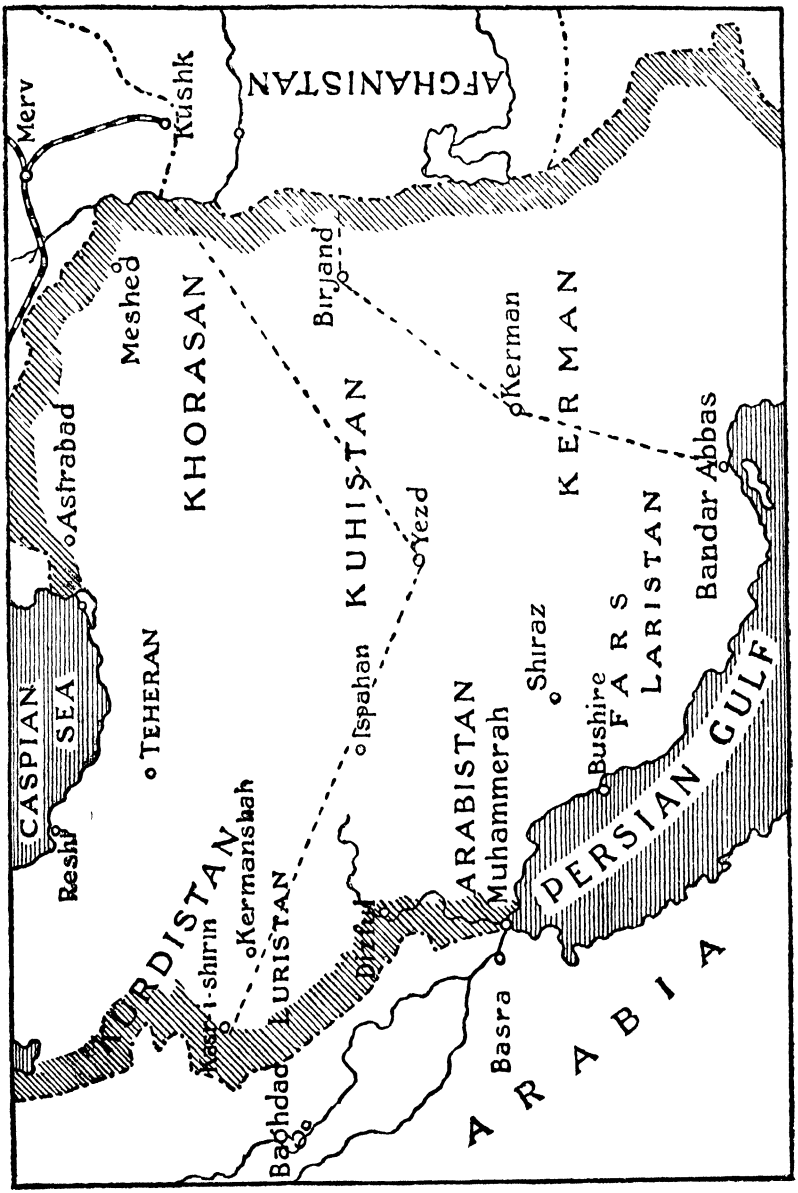
Summary.

From this brief summary of the conditions in the Persian Gulf, it will be seen that the British position is a nebulous one. We have stamped out piracy, we have kept the peace, we have sought no exclusive privileges, the commerce of these waters is freely open to the ships of all nations But this policy is in the main negative rather than positive, it is so barren of definite territorial achievements that it is singularly open to attack; it depends for its permanent success on the maintenance of the *status quo* in a part of the world where conditions are fast changing nor was it in any way regularised by the Anglo-Russian agreement On the contrary, by that instrument the British zone stopped short at Bunder Abbas the British sphere being restricted to the east of a line drawn from the Afghan frontier to Gazik, Birjand, Kerman and Bunder Abbas All Persia between this line and the delimitation of the Russian zone by a line from Kasr-i Shirin, Ispahan, Yezd, and Kakh, to the junction of the Persian Afghan, and Russian frontiers—that is to say the whole of the Persian Gulf littoral—is in the neutral zone The Agreement made no mention of the Persian Gulf, but with the Convention a letter was published from Sir Edward Grey to the British Ambassador at St Petersburg, announcing that the Persian Gulf lay outside its scope, but that the Russian Government had stated during the negotiations that it did not deny the special interests of Great Britain in the Gulf and it was intimated that Great Britain reasserted them

At the present time, of course, the politics of the Persian Gulf and of Turkish Arabistan are in a state of uncertainty owing to the war Before the war broke out, active negotiations were conducted between the British, the Turkish and the German Governments with a view to the regularisation of the whole situation On more than one occasion it was announced that they were on the verge of completion The outline of these negotiations was that the Baghdad railway should proceed as far as Basra as a purely German-Turkish enterprise, but that it should not proceed beyond Basra without the approval of the British Government Great Britain was to receive two directors on the Board to guard against differentiation of rates The Sheikh of Kowiet was to recognise the suzerainty of Turkey, but he was not to be interfered with, and Turkey was to accept the treaty of 1899 The Turkish post at El Kater, opposite to Bahrein was to be withdrawn, but incessant acts of veiled hostility at Baghdad and Basra in September and October indicated that the attitude of Turkey in the great war could not be relied upon, despite the repeated assurances of neutrality by the Grand Vizier In October therefore a British-Indian force was sent to the Gulf, landing at Bahrein, to be ready for all emergencies It caused little surprise then when the official announcement was received that the Turkish warships in the Black Sea had committed acts of war by firing on Russian ships and bombarding Russian coast towns The force in the Gulf was immediately raised and Fao, the Turkish post at the entrance to the Shatt-el-Arab was occupied, afterwards Basra was taken (November 1914)

GUNRUNNING IN THE PERSIAN GULF.

The question of gunrunning in the Persian Gulf is inseperable from the position on the North-Western Frontier, because the copious supplies of modern rifles, with suitable ammunition, from this source have transformed the military value of the tribesmen. Prior to 1897 this trade, though considerable, concerned Turkey and Persia rather than Great Britain. Arms were brought from Europe, France, Belgium, and England, to Maskat, where they were discharged and freely distributed round the Persian and Arabian shores The Frontier tribesman had to obtain his modern rifle by stealing, even if it meant the murder of a sentry, or else content himself with the jezail, or the rough country-made rifle, which is turned out in small numbers by the Kohat Pass Afridis. But after the rising of 1897 these rifles began to


Merv
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Resht
Kermanshah
Muhammerah
Bushire
PERSIAN GULF
Basra
ARABIA
Baghdad

filter into the North-Western Frontier, replacing the homely jezail The Sultan of Maskat issued a proclamation empowering British and Foreign men of war to search for arms, and the first consignment seized was in the s. s. Baluchistan. Still the traffic grew, and in 1902 steps were taken to check it through the instrumentality of the Governor of Kerman As his authority was inconsiderable, in 1907 the Government began to see that the traffic had assumed proportions which could not be neglected In the year 1907-08 the value of the arms imported into Maskat reached a total of £270,000, and it is estimated that between 1905 and 1911 no fewer than 200,000 rifles and millions of rounds of ammunition reached the Indian borderland through Maskat In 1909 a rigorous blockade was instituted in the Persian Gulf and the Gulf of Oman.

France and Maskat.

The seat of trouble lay in the French commercial treaty with Maskat, and in the refusal of the French Government to abrogate it, except as the price of concessions in West Africa. Under this treaty arms were openly discharged at Maskat, and dumped down in the town, under the eyes of the British Consular officers and men of war They were then shipped in dhows across to the Mekran Coast by Arab dhows, and landed on the Persian shore. There Persian Baluch sirdars received them, and transported them to spots in the interior, where the Afghan caravans were waiting These caravans were for the most part manned by Ghilzais, who transported the rifles right across Persia and Afghanistan to Kandahar, whence they were distributed throughout the frontier It is impossible to gauge the extent of the trade, but thirty thousand rifles are reported to have been run to Kandahar in a single year and the supply became so plentiful that it was no longer worthwhile to steal rifles in India, nor to manufacture them in the Kohat Pass.

Naval Blockade.

Forced into indirect measures through the obstruction of France the Government instituted the naval blockade For this purpose the ships of the East Indies Squadron were supplemented by a number of launches and boat cruisers, and a complete system of wireless telegraphy established The Omani and Pirate coasts were watched by cruisers, and the departure of dhows was communicated by wireless to Jask, thence communicated to the boat cruisers These followed the dhows who slipped the cordon into shallow waters Then at Robat, the northern frontier of British Baluchistan, a military post was established to intercept the caravans as they drew near Afghanistan.

Traffic Moribund.

The effect of these measures was so marked that it nearly precipitated a serious outbreak on the North-West Frontier. The Pathans who returned from Mekran Coast about the beginning of June 1910 reported that they had been unable to obtain rifles, because the British ships had put an end to the trade At the same time cash in advance had been paid for these rifles and the money lay in the possession of the traders at Maskat Between the rifles and the Mekran Coast, where they could be landed, was the scene of the British cordon Excitement was rife, and only the exceptional tact of the British Officers prevented an *en emte* Further preventive measures were taken to break up the power of Baikhat Khan Governor of Biyaban, who had been the most indefatigable of the Baluch Sirdars engaged in the gun running traffic A small force of Infantry was landed at Gallag on the Mekran Coast and marched "to show themselves" at Bmt Then re-embarking it made a second landing at Sirik at the mouth of the Gaz River and encountering the gun runners at the Pass of Pashak inflicted a sharp reverse upon them Another episode characteristic of this traffic occurred at Debai on the Pirate Coast when a landing party from H M S "Hyacinth," in December 1910 to search for rifles was actively opposed and five Bluejackets were killed and nine wounded Under the threat of bombardment the Sheikh of Debai submitted to a heavy fine In 1912, the traffic was brought under still closer control by an arrangement with the Sultan of Maskat by which all arms landed at that port are placed in a bonded warehouse and only issued on a certificate of destination

The agreement was finally sealed when, in 1914 the French Government recognised the new Arms Traffic Regulations, and abandoned the privileges and immunities secured by Treaty. Compensation was paid to the French merchants whose arms were virtually impounded. The traffic is now dead, though the preventive measures are being only cautiously relaxed.

PERSIA.

The concentration of public attention on the Persian Gulf has been allowed to obscure the frontier importance of Seistan Yet it has been a serious preoccupation with the Government of India Seistan lies midway north and south between the point where the frontiers of Russia, Persia and Afghanistan meet at Zulfikar and that where the frontiers of Persia and of our Indian Empire meet on the open sea at Gwattur It marches on its eastern border with Afghanistan and with Baluchistan, it commands the valley of the Helmand, and with it the road from Herat to Kandahar, and its immense resources as a wheat-producing region have been only partly developed under Persian misrule. It offers to an aggressive Russia an admirable strategic base for future military operations, it is also midway athwart the track of the shortest line which could be built to connect the Trans-Caspian Railway with the Indian Ocean, and if and when the line from Askabad to Meshed were built, the temptation to extend it through Seistan would be strong Whilst the gaze of the British was concentrated on the North-West Frontier, and to possible lines of advance through Kandahar to Quetta, and through Kabul to Peshawar, there can be little doubt that Russian attention was directed to a more leisurely movement through Seistan, if the day came when she moved her armies against India.

Anglo-Russian Agreement.

Whether with this purpose or not, Russian intrigue was particularly active in Seistan in the early years of the century Having Russified Khorassan, her agents moved into Seistan, and through the agency of the Belgian Customs officials, "scientific missions" and an irritating plague cordon, sought to establish influence, and to stifle the British trade which was gradually being built up by way of Nushki These efforts died down before the presence of the McMahon mission, which, in pursuance of Treaty rights, was demarcating the boundary between Persia and Afghanistan, with special reference to the distribution of the waters of the Helmand They finally ceased with the conclusion of the Anglo-Russian Agreement Since then the international importance of Seistan has waned Whether on account of the Agreement, which bars the line of advance through Seistan, or because of the discovery of an easier route, we cannot determine, but Russian activities in railway construction have been diverted to the Trans-Persian route, which would take a direct line through Teheran from Baku, and meet the Arabian Sea at Bunder Abbas or Chahbar

The natural conditions which give to Seistan this strategic importance persist Meantime British influence is being consolidated through the Seistan trade route The distance from Quetta to the Seistan border at Killa Robat is 465 miles, most of it dead level, and it has now been provided with fortified posts, dak bungalows, wells, and all facilities for caravan traffic The railway has been pushed out from Spezand, on the Bolan Railway to Nushki, so as to provide a better starting point for the caravans than Quetta The value of the trade carried over this route last year was Rs. 25 lakhs

Text of the Agreement.

This Agreement, which aimed at an amicable settlement of all questions likely to disturb the friendly relations of the two countries in Asia generally, and in Persia, Afghanistan and Tibet in particular, was signed on August 31st, 1907, and officially communicated to the Powers in St Petersburg on September 24 After reciting the desire of both Governments to maintain the integrity of Persia, and to allow all nations equal facilities for trade in that country, the Convention states that in certain parts, owing to their geographical proximity to their own territories, Great Britain and Russia have special interests Accordingly (Art I) · To the north of a line drawn from Kasr-i-Shirin, Isfahan, Yezd and Khakh to the junction of the Persian, Russian and Afghanistan frontiers, Great Britain agrees not to seek for itself or its own subjects or those of any other country any political or commercial concessions, such as railway, banking, telegraph, roads, transport or insurance, or to oppose the acquisition of such concessions by the Russian Government or its subjects II. Russia gives a similar undertaking concerning the region to the south of a line extending from the Afghan frontier to Gazik, Birjand, Kerman and Bandar Abbas III. Russia and Great Britain agree not to oppose, without previous agreement, the granting of concessions to subjects of either country in the regions situated between the lines above-mentioned. All existing concessions in the regions above designated are maintained IV. The arrangements by which certain Persian revenues were pledged for the payment of the loans contracted by the Shah's Government with the Persian Banque d'Escompte and de Prets and the Imperial Bank of Persia before the signing of the Convention are maintained V In the event of any irregularities in the redemption or service of these loans Russia may institute a control over the revenues situated within the zone defined by Article I and Great Britain may do the same in the zone defined by Article II But before instituting such a control the two Governments agree to a friendly exchange of ideas with a view to determining its nature, and avoiding any action in contravention of the principles of the Convention

With the Convention a letter was published from Sir E Grey to the British Ambassador at St Petersburg announcing that the Persian Gulf lay outside its scope, but that the Russian Government had stated during the negotiations that it did not deny the special interests of Great Britain in the Gulf, and it was intimated that Great Britain re-asserted them.

Chaos in Persia.

So far from improving the domestic situation in Persia, the Convention preluded a condition of thinly disguised anarchy There was little security for life or property outside the zone commanded by the Russian troops in the North, and in 1913, the Central India Horse, a solitary Indian Regiment sent to Shiraz, was withdrawn A dismal picture of Persian disorder was drawn in the Persian Blue Book published in July, 1913 Lord Curzon, summarising it in a debate in the House of Lords on July 28 said —"The picture delineated in this Blue-book of Southern Persia is a picture of a country in the throes of dissolution, given up to rapine and brigandage, where trade is at a standstill, where armed bands rove about the country doing as they please, where British officers are fired at and robbed, and in one particular unfortunate case an officer was killed, a country where the central Government is impotent and local government ignored

'In Northern Persia—and I must discriminate between Northern and Southern Persia—the conditions are very different I do not say there is no insecurity, but life and property are relatively safe in Northern Persia, and this is owing to the presence of an overwhelming force of Russian troops in that part of the country. Now we have been told many times that the number of Russian troops would presently be reduced and the noble Viscount (Lord Morley) made an impression in the course of debate by reading a categorical assurance, which he said the Russian Government desired to place on record, that such military measures as they were taking in Persia were of a purely provisional nature, and that they had no intention whatever of infringing the conditions of the Anglo-Russian Convention of 1907. 'That,' the noble Viscount said, 'justifies us in framing our policy on the assumption that is theirs That was read out to us in December 1911. At that time the Russian troops in Northern Persia numbered 3 000; at present according to such information as we have, they number

17,500 The Blue-book mentions that not a single Russian soldier was withdrawn in the past year'

Lord Morley thus indicated the Government's policy "I will put that common policy in seven propositions—(1) maintaining the spirit and the letter of the Anglo-Russian Convention, (2) maintaining the independence of Persia and avoidance of partition and an approach to partition, economical, administrative, geographical, political, (3) while faithful to the stability of our present alliance and to our real engagements we are faithful also in an equal degree to the good of Persia, (4) to uphold some form of constitutional Government, (5) to lose no chance of easing the distracted situation in which the Persian Government now is, by counsel, attention, and such assistance as from time to time we may consider it prudent to give, (6) to enable Persia by money or otherwise to restore order on the southern roads, (7) to avoid entangling ourselves in a policy of adventure in Southern Persia. I am inclined to add an eighth proposition, namely, that we must beware of being forced into a position which would offend the opinion and sentiment of Mahomedans in India"

Broadly speaking, the policy of Great Britain is to support the Persian Government in an attempt to re-establish order on the southern trade routes through the agency of a Persian gendarmerie organised by Swedish officers, and to make advances of money for this purpose. Whether that policy will succeed or not remains to be seen, certainly it will not succeed unless the gendarmerie are continuously financed by the British or Russian Governments, or both jointly In a speech in the Imperial Legislative Council in March the Viceroy took an optimistic view of the situation He claimed that the hopes based on the supposition that the Swedish officers and gendarmerie would be able to restore order on the southern trade routes had not been disappointed Despite an affray at Kazerun, when the tribesmen attacked the gendarmerie in their barracks, and were not driven off until reinforcements arrived, the trade routes were more secure and trade revived Another gendarmerie force had dealt with the situation between Bunder Abbas and Kerman The alternative to the employment of the gendarmerie was the despatch of a British expedition to Southern Persia for the restoration of order, a policy to which the Government of India had always been firmly opposed The Persian situation too has been overshadowed by the war The Persian Government has assured the British Government of its neutrality, and has expressed the hope that the territory of Persia will not become the scene of hostilities

H B M's Consul General and Agent of the Government of India in Khurasan—Lieut Colonel T W Haig, C M G

Agency Surgeon and ex-officio Assistant to the Consul-General—Captain H H Thorburn, I M S

Military Attache—Major F G Marsh, *9th* Gurkha Rifles

H B M's Consul in Sistan and Kain—Major F B Prideaux, C I E

Medical Officer and Vice-Consul—Captain D. Heron, I M S

H B M's Vice Consul in Birjand—Mr R. H. New

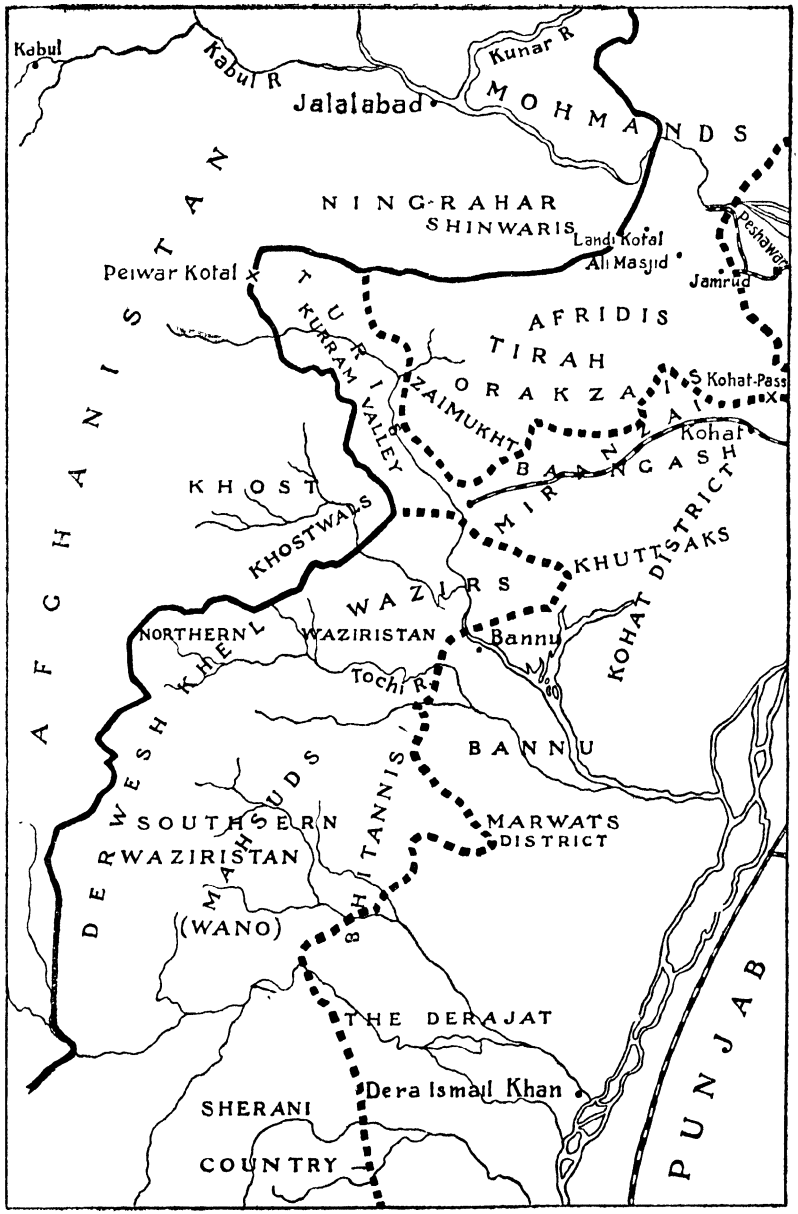
THE INDEPENDENT TERRITORY.

There yet remains a small part of British India where the King's writ does not run Under what is called the Durand Agreement with the Amir of Afghanistan, the boundary between India and Afghanistan was settled, and it was delimited in 1903 But the Government of India have never occupied up to the border Between the administered territory and the Durand line there lies a belt of territory of varying widths, extending from the Gomal Pass in the south, to Kashmir in the north, this is generically known as the Independent Territory Its future is the keynote of the interminable discussions of frontier policy for nearly half a century

This is a country of deep valleys and secluded glens, which nature has fenced in with almost inaccessible mountains It is peopled with wild tribes of mysterious origin, in whom Afghan, Tartar, Turkoman, Persian, Indian, Arab and Jewish intermingle They had lived their own lives for centuries, with little intercourse even amongst themselves, and as Sir Valentine Chirol truly said "the only bond that ever could unite them in common action was the bond of Islam" It is impossible to understand the Frontier problem unless two facts are steadily borne in mind. The strongest sentiment amongst these strange people is the desire to be left alone They value their independence much more than their lives The other factor is that the country does not suffice even in good years to maintain the population They must find the means of subsistence outside, either in trade, by service in the Indian Army or in the Frontier Militia, or else in the outlet which hill-men all the world over have utilised from time immemorial, the raiding of the wealthier and more peaceful population of the Plains

Frontier Policy.

The policy of the Government of India toward the Independent Territory has ebbed and flowed in a remarkable degree It has fluctuated between the Forward School, which would occupy the frontier up to the confines of Afghanistan, and the school of Masterly Inactivity, which would leave the tribesmen entirely to their own resources, punishing them only when they raided British territory Behind both the policies lay the menace of a Russian invasion, and that coloured our frontier policy until the Anglo-Russian Agreement This induced what was called Hit and Retire tactics, in the half century which ended in 1897 there were nearly a score of punitive expeditions, each one of which left behind a legacy of distrust, and which brought no permanent improvement in its train. The fruit of the suspicion thus engendered was seen in 1897 Then the whole Frontier, from the Malakand to the Gomal, was ablaze The extent of this rising and the magnitude of the military measures which were taken to meet


Kabul
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MOHMANDS
AFGHANISTAN
NINGRAHAR
SHINWARIS
Landi Kotal
Ali Masjid
Peshawar
Jamrud
Peiwar Kotal
TURI
KURRAM VALLEY
AFRIDIS
TIRAH
ORAKZAIS
Kohat-Pass
ZAIMUKHT
BANNUCHIS
Kohat
KHOST
KHOSTWALS
MIRANZAI
KHUTTAKS
KOHAT DISTRICT
WAZIRS
NORTHERN WAZIRISTAN
Bannu
Tochi R
KHEL
DERWESH
BANNU
MAHSUDS
BHITANNIS
SOUTHERN WAZIRISTAN
MARWATS DISTRICT
(WANO)
THE DERAJAT
Dera Ismail Khan
SHERANI COUNTRY
PUNJAB

it compelled a consideration of the whole position The broad outlines of the new policy were laid down in a despatch from the Secretary of State for India, which prescribed for the Government the "limitation of your interference with the tribes, so as to avoid the extension of administrative control over tribal territory." It fell to Lord Curzon to give effect to this policy The main foundations of his action were to exercise over the tribes the political influence requisite to secure our imperial interests, to pay them subsidies for the performance of specific duties, but to respect their tribal independence and leave them, as far as possible, free to govern themselves according to their own traditions and to follow their own inherited habits of life without let or hindrance

New Province.

As a first step Lord Curzon took the control of the tribes under the direct supervision of the Government of India Up to this point they had been in charge of the Government of the Punjab, a province whose head is busied with many other concerns Lord Curzon created in 1901, the North-West Frontier Province, and placed it in charge of a Chief Commissioner with an intimate frontier experience, directly subordinate to the Government of India This was a revival of a scheme prepared by Lord Lytton in 1877, and often considered afterwards, but which had slipped for lack of driving power Next Lord Curzon withdrew the regular troops so far as possible from the advanced posts, and placed these fortalices in charge of tribal levies, officered by a handful of British officers The most successful of these is the Khyber Rifles, which have steadfastly kept the peace of that historic Pass At the same time the regular troops were cantoned in places whence they could quickly move to any danger point, and these bases were connected with the Indian Railway system In pursuance of this policy frontier railways were run out to Dargai, and a narrow-gauge line, since converted to the broad-gauge, was constructed from Kushalgarh to Kohat at the entrance of the Kohat Pass, and to Thal at the mouth of the Kurram Valley These railways are to be completed by lines to Tonk and Bannu By this means the striking power of the regular forces was greatly increased Nor was the policy of economic development neglected The railways gave a powerful stimulus to trade, and the Lower Swat Canal converted fractious tribesmen into successful agriculturists This policy of economic development is receiving a great development through the completion of the Upper Swat Canal (q v. Irrigation). Now it is completed there are other works awaiting attention

Greater Peace.

So far this policy has been completely justified by results. During Lord Curzon's Viceroyalty there was no frontier expedition. The recalcitrancy of the Mahsud Waziris necessitated punitive measures, but they took the form of a blockade Critics have declared that the blockade was scarcely distinguishable from an expedition, but that is a secondary matter It was not until 1908 that the peace of the border was directly disturbed, and then the continued recalcitrancy of the Zakka Khel sept of the great Afridi tribe compelled the Government to take action General Willcocks, moving swiftly down the Chura Pass, and Colonel Roos-Keppel taking the Khyber Rifles down the Bazar Valley inflicted such condign punishment on them that they were glad to accept terms of peace negotiated by the main Afridi tribe A month later, action was necessary against the Mohmands In this case the rebellious tribesmen were actively supported by Afghan levies, assembled and fitted out in Afghan territory at Lalpura Two brigades entered their country and defeated them. There was a diversion when lashkars numbering nearly twenty thousand moved up from Afghanistan and threatened the British post of Landi Kotal in the Khyber They too were driven back into Afghan territory, and the trouble was at an end The Amir, who had been strangely quiescent, asserted his authority and the irregular warfare waged from Afghan territory ceased

Policy Justified.

These expeditions have been seized upon by critics to condemn the present policy. They justify it Thanks to the confidence engendered by ten years of non-aggression, the disturbed area was localised, the Khyber was kept open, the Afridis lent their aid in concluding peace For these reasons, when the Government of India proposed the occupation of further strategical points in order to control the Zakka Khels, the Secretary of State wisely imposed his embargo The strength of the position was still further demonstrated when in 1910 the tribesmen suffered heavy losses in consequence of measures to suppress the arms traffic (q v Gun-running) The frontier is always in a state of suppressed ferment No one knows what will happen to-morrow But the tribesmen, feeling confident in the knowledge that no attack on their independence is contemplated and growing richer in consequence of the development of trade and agriculture, are more easily handled With the removal of the Russian menace, or rather its transference to Persia, the importance of the North-West Frontier has tended to subside There are still heard mutterings of the necessity for a reversion to the forward policy, and for the occupation of the Independent Territory right up to the Durand line. But they are not regarded seriously. The tribesmen are so saturated with rifles and ammunition, as the result of importations from the Persian Gulf, that the task would be long and costly When it was achieved the frontier problem would only have shifted. Instead of a frontier against the Independent tribesmen, India would have a frontier against Afghanistan, and the problem would still be present, only in an aggravated form

The frontier affrays which had their origin in Afghanistan are discussed in that section (q v) The Utman Khel were guilty of an outrage in the north of Peshawar district and two serious raids were made by Bunerwals in British territory A blockade was established against the Utman Khels and a column entered the country of the Bunerwals to punish the villages chiefly at fault.

As for the nomenclature of the Frontier tribes, the term Pathan is not racial It is

used to denote status, and is generally used of the Frontier tribes and their connections Furthest to the South, on the borders between the North-West Frontier Province and Baluchistan, are found the Shiranis, who are an Afghan people. Waziristan is inhabited by the Waziris, who have two main branches, the Mahsud Waziris, found in Southern Waziristan, and the Darwesh Khel Waziris, mostly in Northern Waziristan. The latter have two main sections, the Utmanzai and the Ahmadzai, and these again are subdivided into numerous clans In the Kuram the Turis (who unlike their neighbours are Shiahs) form the strongest element. In the Khyber region the main tribes are the Orakzai and the Afridis, both found in the mountainous country south of the Khyber Pass commonly called Tirah, both are extensively subdivided, the strongest sections of the Orakzai being the Lashkarzai and the Masozai, and of the Afridis the Malik Din Khel, the Zakka Khel, the Kambar Khel and the Kuki Khel. Between the Khyber Pass and the Kabul River are the Mullagoris, and further south the Mohmands and the Utman Khel Beyond these are the Yusufzai, who form the bulk of the inhabitants of Swat and Dir Chitral is inhabited by races whose origin is obscure

AFGHANISTAN.

The relations of Afghanistan with the Indian Empire are dominated by one main consideration—the relation of Afghanistan to a Russian invasion of India All other considerations are of secondary importance For nearly three-quarters of a century the attitude of Great Britain toward successive Amirs has been dictated by this one factor It was in order to prevent Afghanistan from coming under the influence of Russia that the first Afghan War of 1838 was fought—the most melancholy episode in Indian frontier history It was because a Russian envoy was received at Kabul whilst the British representative was turned back at Ali Masjid that the Afghan War of 1878 was waged Since then the whole end of British policy toward Afghanistan has been to build up a strong independent State, friendly to Britain, which would act as a buffer against Russia, and so to order our frontier policy that we should be in a position to move large forces up, if necessary, to support the Afghans in resisting aggression

Gates to India.

A knowledge of the trans-frontier geography of India brought home to her administrators the conviction that there were only two main gates to India—through Afghanistan, the historic route to India, along which successive invasions have poured, and by way of Seistan. It has been the purpose of British policy to close them, and of Russian endeavour to keep them at any rate half open To this end having pushed her trans-Persian railway to Samarkand, Russia thrust a military line from Merv to the Kushklinsky Post, where railway material is collected for its immediate prolongation to Herat. Later, she connected the trans-Siberian railway with the trans-Caucasian system, by the Orenburg-Tashkent line, thus bringing Central Asia into direct touch with her European magazines She was, until recently, credited with the determination to build the Termez railway, which would menace north-east Afghanistan just as the Kushklinsky line does north-west Afghanistan. Nor has Great Britain been idle A great military station has been created at Quetta This is connected with the Indian railway system by lines of railway which climb to the Quetta Plateau by the Bolan Pass and through the Chapper Rift, lines which rank amongst the most picturesque and daring in the world From Quetta the line has been carried by the Khojak tunnel through the Khwaja Amran Range, until it leads out to the Afghan Border at New Chaman, where it opens on the route to Kandahar The material is stocked at New Chaman which would enable the line to be carried to Kandahar in sixty days. In view of the same menace the whole of Baluchistan has been brought under British control Quetta is now one of the great strategical positions of the world, and nothing has been left undone which modern military science can achieve to add to its natural strength In the opinion of many military authorities it firmly closes the western gate to India, either by way of Kandahar, or the direct route through Seistan

Further east the Indian railway system has been carried to Jamrud, at the entrance to the Khyber Pass A first class military road, sometimes double, sometimes treble, threads the Pass to our advanced post at Landi Kotal, and then descends until it meets the Afghan frontier at Tor Khum Later, a commencement was made with the Loi Shilman Railway, which, starting from Peshawar, was designed to penetrate the Mullagori country and provide an alternative advance to the Khyber for the movement of British troops for the defence of Kabul For unexplained reasons, this line was suddenly stopped and is now thrust in the air. In this wise the two Powers prepared for the great conflict which was to be fought on the Kandahar-Ghazni-Kabul line.

Relations with India.

Between the advanced posts on either side stands the Kingdom of Afghanistan The end of British policy has been to make it strong and friendly In the first particular it has largely succeeded When the late Abdurrahaman was invited to ascend the throne, as the only means of escape from the tangle of 1879, none realised his great qualities Previously the Amir of Afghanistan had been the chief of a confederacy of clans Abdurrahaman made himself master in his own kingdom. By means into which it is not well closely to enter, he beat down opposition until none dared lift a hand against him Aided by a British subsidy of twelve lakhs of rupees year, increased to eighteen by the Durand Agreement of 1893, he established a strong standing army and set up arsenals under foreign supervision to furnish it with arms and ammunition Step by step his position was regularised The Anglo-Russian Boundary Commission,—which nearly precipitated war over the Penjdeh episode in 1885,—determined the northern boundaries. The Pamirs Agreement delimited the borders amid those snowy heights. The Durand

Agreement settled the border on the British side Finally the McMahon award closed the old feud with Persia over the distribution of the waters of the Helmand in Seistan It was estimated by competent authorities that about the time of Abdurrahaman's death, Afghanistan was in a position to place in the field, in the event of war, one hundred thousand well-armed regular and irregular troops, together with two hundred thousand tribal levies, and to leave fifty thousand regulars and irregulars and a hundred thousand levies to maintain order in Kabul and the provinces But if Afghanistan were made strong, it was not made friendly Abdurrahaman Khan distrusted British policy up to the day of his death. All that can be said is that he distrusted it less than he distrusted Russia, and if the occasion had arisen for him to make a choice, he would have opposed a Russian advance with all the force at his disposal. He closed his country absolutely against all foreigners, except those who were necessary for the supervision of his arsenals and factories He refused to accept a British Resident, on the ground that he could not protect him, and British affairs have been entrusted to an Indian agent, who is in a most equivocal position At the same time he repeatedly pressed for the right to pass by the Government of India and to establish his own representative at the Court of St James

Position To-day.

It used to be one of the commonplaces of Indian discussion that the system which Abdurrahaman Khan had set up would perish with him, because none other was capable of maintaining it Abdurrahaman Khan died in 1901 His favourite son, Habibullah, who had been gradually initiated into the administration, peacefully succeeded him, and has since peacefully retained his seat on the throne He concluded in 1905 the Dane Treaty, by which he accepted the same obligations on the same terms as his father He visited India in 1907, and apparently both enjoyed and profitted by his experiences Since then the purdah which screens Afghanistan has been lifted so little that there is no definite knowledge of what has passed behind it It would however be impossible to describe the attitude of the Amir as friendly It is said that the honours bestowed upon him in India, especially the conferring of a Royal Title, increased the megalomania from which all Afghans suffer He bitterly resented the conclusion of the Anglo-Russian Agreement, without any prior reference to himself, and has never given his adhesion to it over. His attitude toward the Frontier disturbances of 1907-08 was peculiar There is no doubt that the Zakka Khel rising was stirred by refugees in Kabul Thousands of Afghans, equipped in Afghan territory, participated in the Mohmand campaign. The great lashkar which attacked Landi Kotal was entirely composed of Afghans. The most favourable interpretation placed on his conduct is that during his absence in India, followed by a long tour in the northern provinces, the situation in Afghanistan had got out of hand, and the Amir let it take its course until failure occurred, when he stepped in and assumed control of affairs. For the rest, the position of the ruler of Afghanistan is not an enviable one. His brother, Nasrullah Khan, a noted Anglophobe and reactionary, is the Commander-in-Chief of the Army and the head of the orthodox party. The administration of the country is extremely lax. Experiences in Khost indicate that the strength of the central power has been exaggerated In 1912, the Mangals of Khost revolted against an unpopular governor and besieged him in his own stronghold The e was much talk of the prompt and severe punishment of the rebels, but the troops never reached the valley and the rebels were bought off by the dismissal of the unpopular governor

Anglo-Russian Agreement.

Inasmuch as Afghan politics, in their relation to Great Britain, were determined by the Russian menace, they have receded with the conclusion of the Anglo-Russian Agreement The part of the Anglo-Russian Convention relating to Afghanistan is as follows I The British Government disclaims any intention of changing the political position in Afghanistan, and undertakes neither to take measures in Afghanistan, nor to encourage Afghanistan to take measures, threatening Russia. The Russian Government recognises Afghanistan as outside the Russian sphere of influence, and agrees to act in all political relations with Afghanistan through the British Government, and it also undertakes to send no agents to Afghanistan II Great Britian adheres to the provisions of the treaty of Kabul of March 21, 1905, and undertakes not to annex or to occupy, contrary to the said treaty, any part of Afghanistan, or to intervene in the internal administration The reservation is made that the Amir shall fulfil the engagements contracted by him in the aforementioned treaty III Russian and Afghan officials especially appointed for that purpose on the frontier, or in the frontier provinces, may enter into direct relations in order to settle local questions of a non-political character IV. Russia and Great Britian declare that they recognise the principle of quality of treatment for commerce and agree that all facilities acquired already or in the future for British and Anglo-Indian commerce and merchants shall be equally applied to Russian Commerce and merchants. V These arrangements are not to come into force until Great Britain has notified to Russia the Amir's assent to them

The Amir has never given his adhesion to the Agreement, but Great Britain and Russia have agreed to regard the Agreement as if the Amir had accepted it.

Whilst throughout the year the relations of the Government of India with the Amir of Afghanistan continued to be most friendly, his subjects committed a series of outrages in British territory Raids were made on the Jehangira and Khairabad railway stations in the Peshawar district by a gang whose base is in the Afghan Shinwari country. The punishment of the offenders was demanded. An even more flagrant instance occurred on the Kohat Bannu border This district has for some time been harried by gangs from the neighbouring Afghan District of Khost Inasmuch as remonstrance had no effect, the

Government of India authorised as reprisal the arrest and detention of all Khostwals found in British territory pending a settlement of the matter The Amir immediately ordered the surrender of the British subjects who had been carried off, and the greater number of the outlaws was arrested and despatched to Kabul for trial A much more serious affair occurred on Sunday afternoon, April 12, when an orderly in the service of Major Dodd, Political Agent in Waziristan and Commander of the Southern Waziristan Militia, irritated over a dispute about the allowance to his cousin, fatally shot Major Dodd, Captain G P. Brown of the 58th Rifles, Lieut G W Hickey, 32nd Mountain Battery and three Indian soldiers. The announcement was made in Parliament that the tragedy was an isolated act of fanaticism; but this was a view which did not find confirmation on the Frontier where it was maintained that these Waziristan tragedies could be traced to a powerful faction in Kabul which was willing to encourage in every way fanatics who set out to kill British officers

On the outbreak of war His Majesty the Amir immediately declared his complete neutrality

TIBET.

Recent British policy in Tibet is really another phase in the long-drawn-out duel between Great Britain and Russia in Central Asia The earliest efforts to establish communication with that country were not, of course, inspired by this apprehension When in 1774 Warren Hastings despatched Bogle on a mission to the Tashi-Lama of Shigatse,—the spiritual equal, if not superior, of the Dalai Lama of Lhasa—his desire was to establish facilities for trade, to open up friendly relations with a Power which was giving us trouble on the frontier, and gradually to pave the way to a good understanding between the two countries After Warren Hasting's departure from India the subject slept, and the last Englishman to visit Lhasa, until the Younghusband Expedition of 1904, was the unofficial Manning. In 1885, under the inspiration of Colman Macaulay, of the Bengal Civil Service, a further attempt was made to get into touch with the Tibetans, but it was abandoned in deference to the opposition of the Chinese, whose suzerainty over Tibet was recognised, and to whose views, until the war with Japan, British statesmen were inclined to pay excessive deference But the position on the Tibetan frontier continued to be most unsatisfactory The Tibetans were aggressive and obstructive, and with a view to putting an end to an intolerable situation, a Convention was negotiated between Great Britain and China in 1890 This laid down the boundary between Sikkim and Tibet, it admitted a British protectorate over Sikkim, and paved the way for arrangements for the conduct of trade across the Sikkim-Tibet frontier These supplementary arrangements provided for the opening of a trade mart at Yatung, on the Tibetan side of the frontier, to which British subjects should have the right of free access, and where there should be no restrictions on trade The agreement proved useless in practice, because the Tibetans refused to recognise it, and despite their established suzerainty, the Chinese Government were unable to secure respect for it.

Russian Intervention.

This was the position when in 1899 Lord Curzon, Viceroy of India, endeavoured to get into direct touch with the Tibetan authorities Three letters which he addressed to the Dalai Lama were returned unopened, at a time when the Dalai Lama was in direct intercourse with the Tsar of Russia His emissary was a Siberian Dorjieff, who had established a remarkable ascendancy in the counsels of the Dalai Lama. After a few years' residence at Lhasa Dorjieff went to Russia on a confidential mission in 1899. At the end of 1900 he returned to Russia at the head of a Tibetan mission, of which the head was officially described in Russia as "the senior Tsanite Khomba attached to the Dalai Lama of Tibet" This mission arrived at Odessa in October 1900, and was received in audience by the Tsar at Livadia Dorjieff returned to Lhasa to report progress, and in 1901 was at St Petersburg with a Tibetan mission, where as bearers of an autograph letter from the Dalai Lama they were received by the Tsar at Peterhoff. They were escorted home through Central Asia by a Russian force to which several Intelligence Officers were attached At the time it was rumoured that Dorjieff had, on behalf of the Dalai Lama, concluded a treaty with Russia, which virtually placed Tibet under the protectorate of Russia This rumour was afterwards officially contradicted by the Russian Government

The Expedition of 1904.

In view of these conditions the Government of India, treating the idea of Chinese suzerainty over Tibet as a constitutional fiction, proposed in 1903 to despatch a mission, with an armed escort, to Lhasa to discuss the outstanding questions with the Tibetan authorities on the spot To this the Home Government could not assent, but agreed, in conjunction with the Chinese Government, to a joint meeting at Khamba Jong, on the Tibetan side of the frontier Sir Francis Younghusband was the British representative, but after months of delay it was ascertained that the Tibetans had no intention of committing themselves It was therefore agreed that the mission, with a strong escort, should move to Gyantse On the way the Tibetans developed marked hostility, and there was fighting at Tuna and several sharp encounters in and around Gyantse It was therefore decided that the mission should advance to Lhasa, and on August 3rd, 1904, Lhasa was reached There Sir Francis Younghusband negotiated a convention by which the Tibetans agreed to respect the Chinese Convention of 1890, to open trade marts at Gyantse, Gartok and Yatung; to pay an indemnity of £500,000 (seventy-five lakhs of rupees), the British to remain in occupation of the Chumbi Valley until this indemnity was paid off at the rate of a lakh of rupees a year. In a separate instrument the Tibetans agreed that the British Trade Agent at Gyantse should have the right to proceed to Lhasa to discuss commercial questions, if necessary

Home Government intervenes.

For reasons which were not apparent at the time, but which have since been made clearer, the Home Government were unable to accept the full terms of this agreement The indemnity was reduced from seventy-five lakhs of rupees to twenty-five lakhs, to be paid off in three years, and the occupation of the Chumbi Valley was reduced to that period The right to despatch the British Trade Agent to Lhasa was withdrawn Two years later (June 1906) a Convention was concluded between Great Britain and China regulating the position in Tibet Under this Convention Great Britain agreed neither to annex Tibetan territory, nor to interfere in the internal administration of Tibet China undertook not to permit any other foreign State to interfere with the territory or internal administration of Tibet Great Britain was empowered to lay down telegraph lines to connect the trade stations with India, and it was provided that the provisions of the Convention of 1890, and the Trade Regulations of 1893, remained in force The Chinese Government paid the indemnity in three years and the Chumbi Valley was evacuated The only direct result of the Mission was the opening of the three trade marts and the establishment of a British Trade Agent at Gyantse

The Anglo-Russian Agreement

The reason underlying the action of the British Government in modifying, in such material particulars, the Convention of Lhasa was apparent later The Anglo-Russian Agreement was in process of negotiation, and under that Agreement Great Britain was pledging herself not to annex any portion of Tibetan territory, nor to send a representative to Lhasa A seventy-five year occupation of the Chumbi Valley would have been indistinguishable from annexation The portions of the Anglo-Russian Agreement which relate to Tibet are as follows

Article I —The two High Contracting Parties engage torespect the territorial integrity of Tibet and to abstain from all interference in its internal administration

Article II —In accordance with the admitted principle of the suzerainty of China over Tibet, Great Britain and Russia engage not to enter into negotiations with Tibet, except through the intermediary of the Chinese Government This engagement does not exclude the direct relations between the British Commercial Agents and the Tibetan authorities, provided for in Article V of the Convention between Great Britain and Tibet of the 7th September, 1904, and confirmed by the Convention between Great Britain and China of the 27th April 1906, nor does it modify the engagements entered into by Great Britain and China in Article I of the said Convention of 1906.

It is clearly understood that Buddhists, subjects of Great Britain or of Russia, may enter into direct relations on strictly religious matters with the Dalai Lama, and the other representatives of Buddhism in Tibet the Governments of Great Britain and Russia engage, as far as they are concerned, not to allow those relations to infringe the stipulations of the present arrangement.

Article III —The British and Russian Governments, respectively, engage not to send Representatives to Lhasa

Article IV —The two High Contracting Parties engage neither to seek nor to obtain, whether for themselves or for their subjects, any concessions for railways, roads, telegraphs, and mines, or other rights in Tibet

Article V —The two Governments agree that no part of the revenues of Tibet, whether in kind or in cash, shall be pledged or assigned to Great Britain or Russia or to any of their subjects

Annexed to the Agreement was a re-affirmation of the declaration for the evacuation of the Chumbi Valley after the payment of three annual instalments of the indemnity, provided that the trade marts had been effectively opened for three years and that the Tibetans had complied in all respects with the terms of the Treaty

Chinese Action

The sequel to the Anglo-Russian Agreement was dramatic, although it ought not to have been unexpected On the approach of the Younghusband Mission the Dalai Lama fled to Urga, the sacred city of the Buddhists in Mongolia He left the internal government of Tibet in confusion, and one of Sir Francis Younghusband's great difficulties was to find Tibetan officials who would undertake the responsibility of signing the Treaty Now the suzerainty of China over Tibet had been explicitly reaffirmed It was asserted that she would be held responsible for the foreign relations of Tibet In the past this suzerainty having been a "constitutional fiction," it was inevitable that China should take steps to see that she had the power to make her will respected at Lhasa To this end she proceeded to convert Tibet from a vassal state into a province of China In 1908 Chao Erh-feng acting Viceroy in the neighbouring province of Szechuen, was appointed Resident in Tibet He proceeded gradually to establish his authority, marching through eastern Tibet and treating the people with great severity Meantime the Dalai Lama, finding his presence at Urga, the seat of another Buddhist Pontiff, irksome, had taken refuge in Si-ning Thence he proceeded to Peking, where he arrived in 1908, was received by the Court, and despatched to resume his duties at Lhasa Moving by leisured stages, he arrived there at Christmas 1909 But it was soon apparent that the ideas of the Dalai Lama and of the Chinese Government had little in common The Dalai Lama expected to resume the temporal and spiritual despotism which he had exercised prior to 1904 The Chinese intended to deprive him of all temporal power and preserve him as a spiritual pope The Tibetans had already been exasperated by the pressure of the Chinese soldiery The report that a strong Chinese force was moving on Lhasa so alarmed the Dalai Lama that he fled from Lhasa, and by the irony of fate sought a refuge in India He was chased to the frontier by Chinese troops, and took up his abode in Darjeeling, whilst Chinese troops overran Tibet

Later Stages.

The British Government, acting on the representations of the Government of India,

made strong protests to China against this action They pointed out that Great Britain, while disclaiming any desire to interfere with the internal administration of Tibet, could not be indifferent to disturbances in the peace of a country which was a neighbour, on intimate terms with other neighbouring States on our frontier, especially with Nepal, and pressed that an effective Tibetan Government be maintained The attitude of the Chinese Government was that no more troops had been sent to Tibet than were necessary for the preservation of order, that China had no intention of converting Tibet into a province, but that being responsible for the good conduct of Tibet, she must be in a position to see that her wishes were respected by the Tibetans Finally, the Chinese remarked that the Dalai Lama was such an impossible person that they had been compelled again to depose him Here the matter might have rested, but for the revolution in China That revolution broke out in Szechuen, and one of the first victims was Chao Erh-feng Cut off from all support from China, surrounded by a hostile and infuriated populace, the Chinese troops in Tibet were in a hopeless case, they surrendered, and sought escape not through China, but through India, by way of Darjeeling and Calcutta The Dalai Lama returned to Lhasa, and in 1913, in the House of Lords on July 28, Lord Morley stated the policy of the British Government in relation to these changes He said the declaration of the President of the Chinese Republic saying that Tibet came within the sphere of Chinese internal administration, and that Tibet was to be regarded as on an equal footing with other provinces of China, was met by a very vigorous protest from the British Government The Chinese Government subsequently accepted the principle that China is to have no right of active intervention in the internal administration of Tibet, and agreed to the constitution of a conference to discuss the relation of the three countries This Convention met at Simla when Sir Henry McMahon, Foreign Secretary to the Government of India, Mr Ivan Chen, representing China, and Mr Long Chen Shatra, Prime Minister to the Dalai Lama, threshed out these issues Whilst no official pronouncement has been made on the subject, it is understood that a Convention was initialled in June which recognised the complete autonomy of Tibet proper, with the right of China to maintain a Resident at Lhasa with a suitable guard A semi-autonomous zone was to be constituted in Eastern Tibet, in which the Chinese position was to be relatively much stronger But this Convention, it is understood, has not been ratified by the Chinese Government, owing to the difficulty of defining Outer and Inner Tibet

Political Importance of Tibet.

The political importance of Tibet in relation to India has of necessity been changed by the Anglo-Russian Agreement So long as that instrument is in force, it tends to decline But no treaties are everlasting The question has been admirably summed up by Sir Valentine Chirol ("The Middle Eastern Question"), written before the Agreement was reached "What it would be impossible to view without some concern" he wrote "would be the ascendance of a foreign and possibly hostile power at Lhasa, controlling the policy of a great politico-religious organisation whose influence can and does make itself appreciably felt all along the north-eastern borderland of India Lhasa is the stronghold of Lamastic Buddhism, a debased form of Buddhism largely overgrown with tantric philosophy—Lhasa is in fact the Rome of Central Asian Buddhism, and the many-storied Po ta-la on the hill to the west of the city is its Vatican, whence its influence radiates throughout innumerable lamaseries or Buddhist monasteries, not only into Turkestan and Mongolia and Western China, but across the Himalayas into the frontier States of our Indian Empire Corrupt and degraded as it is, it is still unquestionably a power, and just because it is corrupt and degraded it might lend itself more readily to become for a consideration the tool of Russian ambitions . . Tibet as a Russian dependency would, at any rate, no longer be a *quantite negligeable*, and our north-eastern frontier, naturally formidable as it is, would require to be watched, just as every civilised country has to watch its frontiers, whatever they may be, where they march with a powerful neighbour, and most of all in India, where our frontier is fringed with semi-independent Native States, over which our authority is conditioned mainly on the hitherto unrivalled prestige of our Imperial power in Asia"

British Trade Agent, Yatung,—D Macdonald
British Trade Agent, Gyantse,—Vacant

THE NORTH-EASTERN FRONTIER.

The position on the northern frontier has been considered as if the British line were contiguous with that of Tibet This is not so The real frontier States are Kashmir, Nepal, Sikkim and Bhutan From Chitral to Gilgit, now the northernmost posts of the Indian Government, to Assam, with the exception of the small wedge between Kashmir and Nepal, where the British district of Kumaon is thrust right up to the confines of Tibet, for a distance of nearly fifteen hundred miles there is a narrow strip of native territory between British India and the true frontier The first of these frontier States is Kashmir The characteristics of this State are considered under Native States (q v.), it is almost the only important Native State in India with frontier responsibilities, and it worthily discharges them through the agency of its efficient Imperial Service troops—four regiments of infantry and two Mountain Batteries, composed mainly of the Rajput Dogras, who make excellent fighting material One of the most important trade routes with Tibet passes through Kashmir—that through Ladak. Then we come to the long narrow strip of Nepal. This Gurkha State stands in special relations with the British Government It is for all practical purposes independent, and the British resident at Khatmandu exercises no influence on the internal administration. The governing machine in Nepal is also peculiar The Maharaj Dhiraj, who comes from the Sesodia Rajput clan,

the bluest blood in India, takes no part in the administration. All power vests in the Prime Minister, who occupies a place equivalent to that of the Mayors of the Palace, or the Shoguns of Japan The present Prime Minister, Sir Chandra Shamsher, has visited England, and has given conspicuous evidence of his attachment to the British Government Nepal is the main Indian outpost against Tibet, or against Chinese aggression through Tibet The friction between the Chinese and the Nepalese used to be frequent, and in the eighteenth century the Chinese marched an army to the confines of Khatmandu - one of the most remarkable military achievements in the history of Asia. Under the firm rule of the present Prime Minister Nepal has been largely free from internal disturbance, and has been raised to a strong bulwark of India Nepal is the recruiting ground for the Gurkha Infantry, who form such a splendid part of the fighting arm of the Indian Empire Beyond Nepal are the smaller States of BHUTAN and SIKKIM, whose rulers are Mongolian by extraction and Buddhists by religion. In view of Chinese aggressions in Tibet, the Government of India in 1910 strengthened their relations with Bhutan by increasing their subsidy from fifty thousand to a lakh of rupees a year, and taking a guarantee that Bhutan would be guided by them in its foreign relations Afterwards China had officially notified that Great Britain would protect the rights and interests of these States

Assam and Burma.

We then come to the Assam border tribes—the Daflas, the Miris, the Abors and the Mishmis Excepting the Abors none of these tribes have recently given trouble The murder of Mr Williamson and Dr Gregorson by the Minyong Abors in 1911 made necessary an expedition to the Dihang valley of the Abor country on the N E frontier A force of 2,500 and about 400 military police was employed from October 1911 to April 1912 in subduing the tribe After two or three small actions the murderers were delivered up The cost of the expedition was Rs 21,60,000 At the same time friendly missions were sent to the Mishmi and Miri countries Close contact with these forest-clad and leech-infested hill has not encouraged any desire to establish more intimate relations with them The area occupied by the Nagasares runs northwards from Manipur The Nagasares a Tibeto-Burman people, devoted to the practice of head hunting, which is still vigorously prosecuted by the independent tribes The Chin Hills is a tract of mountainous country to the south of Manipur The corner of India from the Assam boundary to the northern boundary of the Shan States is for the most part included in the Myitkyina and Bhamo districts of Burma Over the greater part of this area, a labyrinth of hills in the north, no direct administrative control is at present exercised It is peopled by the Shans and the Kachins Civilisation is said to be progressing and steps have been taken to prevent encroachments from the Chinese side There is a considerable trade with China through Bhamo On the Eastern frontier of Burma are the Shan States, with an area of fifty thousand square miles and a population of 1,300,000. These States are still administered by the Sawbwas, or hereditary chiefs, subject to the guidance of Superintendents and Assistant Superintendents The Northern Shan Railway to Lashio, opened in 1903, was meant to be a stage in the construction of a direct railway link with China, but this idea has been put aside, for it is seen that there can never be a trade which would justify the heavy expenditure The Southern Shan States are to be developed by railway connection. The five Karenni States lie on the frontier south of the Shan States. South of Karenni the frontier runs between Siam and the Tenasserim Division of Burma The relations between the Indian Government and the progressive kingdom of Siam are excellent

PERSIAN DEBT TO BRITAIN.

A Parliamentary Paper sets out the outstanding debt of the Persian Government to the British and Indian Governments, as follows

	£	s.	d
Portion of Anglo-Indian Loan of 1903-4 (repayable by March, 1928)	314,281	15	4
Anglo-Indian advance of February, 1912	100,000	0	0
Anglo-Indian advance of Aug 1912, after defeat of gendarmerie in Fars	25,000	0	0
Anglo-Indian advance of Nov 1912, for use of Governor-General of Fars	15,000	0	0
Anglo-Indian advance of April, 1913, for general purposes of administration, including £30,000 for such purposes in Fars and £10,000 for the Bushire Custom House	200,000	0	0
Anglo-Indian advance of May, 1913, for gendarmerie purposes in Fars	100,000	0	0
Total	£754,281	16	4

The 1903-5 loan bears interest at 5 per cent, and all other advances bear interest at 7 per cent

Railways to India.

The prospect of linking Europe and Asia by a railway running eastwards through Asia Minor has fascinated men's minds for generations. The plans suggested have, owing to the British connection with India, always lain in the direction of lines approaching India More than 40 years ago a Select Committee of the House of Commons sat for two years to consider the question of a Euphrates Valley railway The Shah of Persia applied to the British Foreign Office for the investment of British capital in Persian railway construction many years before the end of the nineteenth century A proposal was put forward in 1895 for a line of 1,000 miles from Cairo and Port Said to Koweit, at the head of the Persian Gulf While these projects were in the air, German enterprise stepped in and made a small beginning by constructing the Anatolian railway system Its lines start from Scutari, on the southern shore of the Bosphorus, opposite Constantinople, and serve the extreme western end of Asia Minor And upon this foundation was based the Turkish concession to Germans to build the Baghdad Railway

Meanwhile, Russia was pushing her railways from various directions into the Central Asian territory running along the northern frontiers of Persia and Afghanistan to the borders of Chinese Turkestan The advance of the Russian railheads was regarded with extreme suspicion in England as part of a scheme of adventure against India, and as the Russian lines crept southwards British Indian railways were thrust forward to the Indian north-west frontier As the two systems approached one another, enthusiasts adumbrated plans for linking them together M de Lesseps, the creator of the Suez Canal, made a journey to Bombay to lay one before the Indian Government. He was proposing to start homewards through Afghanistan and Central Asia, so that he might examine a route that way, and *via* Orenburg to Moscow, when the Afghan wars broke out and ended the dream.

The construction of a Trans-Persian railway, connecting India across Persia, with the Russian lines between the Black Sea and the Caspian Sea has come to the forefront since the conclusion of the Anglo-Russian agreement regarding Persia, and simultaneously with this and the advance of the Baghdad railway old projects for British lines running inland into Persia from the Persian Gulf have been quickened.

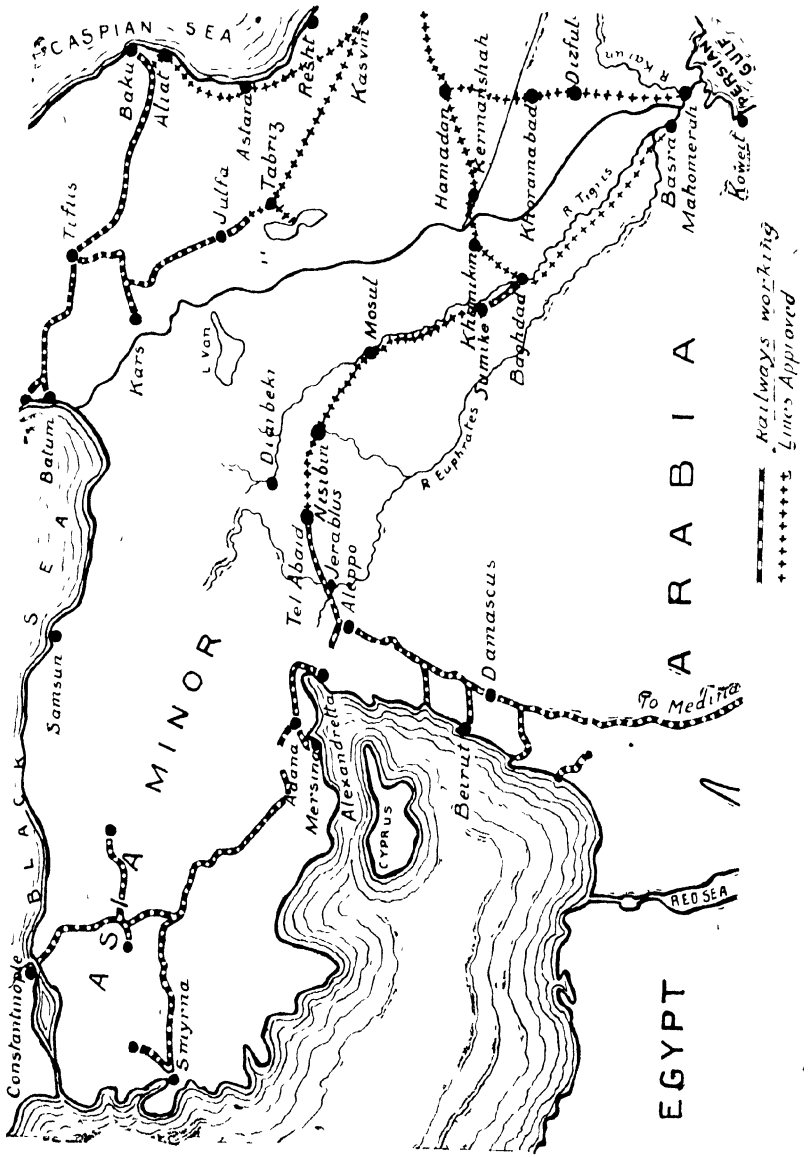
The actual position in regard to these various undertakings up to the outbreak of the European war was as follows —

Baghdad Railway.

The German group holding the Anatolian railway concession was granted, in 1902, a further concession for extending that system from Konia, then its southern terminus, through the Taurus range to the extreme eastern Mediterranean seaboard, and by way of Nisibin, Mosul and Baghdad to Basra This concession was substituted for a line projected by a more northerly route through the pass of Diarbekr Russia strongly objected to that route, on the ground that it would bring the line into the Black Sea basin. When it was abandoned, a Russo-Turkish agreement was passed, reserving to Russia the sole right to construct railways in the northern part of Asia Minor, and Russia has since then prepared a number of projects for that region, branching out from Samsun, on the Black Sea Russia has also prepared her Caucasian railways for possible extensions in the same region, pushing her lines towards Van and making an agreement with Persia, in February, 1913, for a line to Lake Urumia

The Anatolian railway company were apparently unable to handle their new concession and initiated fresh negotiations, which resulted in the Baghdad Railway convention of March, 1903 This caused much discussion in England, owing to the apparent intention of the Germans to encroach on the Persian Gulf Attempts were made by the German group to secure the participation of France and Britain in the undertaking They were successful in France, the Imperial Ottoman Bank group agreeing to take 30 per cent of the finance, without, however, the countenance of the French Government But in England, though Mr Balfour's Government was favourable, strong objection was taken to the constitution of the Board of Directors, which established German control in perpetuity It was regarded as a German political move and participation was rejected.

The financial terms, with a Turkish kilometric guarantee, were highly favourable to the company Thus, the outside cost of construction of the first section, which lies entirely in the plains of Konia, is estimated to have been £625,000, and the company retained a profit of at least 1½ millions sterling on this part of their enterprise In the second section the Taurus range is being encountered and construction is more difficult and more costly The railway must for a long time be a heavy burden on Turkish finance The country through which it passes from the Mediterranean seaboard to the Tigris valley above Baghdad holds out little or no prospect of commercial advantage, and the financial system adopted offers no inducement to the concessionaires to work for increasing earnings Thus, the Baghdad railway company sublet the working of the line to the Anatolian Railway Company at a rate of £148 per kilometre, as against £180 per kilometre guaranteed by the Turkish Government The weight of the Turkish obligations in connection with the railway had an important effect upon the discussions, in Paris in the summer of 1913, of the international committee for the examination of questions relating to the Ottoman debt The committee was appointed in reference to the financial settlement between Turkey and the Balkan States after the war and it became evident that for some Powers, whatever the deserts of the Balkan Allies might be, the Baghdad railway and Turkey's ability to pay the guarantee upon it were the one fixed point to be guarded in the Ottoman Empire. Important negotiations took place between Germany and France, in 1913, to regulate their respective financial positions in regard to the railway, so as to avoid future conflict of poli-


CASPIAN SEA
Baku
Aliat
Astara
Resht
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Tiflis
Julfa
Tabriz
Hamadan
Kermanshah
Dizful
Kermanshah
Persian Gulf
Karun
Kars
Van
Batum
Diarbekr
Mosul
Kirkuk
Khanikin
Baghdad
Tigris
Basra
Mahomerah
Kowet
Samsun
Nisibin
Euphrates
Sumike
Jerablus
Tel Abiad
Aleppo
Damascus
To Medina
Adana
Mersina
Alexandretta
CYPRUS
Beirut
Smyrna
Constantinople
BLACK SEA
ASIA MINOR
ARABIA
EGYPT
RED SEA
Railways working
Lines Approved

tical interests in the regions of the Baghdad lines and the French railway system in Syria.

The Baghdad Railway was during 1913 advanced southward from Konia 182 miles, to Karapunar, on the northern slope of the Taurus On the southern side of the mountains, the Mersina-Adana line had been incorporated and 16 miles of track constructed, from Adana to Dorak, among the southern foothills of the Taurus. Work is now in progress to link up Karapunar and Dorak The distance between them through the mountains, is 56 miles, The limestone mountain gorges involve much tunnel work and it was estimated that the work would occupy three years

Eastward from Adana, construction advanced about 65 miles, by the middle of 1913, towards the head of the French Syrian lines at Aleppo, and work was begun on a short branch line connecting this new piece with Alexandretta The branch was opened to traffic early in 1914 Plans were submitted to the Turkish Government in 1913 for the construction of a new port at Alexandretta, in accordance with the terms of a supplementary concession sanctioning the branch line These include the construction of three docks, a feature of considerable interest Work was begun early in 1913 on a line running north-west from Aleppo to meet that coming from Adana It will have to pierce the Amanus range of hills by a tunnel three miles long, which, it was estimated, would take three years to construct

Progress has meanwhile been made with the early stages of the line running north-east from Aleppo en route to Baghdad This line was in 1913 open to Jerablus, on the Euphrates and the construction of a large bridge at that spot was immediately undertaken, while motor boats and a steamer or two were taken in pieces to Jerablus and launched for river traffic to Baghdad. The journey from Beirut to Baghdad was thus reduced to 8½ days, counting two days from Beirut to Jerablus by tram, six days by steamer to Feluja, and finally, 10 hours' carriage drive to Baghdad The river traffic is likely to be interrupted in the dry season. The Jerablus bridge having been completed, the railway was completed and opened on July 1st last as far as Tel Abiad, 60 miles east of Jerablus Earthwork had already been carried much farther

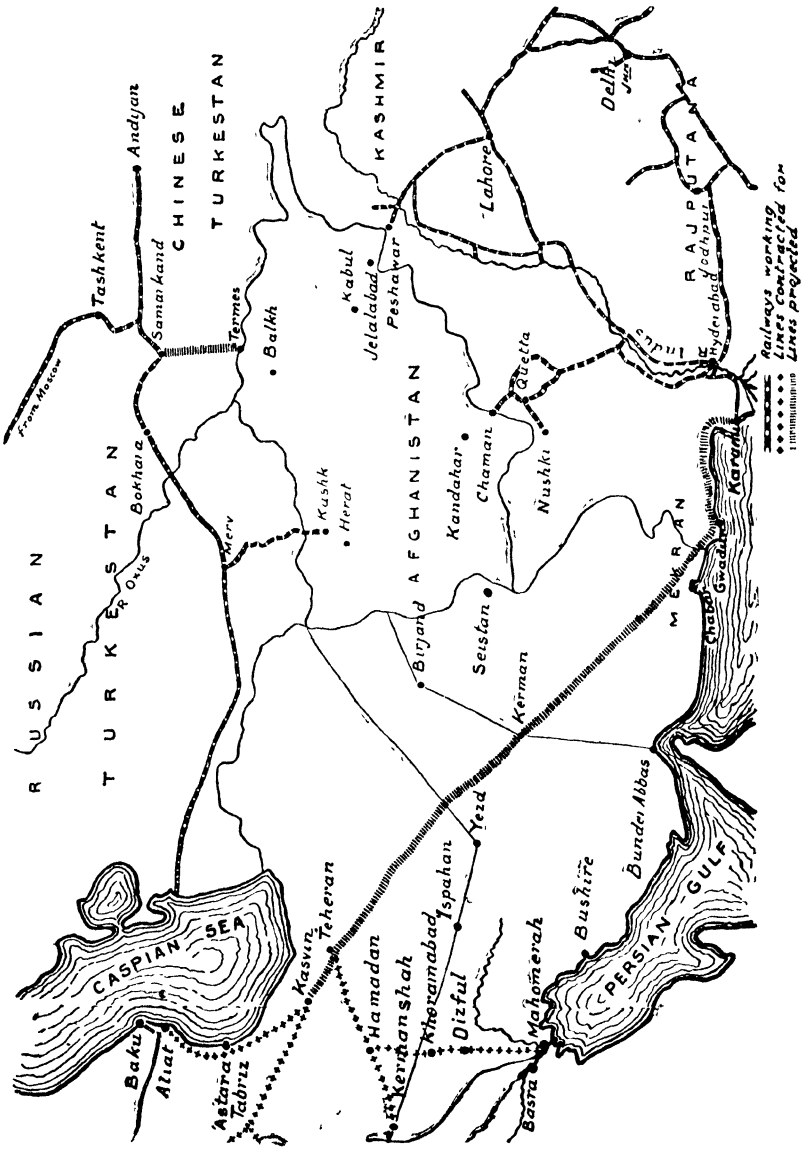
Construction was meanwhile carried on the Baghdad-Mosul section, material for the latter being taken up-river from Basra to Baghdad by special barges and tugs The line from Baghdad. to Sumike, about 40 miles north of Baghdad was handed over for traffic on June 2nd, 1914 Reckoning all the sections completed and open for traffic, a distance of 497 miles had been finished by the summer of 1913, out of a total of 1,029 miles, reckoning from Konia to Baghdad An official Deutsche Bank report issued in March, 1914, stated that the Balkan wars had caused the German undertaking "to concentrate its Turkish enterprises more than ever upon the Asiatic territories" To this end the Germans handed over their Balkan railway interests to an Austro-Hungarian financial group 'on favourable terms," and thus greatly facilitated their special direction of effort in Asia Minor and Mesopotamia

A satisfactory agreement was reached between Britain and Turkey, with the acquiescence of Germany, regarding the approach to the Persian Gulf Its central provision is that the railway shall not proceed beyond Basra without an agreement with Britain and Britain is making no agreement that it shall proceed beyond Basra Britain waives any question of her participation in the Baghdad-Basra section of the line It is agreed that there are to be no differential rates on the railway, and in regard to the latter Britain obtained the right of appointing two directors of the railway, not for purposes of control but to guard British interests Britain recognises Turkish suzerainty over Koweit and Turkey recognises the independence of the Sheikh of Koweit and the continuance, unimpaired, of the present relationship between him and the British Government The Anglo-Turkish Agreement has not yet been published but Sir Edward Grey has announced that "we get recognition by Turkey of the status quo in the Persian Gulf, the status quo as we have regarded it for years past" (House of Commons, June 29, 1914) A statement issued in Berlin on June 15, 1914 stated "The Anglo-German Agreement regarding the Baghdad Railway and Mesopotamia has been initialled in London by Sir Edward Grey and Prince Lichnowsky, the German Ambassador A complete understanding has been reached on all questions at issue The agreement will not come into force until after the conclusion of the negotiations with Turkey, as on some material points the assent of the Porte will be necessary The contents of the Agreement can, therefore, not be divulged at present" Nothing further has been published regarding this aspect of the matter.

Germany also proposes to build a line from Baghdad to Khanikin where a pass through the mountains leads into the West Persian high-lands Russia has agreed to build a railway from Khanikin, *via* Kermanshah and Hamadan to Teheran, construction to begin within two years of the completion of the extension from Baghdad to Khanikin and then to be completed in 4 years

Trans-Persian Line.

A trans-Persian line to join the Russian Caucasian system with the Indian Railways first assumed proportions of practical importance in the late winter of 1911 Both the Russian and the Indian railways are fully developed up to the points which would be the termini of a trans-Persian line The Russian railway system reaches Julfa on the Russo-Persian border between the Black Sea and the Caspian Sea A line connecting with this runs from Batum, on the east coast of the Black Sea, to Baku on the west coast of the Caspian Incidentally, article 59 of the Treaty of Berlin provides that Batum shall be "a free port essentially commercial". The Persian Foreign Minister on February 6, 1913, signed a concession to the Russian Julfa-Tabriz and Enzeli-Teheran Road Companies, giving the right to construct a railway from Julfa to Tabriz (93 miles) with an extension to Lake Urumiah and a preferential right to build a railway from Tabriz to Kazvin Julfa and Tabriz were at that time equipped with a metalled road, on which a motor omnibus


RUSSIAN TURKESTAN
CHINESE TURKESTAN
AFGHANISTAN
BALUCHISTAN
KASHMIR
RAJPUTANA
From Moscow
Tashkent
Andijan
Samarkand
Termes
Balkh
Kabul
Jelalabad
Peshawar
Lahore
Delhi
Hyderabad
Indus
Quetta
Chaman
Kandahar
Nushki
Kushk
Herat
Kerv
Bokhara
R. Oxus
Birjand
Seistan
Kerman
Yezd
Ispahan
Kharamabad
Dizful
Mahonerah
Bushire
Bunder Abbas
Gwadur
Karachi
Hamadan
Kermanshah
Teheran
Kasvin
Astara
Tabriz
Baku
Atiat
Basra
CASPIAN SEA
PERSIAN GULF
Railways working
Lines contracted for
Lines projected

service is maintained. The road is the property of the concessionaire company and if, as seems likely, sections of it are being utilised for railway construction, the work of constructing the line will be materially expedited The railway was to be begun within two years of the granting of the concession and completed within six years and a time limit of eight years is fixed for the extension of the line from Tabriz to Kazvin, a further distance of 250 miles The concession runs for a period of seventy-five years Option is reserved to the Persian Government to purchase the Julfa-Tabriz line after a lapse of 35 years Early in 1914, it was announced in Teheran that the line had been built from Julfa to Darabiz, some 13 miles south of Julfa and news from Russia thus indicated that it would be completed to Tabriz in the spring of 1915 The Russian Government Department of Railways in June 1913, approved a concession to a Russian Syndicate for the construction of the line from a point on the railway close to Baku to Astara, a point on the Caspian south-western seaboard, where the Russian and Persian territories meet More than one possible starting point for the trans-Persian Railway is therefore in course of preparation.

On the Indian side, the railway system is fully developed up to Baluchistan, close to the Persian frontier A broad gauge line running through Quetta to Nushki was constructed with the intention of its development for the benefit of trade which already runs by caravan along the "Nushki trade route" to the Persian province of Seistan The Russian Government favoured linking up the trans-Persian railway with the Indian railways at this point. But the suspicious saw a strategical reason for this preference The Indian Government found itself unable to approve the connection They insist that the line shall run either from Yezd or Kerman to the seaboard This condition is absolute There remains, then, a connection with the Indian North-Western Railway at or near Karachi.

The necessary financial arrangements for the preliminary work in connection with the proposal, which came from Russia, to connect the railways with Russia and India were completed in January, 1912 It was then stated that the Russian Committee were already in possession of a nearly complete survey of more than 300 miles from Astara to Teheran and the length of the line from there to Gwadur on the Perso-Baluch Frontier is some 1,200 miles Soon after this announcement, Mr. Johns was appointed by the Government of India to survey a railway route between Karachi and Gwadur, and found a good line with a general gradient of 1 in 250, the steepest being 1 in 90 Twelve of the principal Russian Banks were interested in the project and the desired amount of English and French capital was guaranteed, one English banking house having even offered to furnish the whole of the English quota The French concerns are the Banque de Paris et des Pays Bas, the Credit Lyonnais, the Societe Generale, the Comptoir National, the Banque de l'Union Parisienne and Count d' Arnaux.

Meetings of the international financiers concerned in the scheme were held and a Societe d'Etudes was formed M G Raindri formerly a distinguished member of the French diplomatic service, was selected as President, with Sir William Garstin as British Vice-President and M Homiakoff, ex-President of the Russian Duma, as Russian Vice-President The Society consists of a council of administration of 24 persons The Governments of all three countries gave their approval to the enterprise and on the firm representations of the British Foreign Office a formal memorandum was drawn up providing for absolute equality of British, Russian and French control in the undertaking. It has been agreed that in the northern half Russian interest shall be 60 per cent, French interest 33 1-3 per cent, and British 6 2-3 per cent, and in the southern half Russian interest 6 2-3 per cent, French 33 1-3 per cent, and British 60 per cent The total interests of the parties in the whole line will thus be equal The French and Russian proposal was that interests should be equal for the whole line The above arrangement was made to meet British susceptibilities

No announcement has yet been made of the settlement of further details in regard to the line Its general route will presumably be from Astara *via* Teheran to Kerman or Yezd, and thence to either Bunder Abbas, at the entrance of the Persian Gulf, or Chabar, a point on the Mekran Coast, about 100 miles west of Gwadur As to the cost, £18,700,000 was the amount first declared by Russian experts as sufficient to cover the cost of construction and provision of rolling-stock for the 1,400 miles of railway in Persian territory English experts then believed that £15,000,000 would be sufficient Further investigation has led competent experts on the English side to say that the capital involved must eventually total £30,000,000 at least The line presents no great engineering difficulties, but there would be a great variety of gradients throughout its length, the line will rise at several points to some thousands of feet above sea-level, and numerous detours will be necessary both for gradients and to serve local needs.

Central Asian Lines.

There remains the possibility of linking up the Russian and Indian railway systems by way of Afghanistan But many strategical objections have been raised to the trans-Persian railway and these considerations are strengthened tenfold in regard to bringing the Russian Central Asian lines nearer Kabul Russia has in recent years considerably increased her railway facilities in Central Asia The line from Krasnavodsk on the East Caspian shore now extends, *via* Merv and Bokhara and Samarkhand, to Andijan, which is some 350 miles north-west of Kashgar, the important town of Chinese Turkestan The great network of railways in European Russia is also now directly connected by the Orenburg line with Tashkent, and a connecting line links it up with the southern railway just described. From Merv a line runs south to Kushk, on the Afghan border, within a few miles of Herat. It is reported that Russia intends building another line extending the Orenburg-Tashkent connection to Termes, a point on the Oxus 50 miles or less from Balkh, which, again, is close to the important strategical point, Mazar-

i-Sharif It is doubtful whether in a race, Russia, starting from Termes, or Britain, starting from the Khyber, could reach Kabul first Termes, where, it is stated, Russia proposes to throw a bridge across the Oxus, is the highest point at which that river is navigable from the Aral Sea The suggestion has often seriously been made in recent years that the Russian line from Merv to Herat should be linked to the Indian line which from Quetta proceeds to the Afghan border at Chaman The distance between the two railheads is about 520 miles.

Persian Gulf Lines.

Britain's special interests in regard to Persian railways are primarily associated with lines running inland from the Persian Gulf, to supersede the old camel routes Special importance has for many years been attached to schemes for a railway from Mohammerah (at the opening of the Karun Valley, where the Karun River runs into the Shat-el-Arab, just above Basra, near the Turkish border,) northwards into the rich highland country of Western Persia Britain has long established special relations with the Karun Valley and has a large trade there An agreement was reached between the Persian Government and the representative of a British Syndicate in February, 1913, for the construction of a railway from Mohammerah to Khoramabad, in the interior Persia offered the syndicate a two years' option, during which period the route of the line was to be surveyed The Persian Government undertook to decide, on the completion of the survey, whether it would build the railway as a State line under contract with the Syndicate, or whether it would grant the Syndicate a concession for the construction of the line The Syndicate immediately began preliminary operations Four English engineers were sent out, and exactly two months after the agreement was announced they proceeded to Dizful, on the route of the line, for the purpose of making preliminary surveys The Syndicate is composed of six groups, of which four are already connected with Persian commerce, viz, the Anglo-Persian Oil Company, the Imperial Bank, the Euphrates and Tigris Steam Navigation Company (Messrs Lynch), and the British India Steam Navigation Company The Syndicate is prepared to undertake much more extensive railway construction in Southern Persia As Russia will eventually build a line from Teheran to Khanikin, the Khoramabad line will probably be linked with this line, at Hamadan or elsewhere, and Persia will thus have two routes from the Gulf to the north The latest reports state that the survey work on the Mohammerah-Khoramabad line is "hung up" owing to the disturbed state of the Luristan tribes around Dizful The Persian Government agreed to a slight modification of the terms of the concession to meet the situation thus created and Sir E Grey has stated in the House of Commons that "every effort will be made to proceed with survey as soon as the situation in Luristan appears to the responsible authorities to justify such a step It is contemplated that the Swedish gendarmerie which has done very good work recently in other parts will devote their attention to Luristan with the object of pacifying that part of the country as they have done in some other parts" This statement was made some months ago As a result of repeated Anglo-Russian applications the Swedish Government permitted General Hjalmarsson, the head of the Persian gendarmery, to return to Persia last November

Period of Transit.

It is commonly said that the Trans-Persian railway would bring India within eight days of London The possibility was demonstrated by the performance of a party who travelled from London to Persia a year ago and sent the following details of their journey to the *Times* The party left London by the 8-35 p m train on a Saturday and arrived at Baku at 10-20 p m (London time, say, 7-30 p m) on the following Thursday, and at Enzeh, on the south-west shore of the Caspian, (reached by steamer from Baku), at 6 a m on the following Saturday,—that is, within six and a half days from London They travelled *via* Folkestone, Flushing, Berlin, Warsaw, Snamenka, Rostoff and Beslan, and were detained at Warsaw some ten hours and at other points a full 12 hours more, thus reducing the actual travelling to 5½ days, which was a "record" There remained, at the end of their journey, only the trans-Persian stage, which it is hoped to cover by the new line, so that an express service from London to Delhi ought to be easily possible within the eight days

Foreign Consular Officers in India.

Name.	Appointment	Port
Argentine Republic.		
Senor Don E Colombies	Consul-General	Calcutta.
Mr F C Danger	Do	Do
Mr C W Rhodes	Vice-Consul	Do
Austria-Hungary.		
The American Consul is in charge of Austro-Hungarian interests during the War		
Dr F Freyesleben	Consul-General	Calcutta
Mr W R Czerwenka	Do	Do
Count Egon von Thurn and Valsassina	Consul	Bombay.
Mr A Platt	Do	Do
Vacant	Do	Aden
Mr E Stemer	Do	Madras
Herr H Schrader	Do	Rangoon.
Mr W U Nicholas	Do	Karachi
Mr C S Anderson	Vice-Consul	Do
Herr E Vogelsang	Do ..	Aden
Belgium		
M Robert Chadron	Consul	Bombay
Mr G Stadler	Do	Calcutta
Mr J H Fyfe	Do	Karachi
Mr E S Murray	Do	Aden
Mr A H Deane	Do	Madras
Mr W Macdonald	Do	Rangoon
Mr R A Scott	Do	Akyab
Mr J Lince	Vice-Consul	Calcutta
M Leegen Combe (on leave)	Do	Bombay
Mr R W Watson (In charge)	Do	Do
Bolivia		
Kumar Shyama Kumar Tagore	Consul-General	Calcutta
Brazil		
Mr Joakim D S Nahapiet	Consul	Calcutta
Mr T A DeSouza	Do	Do
Dr Edward F Underwood, M A, M D, Ph D, J P	Vice-Consul ..	Bombay.
Mr Martin Cohen	Commercial Agent	Do
Mr J B Halliday	Vice-Consul	Rangoon.
Mr J F Brown	Commercial Agent .	Do
Chile.		
Senor Don A D Garces	Consul-General	Calcutta
J G Bendien (Acting)	Vice-Consul .	Bombay
Mr R Menzies	Do	Madras
Senhor L Grommers .	Do .	Calcutta
Mr A R Leishman	Do	Chittagong
Mr C Kauffeld	Do	Rangoon.
China.		
Mr. Hsiao Yung Hsi .	Consul . .	Rangoon.
Costa Rica.		
Kumar Shyama Kumar Tagore ..	Consul	Calcutta

Name.	Appointment	Port.
Cuba.		
Senhor Alfredo Casanovas (in charge)	Honorary Consul . .	Bombay
Vacant	Do	Calcutta.
Mr C J Elton	Consul-General	Calcutta.
Mr A F Sells	Consul	Bomb y.
Mr E S Murray	Do	Aden
Mr R T Menzies	Do	Madras
Mr I F Jensen	Do	Rangoon.
Mr L B Stevens	Vice-Consul	Karachi
Mr S G L Eustace	Do	Calcutta
Mr P T Christensen	Do	Moulmein.
Ecuador		
Kumar Shyama Kumar Tagore	Consul	Calcutta
France		
M Dejean de la Batie	Consul-General	Calcutta
Mr R T Gueritte	Vice-Consul ..	Do
M C Barret	Consul	Bombay.
M H Martin	Vice-Consul Chancelier	Do
M M Ries	Consular Agent	Aden
Mr. T L F Beaumont	Do	Karachi
Mr F E L Worke	Do	Madras
Vacant	Do	Chittagong
Vacant	Do	Rangoon.
Revd P J Kieffer	Do	Akyab
Mr J LeFaucheur	Do	Coconada
Mr J Fernel	Do	Tellicherry.
Mr. F Bordes	Do	Do
Germany.		
The American Consul is in charge of German interests during the War		
Count Karl Von Luxburg	Consul-General	Calcutta
Baron E. von Rosen	Attached to the Consulate-General	Do
Mr H R Schuler	Consul	Do
Herr F Heyer .	Do	Bombay
Herr E Neuenhofer	Do	Karachi
Herr E Vogelsang	Do	Aden
Mr. Max Miersch	Do	Madras
Mr Fritz Gosling	Commercial Agent	Calcutta
Mr. E J. Foucar .	Consul	Moulmein.
Herr Leo Ulrich	Do	Akyab
Mr Carl Kauffeld	Do	Rangoon.
Herr Fritz Fecz	Do	Bassein
Mr Adolf Bueler	Do	Cochin
Herr H Bacchtold	Do	Do
Greece		
Mr E Apostolides . .	Consul .	Calcutta.
Gautemala		
Mr. H. J Sanders . .	Consul . ..	Calcutta.
Italy.		
Cavaliere Giuseppe Saint Martin	Consul-General ..	Calcutta.
Cav. L Zummi	Do. .	Aden
Cav Dr G Gorio (on leave)	Consul .	Bombay.
Signor Alfredo Manzato (Acting)	Do.	Do.
Mr. J Meikle	Do ..	Rangoon.
Vacant .	Honorary Vice-Consul	Calcutta.
Signor Alfredo Manzato	Vice-Consul . .	Bombay.
Mr. Gordon Fraser	Consular Agent .	Madras
Vacant .	Do ..	Moulmein.
Vacant . .	Do . ..	Akyab.
Mr. H J Guy, R N R . .	Do .	Bassein.

Name	Appointment	Port
Japan.		
Mr Kametaro Tijima Shorokui	Consul-General	Calcutta.
Mr Y Shibata	Do	Do
Mr Yasukichi Yatabe	Consul	Bombay.
Liberia		
Dr. Benode Behari Banerjee	Consul	Calcutta.
Mexico.		
Mr R L B Gall	Consul	Calcutta
Netherlands		
Mons J Barendrecht	Consul-General	Calcutta
Mons L Grommers	Consul	Do
Mons J G Bendien	Do	Bombay
Mr W Grimm	Do	Do
Mr T L F Beaumont	Do	Karachi.
Mr C E L Kappelhoff, Jr	Do	Aden
Mr R A Scott	Do	Akyab
Mr W Massink	Do	Rangoon
Mr J V Crusha	Do	Madras
Mons L Grommers	Vice-Consul	Calcutta
Norway		
Mr H J Sanders	Consul-General	Calcutta
Mr F E Hardcastle (on leave)	Consul	Bombay
Mr John Wallace (Acting)		
Mr W Meek	Do.	Aden
Sir H. S Fraser, Kt	Do	Madras
Mr. J F Simpson	Do	Do
Mr H A Rees	Do	Rangoon
Mr G J Smidt	Vice-Consul	Calcutta
Mr S G Ritherdon	Do	Chittagong
Mr S Lucas	Do	Do
Mr A Gardner	Do	Coconada
Mr D Miller	Do	Tuticorin.
Mr E G Moylan	Do	Akyab
Mr J Anderson	Do	Bassein
Mr J McCracken	Do	Do
Mr. J J Shaw	Do	Moulmein.
Mr. E F. B Wyatt	Do	Karachi
Persia.		
Mirza Sir Davood Khan Meftahos-Saltaneh, K C M G	Consul-General	Calcutta
Mirza Ali Akbar Khan, B A., Barrister-at-Law	Consul	Bombay
Khan Bahadur Haji Mirza Shujaut Ali Beg	Do	Calcutta
Hadji Mirza Mehdi	Do	Madras
Kumar Shyama Kumar Tagore	Vice-Consul-General	Calcutta.
Vacant	Vice-Consul	Karachi
Aga Mahmood	Do	Rangoon
Vacant	Do	Moulmein
Peru		
Mr W Smidt	Consul	Rangoon
Mr J B. Strain	Do	Calcutta
Portugal		
Senhor A. Cassanova	Consul-General	Bombay.
Vacant	Consul	Do
Mr Hormusji Cowasji Dinshaw	Do	Aden
Mr R D Dinshaw	Do	Do
Dr E M deSouza	Do.	Rangoon.
Senhor F. daCunha Pinto	Vice-Consul	Bombay.
Mr W D Young	Do	Karachi.
Mr J Short	Do	Madras
Mons C Jambon	Do	Calcutta.
Mons. A Goguet Chapuis	Do	Do

Name	Appointment.	Port
Russia.		
Mons C Nabokoff	Consul-General	Calcutta
Mons M Ries	Vice-Consul	Aden
Mons Vsevolod Ampenow	Do	Calcutta
Mr S J Bodaline	Do	Do
Siam.		
Vacant	Consul	Calcutta
Mr B J B Stephens	Do	Rangoon
Mr A H. Russell	Do	Moulmein.
Mr C Van-der-Gucht	Do	Do
Spain		
Manuel de Caabeyro	Consul	Bombay
Vacant	Do	Calcutta
Mons L Grezoux	Vice-Consul	Do
Mr L Lesdos	Do	Do
Mons M Ries	Do	Aden
Mr G D Coleman	Do	Madras
Mr W Archbald	Do	Rangoon
Sweden.		
Mr W L Wanklyn	Consul-General	Calcutta
Mr Andrew Yule	Do	Do
Mr E R Logan	Consul	Madras
Mr L. Volkart	Do	Bombay
Mr J Muller	Do	Do
Mr A E Adams	Do	Aden
Mr E T Hicks	Do	Rangoon
Mr T H Wheeler	Vice-Consul	Calcutta
Vacant	Do	Moulmein.
Turkey.		
The American Consul is in charge of Turkish interests during the war		
H Basri Bey (Acting)	Consul-General	Bombay
Haji Muhammad Abdul Aziz Badshah Sahib	Consul	Madras
Haji Muhammad Youssouf Ismail Sahib Effendi	Do.	Rangoon
United States of America.		
Mr James A Smith	Consul-General	Calcutta.
Mr. John S. Hunt	Vice and Deputy Consul-General	Do
Mr H D Baker	Consul	Bombay.
Mr. William J Grace	Do	Aden
Mr James O Laing	Do	Karachi.
Mr Jose de Olivares	Do	Madras
Mr Maxwell K Moorhead	Do	Rangoon.
Mr Selby S Coleman	Vice and Deputy Consul	Bombay.
Mr E L Rogers	Do	Karachi.
Mr. H B Osborn	Do	Rangoon
Mr P Nalin	Do	Aden
Mr A J Graven	Consular Agent	Chittagong
Uruguay.		
Mons. C Jambon	Consul	Calcutta.

The Army in India.

The great sepoy army of India originated in the small establishments of guards, known as peons, enrolled for the protection of the factories of the East India Company, but sepoys were first enlisted and disciplined by the French, who appeared in India in 1665. Before this, detachments of soldiers were sent from England to Bombay, and as early as 1625 the first fortified position was occupied by the East India Company at Armagon, near Masulipatam. Madras was acquired in 1640, but in 1654 the garrison of Fort St. George consisted of only ten men. In 1661 Bombay was occupied by 400 soldiers, four years before the French appeared in India. In 1668 the garrison of Bombay consisted of 285 men, of whom only 93 were English, the remainder being French, Portuguese and natives.

While the origin of the regular sepoy army is usually dated from 1748, when Stringer Lawrence, "the father of the Indian Army," enrolled an Indian force in Madras, it is interesting to note that there was a considerable military establishment in Bombay prior to that date. In 1741 this establishment, which was considered as one regiment, consisted of a captain, nine lieutenants, fifteen ensigns, a surgeon, two sergeant-majors, 82 sergeants, 82 corporals, 26 drummers, and 319 European privates, together with 31 "masters" (probably Eurasians) and 900 topasses—presumably Goanese. These were distributed in seven companies, their total monthly pay being 10,314 rupees. There was in addition a kind of native militia, composed of 700 sepoys including native officers. These were maintained at a monthly cost of 312 rupees. They were not equipped or dressed in a uniform manner, but supplied their own weapons—swords and shields, bows and arrows, pikes, lances or matchlocks. After the declaration of war with France in 1744, the forces at Bombay were considerably increased, and an artillery company was raised. Already in 1740 the French at Pondicherry had raised a large force of Musalman soldiers, armed and equipped in the European fashion, and the fall of Madras, which the French captured in 1746, induced the English East India Company to begin the formation of a military establishment of like nature. In January 1748 Major Stringer Lawrence landed at Fort St. David to command the forces of the Company. The English foothold in India was then precarious. The French under Dupleix were contemplating further attacks, and it became necessary for the English Company to form a larger military establishment. The new commandant at once set about the organisation and discipline of his small force. The garrison was organised in seven companies, and the peons, or factory guards, were also formed into companies. This was the beginning of the regular Indian Army, of which Lawrence eventually became Commander-in-Chief. In Madras the European companies developed into the 1st Madras Fusiliers, similar companies in Bombay and Bengal became the 1st Bombay and 1st Bengal Fusiliers. The native infantry was similarly developed and organised by Lawrence and Clive, who was his contemporary, and military adventurers—both Musalman and Hindu—readily took service under the East India Company. By degrees Royal Regiments were sent to India, the first being the 39th Foot, which arrived in 1754.

Struggle with the French.

From this time for a century or more the Army of India was engaged in constant war. After a prolonged struggle with the French, whom Dupleix had by 1750 raised to the position of the leading power in India, the efforts of Stringer Lawrence, Clive and Eyre Coote completed the downfall of their rivals, and the power of England was established by the battle of Plassey in Bengal and on the field of Wandewash in Southern India. In 1761 the final overthrow of the French was completed, and the territories of that enterprising people were reduced to a few settlements on the coast, the principal of which, Pondicherry, was captured in 1793. But while the Army of India had accomplished this much, they had now to contend with the great native powers, both Hindu and Mahomedan. A number of independent states had arisen on the decline of the Mughal Empire, some ruled by the satraps of the Emperor of Delhi and others by the Mahratta princes who had succeeded to and extended the conquests of Sivaji, while in Mysore Hyder Ali, a Mussalman adventurer, had established himself in the place of the Hindu Raja. A great and prolonged struggle took place with the ruler of Mysore, in which the forces of the Crown and the Company's Army bore a distinguished part. This struggle extended over nearly twenty years, and terminated only with the death of Hyder's son and successor Tipu when his capital of Seringapatam was taken by assault in 1799.

Presidency Armies.

The extension of British territory had necessitated a corresponding augmentation in the strength of the armies of Bengal, Madras and Bombay, which were entirely separate organisations, as rendered requisite by the great distances and independent territories by which they were separated. But Bengal and Bombay troops had taken part in the wars in Southern India, although the brunt of the fighting had fallen on the Madras Army. These armies had grown both in strength and efficiency. In 1787 the Governor-General, Lord Cornwallis, wrote to the Duke of York—"A brigade of our sepoys would make anybody emperor of Hindustan. The appearance of the native troops gave me the greatest satisfaction, some of the battalions were perfectly well-trained, and there was a spirit of emulation among the officers, and an attention in the men, which leaves me but little room to doubt that they will soon be brought to a great pitch of discipline."

Reorganisation of 1796.

In 1796, when the native armies were reorganised, the European troops were about 13,000 strong, the native troops numbered some 57,000, the infantry being generally formed into regiments of two battalions each. In Bengal native infantry regiments were formed by linking existing battalions. The establishment of each two-battalion regiment was 1 colonel commandant, 2 lieutenant-colonels, 2 majors, 8 captains,

22 lieutenants, 10 ensigns, 2 European non-commissioned officers, 40 native officers, 200 native non-commissioned officers, 40 drummers and fifers, 1,600 sepoys Each battalion had two grenadier and eight battalion companies Promotion and furlough rules for the officers were promulgated and interior economy was improved At the same time the Madras and Bombay armies were reorganised The Madras cavalry was formed into four regiments, having twelve British officers each, the artillery into two battalions of five companies each and fifteen companies of lascars The native infantry was organised in eleven two-battalion regiments, rather stronger than those of the Bengal establishment There were also two battalions of European infantry The Bombay Army was organised on similar lines, with an establishment of six two-battalion regiments and a Marine Battalion, six companies of European artillery were formed in 1798

Policy of Wellesley.

Besides the wars that have been referred to, the East India Company had been engaged in minor operations, particularly against the growing power of the Mahrattas, which menaced the stability of the British in India In 1798 the Marquis Wellesley arrived as Governor-General firmly imbued with the necessity of reducing the power and influence of the French, which had again arisen through the military adventurers who had established themselves in the service of various native powers There was a French party at Seringapatam, and the ruler of Mysore was in correspondence with Napoleon Bonaparte in Egypt At Hyderabad the French adventurer Raymond dominated the State army, having under his command a disciplined force of 14,000 men who carried the colours of the French Republic and wore the Cap of Liberty engraved upon their buttons In the Mahratta States, and especially in Sindia's service, adventurers of the same enterprising nation had disciplined large forces of infantry and artillery, and the blind Mughal Emperor at Delhi was held in the power of Perron, Sindia's French General One of the first acts of the new Governor-General was to disarm the French party at Hyderabad, a measure carried out by Captain (afterwards Sir John) Malcolm. The French officers in the Nizam's service were deported to their own country, and a treaty of alliance was concluded under the terms of which a Contingent of Hyderabad Troops was supplied for service in the campaign of Seringapatam Troops of all three presidencies took part in the campaign which terminated with the capture of Seringapatam and the death of Tipu on the 4th May 1799 It was in this campaign that Colonel Arthur Wellesley, afterwards Duke of Wellington, came into prominent notice It was now necessary to direct attention to affairs in the Mahratta States, which were encroaching on the territories of our ally the Nizam, and had a dangerous ascendancy throughout India An opportunity occurred in supporting the Peshwa, who had been expelled from Poona by Holkar.

The Mahrattas.

The Mahrattas, originally mere predatory hordes, had become an organised nation under the rule of Sivaji. After his death the Government which he had inaugurated passed from the feeble hands of his successors, the Rajas of Satara, into those of the astute Brahmin Ministers, the Peshwas, who had their seat at Poona Other Mahratta princes, descended from officers of State—Sindia, Holkar, the Gaikwar and the Raja of Berar—held sway over a great part of India, and were attempting to extend their dominions and consolidate their influence from the Ganges to the Godavery The Mahrattas, famous as irregular predatory hordes in times gone by, had never been remarkable for courage, the place of which was supplied by their natural astuteness and capacity for organisation The genius of the nation lay more in the direction of diplomacy and intrigue, and a false glamour appears to surround their name as warriors, to which history has lent an undeserved prestige Their success must in part be prescribed to their intellectual acumen and subtlety, and in part to the effete condition of those with whom they had to contend The edifice of their nationality was built on the ashes of the declining Mughal Empire But even since the days when their military renown had rested on some solid foundation they had rapidly declined, and the phantom of their fame was dissipated the moment they came into collision with European armies Their artillery and infantry, composed of Jats, Rajputs, Arabs and other mercenaries, fought with desperate valour, but the far-famed Mahratta horse disappeared from the field at the beginning of every action General Lake in the north of India defeated the forces of Sindia in a succession of battles at Aligarh, at Agra, at Delhi and Laswari, while in the south General Arthur Wellesley captured Ahmednagar and Gawilgarh, and gained complete victories over the combined forces of Sindia and the Raja of Berar at Assaye and Argaum In these campaigns a considerable British force and a large portion of the Bengal and Madras armies were employed, they acquitted themselves with their customary valour, and gained some of the most notable victories recorded in English history During the progress of these wars the Army of India was considerably augmented, and we find that on reduction to peace establishment in 1805 there were some 25,000 British and 130,000 native troops in India.

Mutiny at Vellore.

The Indian Army has been from time to time subject to incidents of mutiny which were precursors of the great cataclysm of 1857 In the fort of Vellore in 1806 were confined the sons of Tipu Sultan, these descendants of the most fanatical enemy of the English in India being permitted to maintain a large body of adherents and an almost regal state. Naturally they intrigued The native soldiers of the Company had grievances The military authorities had issued a new pattern of turban, which owing to its resemblance to the head-dress worn by half-caste drummers, gave rise to a rumour that their conversion to Christianity was intended. Other inconsiderate orders, prejudicial to the religion and sentiments of both Hindus and Mahomedans, caused the smouldering discontent already existing to break out into open

mutiny. There were many signs and portents typical also of the greater rebellion. The officers had become estranged from their men and lived too much apart from them. The native troops suddenly broke out and killed the majority of the European officers and soldiers, their wives and children, quartered in the fort, while the striped flag of the Sultan of Mysore was raised on the ramparts But if the parallel so far is close, the method of dealing with the outbreak of 1806 differed widely from the weakness displayed at Meerut in 1857 There was happily at the neighbouring station of Arcot a soldier of energy, decision, and courage both moral and physical Colonel Gillespie with the 19th Light Dragoons and galloper guns came down upon the mutineers like a hurricane, blew in the gates of the fort, destroyed most of the sepoys, and in the course of a few hours suppressed the rebellion This retribution struck terror into the hearts of other would-be mutineers and disaffection, which was rife throughout the Madras Army, did not elsewhere find active expression

Overseas Expedition

Almost as dangerous was the mutinous discontent excited among the British officers by the ill-advised measures of Sir George Barlow, unfortunately acting temporarily as Governor-General in 1809, which was with difficulty quelled by the tact of wiser and more considerate men It was not only within the confines of India that the Army distinguished itself during the period under review Expeditions were made beyond seas Bourbon was taken from the French, Ceylon, Malacca, and the Spice Islands were wrested from the Dutch, and Java was conquered in 1811 by a force largely composed of Bengal troops which had volunteered for this service In 1814 took place the Nepal War, in which the brave Gillespie who had so distinguished himself at Vellore and in Java, was killed when leading the assault on a fort near Dehra Dun This war is chiefly of interest from its having introduced us to the Gurkhas, inhabitants of Nepal, who form so large and efficient a portion of our Indian Army

Second Mahratta War.

In 1817 hostilities again broke out with the Mahrattas The primary cause of the war were the Pindaris, a military system of bandits of all native races and creeds who, formed mostly from the military adventurers who had been employed by native potentates, had established themselves in strongholds on the banks of the Narbada river, from whence they issued to plunder the country from the end to end These people had become so formidable that a large army had to be assembled for their destruction, for they viewed with dismay and opposed with force the establishment of effective power in the land where they had so long carried on with impunity their lawless modes of life To cope with this growing evil, armies were to close in from every direction on the fastnesses of the Pindaris. At the same time a watch had to be kept on the Mahratta States, whose rulers, encouraged by the feeble policy that had followed when the strong hand of the Marquis Wellesley was removed, were prepared to take up arms once more. Practically the whole of the Army took the field, and all India was turned into a vast camp. The experiences of 1817 differed in no wise from those of 1803, except that resistance was less stubborn as the brigades of the European military adventurers no longer existed in the Mahratta armies The Chiefs of Poona, Nagpore, Indore and Gwalior rose in succession At the battle of Kirkee, where the tramp of the myriad Mahratta horse shook the very earth, they were beaten off by one-tenth of their numbers after a feeble attempt to charge a native regiment At Koregaum where the detachment under Captain Staunton offered so gallant a resistance to the attacks of a vastly superior force, the Arabs alone fought on the side of the Mahrattas, 20,000 of whom stood idle on the plain At Sitabaldi a few regiments of Madras native infantry beat off the attacks of the army of the Raja of Nagpore, and victory was assured by the charge of a troop of Bengal cavalry At the battle of Mahidpur the hosts of Holkar melted like snow from the face of the desert before the determined onslaught of a small army of British and native troops This was the last war in Southern India The tide of war rolled to the north, never to return In the Punjab, to the borders of which our frontier was now extended, the Army was to meet in the great military community of the Sikhs, a braver and more virile foe.

Reorganisation in 1824

In 1824 there was another outbreak of mutiny, this time at Barrackpore in a regiment that was unwisely dealt with when about to proceed to the Burmese War In that year the armies were reorganised, the double-battalion regiments being separated, and the battalions numbered according to the dates when they were raised The Bengal Army was organised in three brigades of horse artillery, five battalions of foot artillery, two regiments of European and 68 of native infantry, 5 regiments of irregular and 8 of regular cavalry The Madras and Bombay armies were constituted on similar lines, though of lesser strength There were also various local forces, such as the Hyderabad Contingent, paid for by the Nizam, consisting of horse, foot and artillery The irregular cavalry were all silladars, that is the troopers furnished their own horse and equipment, as do the greater part of the native cavalry of to-day. The irregular and local corps had each only two or three European Officers

First Afghan War.

In 1839 the occupation of Afghanistan was undertaken, Kabul was occupied, and a large Army stationed in this country beyond the Indus. There followed the disasters of Kabul, the murder of British envoys, and the retreat in which a whole army perished This disaster was in some measure retrieved by subsequent operations, but it had far-reaching effects on the *morale* of the Army and on British prestige

The Sikhs.

The people of the Punjab had witnessed from afar the disaster of the retreat from Kabul. It is true that they had seen also the advance of the victorious army, and the triumph of its return which was celebrated

with barbaric pageantry at Peshawar, but the British army had lost the prestige of invincibility which it had gained during a hundred years of victory throughout peninsular India. It is convenient here to give some account of the Sikhs in whom our army met a more formidable enemy than they had hitherto encountered, who have since supplied many of the best soldiers in its ranks, and who less than nine years later served with valour and fidelity beneath our colours in the great struggle of the sepoy war. In the early part of the sixteenth century Baba Nanak, a peasant of a village near Lahore, founded the religious sect which was to play such an important part in the history of India. The religion he preached was pure monotheism and in no way militant in its original form. The new faith, founded on the Unity of God and the religious equality of man, gradually made great headway, the philanthropy and tolerance of its tenets appealing to the hearts of men. The Gurus who succeeded Nanak were active in their teaching, they founded and built the Golden Temple at Amritsar, and the sect began to assume a political significance. This brought them into conflict with the Mughal Government, and Sikhism was subjected to that persecution which was alone necessary to transform it into a militant political force. Har Govind, the Sixth Guru, became a military as well as a spiritual leader, and on his death in 1645 left the Sikhs a strong and militant power.

After two hundred years the Sikh faith became established as a guiding principle to work its way in the world. Nanak disengaged his little society of worshippers from Hindu idolatory and Mahomedan faith, Amar Das preserved the community from declining into a sect of ascetics, Arjan gave his increasing followers a written rule of conduct and a civil organisation, Har Govind added the use of arms and a military system, Govind Singh bestowed upon them a distinct political existence, and inspired them with the desire of being socially free and naturally independent. Sikhism arose where fallen and corrupt Brahminical doctrines were most strongly acted on by the vital and spreading Mahomedan belief. As in the case of other sects whose vicissitudes are recorded in the history of the world, religious persecution gave to Sikhism that vivifying influence which was the necessary stimulus to permanence and progress. With varying fortunes the power of the Sikhs was consolidated, and by 1785 they were predominant from the frontiers of Oudh to the Indus. Their prestige is illustrated in the story of the traveller Foster, who describes the alarm caused to a petty Chief and his people by the appearance of two Sikh horsemen under the walls of their fort. The great Chief Ranjit Singh, the "lion of the Punjab," established his ascendancy throughout that province, and with the aid of European military adventurers such as Ventura and Allard organised a powerful regular army. Ranjit Singh had the wisdom to keep on friendly terms with the English, but his death was the signal for internal dissensions which in course of time rendered the Army the principal power in the state, and brought them into conflict with their English neighbours.

Sikh Wars

A large portion of the Bengal Army under Sir Hugh Gough took part in the first Sikh War in 1845-6, in the opening battle of which, at Mudki and Ferozeshahr, the native troops did not greatly distinguish themselves, although they retrieved their reputation in subsequent actions when the Sikhs were defeated at Aliwal and Sobraon. But the Bengal Army had for some time been undergoing that deterioration of discipline which culminated a dozen years later in the mutiny. They were no longer the soldiers of Lake and Hastings, the heroes of Laswari, of Seringapatam, and of expeditions overseas. In the snows and deserts of Afghanistan and amid the bloody scenes of the Khurd Kabul Pass and Jagdalak they had lost much of their ardour and prestige, while they had witnessed the defeat and slaughter of their hitherto invincible English comrades. They fought well on occasion, stimulated by the presence and example of English regiments, but their training and discipline left much to be desired. The second Sikh War followed a few years later, when, after the indecisive battle of Chillianwala, the Sikhs were finally vanquished at Gujarat. The other campaigns belonging to this period were the conquest of Sind by Sir Charles Napier and the Second Burmese War. On the eve of the Mutiny there were in the Bengal Army 21,000 British and 137,000 native troops, in the Madras Army 8,000 British and 49,000 native troops, and in Bombay 9,000 British and 45,000 native troops. The conquest of the Punjab extended our frontier to the country inhabited by those turbulent tribes which have given so much trouble by their raids and forays, while they have supplied many soldiers to our army. To keep order on this north-western limit of the Empire the Punjab Frontier Force was established, and was constantly engaged in small expeditions which, while they generally involved but little bloodshed, kept the Force fully employed for many years and involved much arduous work in the pursuit of an elusive enemy.

The Indian Mutiny.

The history of the Indian Army in general and of the Bengal Army in particular is so closely bound up with the great Mutiny of 1857 that it is necessary to enter into some account of the causes which brought about that catastrophe, and to sketch in outline its chief events. In 1856 Lord Dalhousie resigned the Viceroyalty of India after a term of office marked by strenuous activity and by an extensive policy of annexation. From Oudh a dissolute and incompetent king was removed and his territories were annexed to the British dominions, an act which could not but have a disturbing effect in a country where the natural and hereditary rulers of the people were regarded with the greatest veneration. The territory of Jhansi was also annexed, the Government refusing to allow the Rani to adopt an heir to succeed her deceased husband; and the Nana of Bithur, adopted son of the last Peshwa Baji Rao, was refused a continuance of his adoptive father's pension. These two latter, the Rani of Jhansi and Nana Sahib, became the bitterest and most cruel of our enemies. The

annexation of Oudh was a severe shock to the susceptibilities of the feudal nobles of that province, from which, it must be remembered a large portion of the Bengal Army was recruited There were thus political causes of disaffection in India apart from the constant presence of racial difference, fostered by political agitators and a seditious press There were Princes and States ripe for rebellion; while on the throne of the Mughals at Delhi there sat the shadow of a monarch whom tradition and the greatness of a name caused to be venerated by Mussalmans throughout India And in the Bengal Army political agitators found a fertile soil for planting the seed of corruption

The infantry of that army had in its ranks a great majority of Oudh sepoys, while men of the same race formed the bulk of forces such as the Gwalior Contingent, maintained by Native States under the terms of treaties with the British Government A small percentage of Mahomedans of Hindustan was also to be found in the Bengal Native Infantry, while they supplied the greater part of the Cavalry of that Presidency It will thus be understood that in both armies there was a dangerous preponderance of one class, facilitating and extending combination on the part of the disaffected It was different with the armies of the other Presidencies, which were entirely separate from the Bengal Army, and under their own Commanders-in-Chief, and where men of every caste and creed were mingled in the ranks, a system which obviated the likelihood of combination among men ever prone to be suspicious of one another There were in the Madras Army family ties to keep the men true to their salt In that Presidency the sepoy had in almost every instance a large number of relatives living with him He was not likely to abandon these relations to their fate, and mutiny against the Government he served The Presidential system, in fact, offered an effective safe-guard in the "watertight compartments" that prevented those armies from intermingling There was not only no sympathy but some antagonism between the different armies, and on one occasion when regiments of the northern and southern Presidencies were serving together, an order had to be issued that the Madras sepoys were not to irritate their brethren by calling them "Bengalis" which was regarded as an opprobrious term, applicable properly to a despised and unwarlike race which has never furnished any soldiers While the susceptibilities of the Oudh sepoy had been hurt by the annexation of his country, the Muhammadans still held in veneration the puppet who occupied the throne of the great Mughals and cherished the recollection of former glory and power They had in addition the influence of a fanatical religion to incite them to a holy war against the Christians Their combination with the Hindus is, however, somewhat remarkable, and the causes which brought these antagonistic peoples into alliance must be sought for elsewhere than in political influences That there were leaders such as the Nana, the Rani of Jhansi and the Maulvi of Fyzabad who made use of the native army for purposes of rebellion has already been indicated But the army would not mutiny merely at the instigation of a few political intriguers and agitators The seeds of disaffection had long been growing in the Bengal Army The disasters of the Afghan War had taught the sepoy that his European comrade was not invincible The proportion of Native to British soldiers in India was far too great The Indian Empire in those days rested too largely on mercenary forces There were in the country only some 38,000 British soldiers, while the native troops numbered 200,000 men, exclusive of the numerous levies of independent or semi-independent princes A great establishment of native artillery had grown up While the Bengal sepoy had deteriorated in *morale*, he had cause for discontent He had been alternatively pampered and abused The grant of extra allowances on all occasions for field service had in the first place excited his cupidity, their withdrawal had aroused his discontent He feared that attempts were being made to destroy his caste and subvert his religion, the points on which he was most sensitive There was too much centralisation of power in the hands of the military authorities at Army Headquarters The proselytising spirit was abroad, and some amiable but fanatical officers preached their religion about the country The crucial question of the greased cartridges brought matters to a head With a great deal of reason the sepoys complained of the new cartridge the paper of which was greased with animal fat said to be that of swine and oxen, the former abhorrent to Musalmans, the latter sacrilegious to Hindus The mysterious unleavened cakes were circulated, and while their significance was realised by some, it was ignored by those in authority

Course of the Rising.

The introduction of the new cartridge for the Enfield Rifle in January 1857 caused widespread alarm among the native ranks of the army At Berhampore the 19th Bengal Infantry mutinied, and was marched to Barrackpore, and there disbanded on the 31st March On the 29th March, sepoy Mangal Pande, of the 34th Bengal Infantry at Barrackpore, attacked and wounded the Adjutant and European sergeant-major of his regiment At Meerut on the 24th April eighty-five men of the 3rd Bengal Cavalry refused to take the new cartridge They were tried and sentenced to ten years' imprisonment, their sentence being announced and fetters rivetted on at parade on the 9th May This degrading aggravation of punishment was the spark that fired the mutiny Next evening the troops in Meerut rose, and, aided by the bazaar rabble, killed every European they met, released their comrades from the gaol, and went off to Delhi It is unfortunate that there was at Meerut no senior officer capable of dealing with the crisis There were in garrison two batteries of field artillery, as well as one of the finest cavalry regiments in the British Army, the Carabineers, and a battalion of Rifles But fatal inaction paralysed the Europeans, and the mutinous soldiery marched unmolested to Delhi. Here the troops soon followed suit, murdered some of their officers, while others escaped, and a number of Europeans of all ages and both sexes was massacred in the

place and in the streets An army was at once organised for the recovery of Delhi, while forces were collected in the Punjab, which remained loyal under the strong hand of John Lawrence The British columns having defeated the rebels who opposed them at Badli-ki-Sarai, arrived before Delhi on the 8th June, and began the long seige which terminated with the capture of the city in the middle of September, when the heroic Nicholson fell in the hour of victory Meanwhile the mutiny had spread to other corps of the Bengal Army The native troops at Cawnpore rose on the 4th June, massacred the Europeans of the Garrison who surrendered on the 27th, while the women and children were butchered on the 15th July, the day before Havelock's relieving column defeated the Nana and entered Cawnpore There was mutiny at many other places during this period not only at stations north of the Jumna, but in Central India, and in Rajputana, where the disaffected troops of the Gwalior Contingent were stationed at Gwalior, Neemuch, Nasirabad and other cantonments At Jhansi a general massacre took place, when the Europeans unwisely surrendered to their pitiless foe Throughout Bundelkhand and the Central Provinces the wilder spirits of the country rose and banded with the mutineers With few exceptions the Bombay Army remained loyal, as did the Madras Army and the Hyderabad Contingent, although there were some isolated out-breaks at Hyderabad and at Shorapur But generally speaking the rebellion did not spread south of the Tapti River On the 30th September the troops at Lucknow rose, and there began the long and glorious defence of the Residency by the beleaguered garrison under Sir Henry Lawrence, Lucknow was relieved by Havelock and Outram on the 27th September, but the rebel hold on the defenders was not relinquished until Sir Colin Campbell advanced and drove off the mutineers with terrible slaughter two months later Having relieved Lucknow, Sir Colin Campbell marched to Cawnpore, where General Windham had been driven into the intrenchments, and was with difficulty holding his own against the Gwalior Contingent under Tantia Topi On the 6th December 1857, Cawnpore was relieved, and the rebels retired on Kalpi It was not until 1858 that the small army under Sir Hugh Rose, the most skilful and enterprising leader of those times, marched through Central India, relieving many beleagured places, fighting many pitched battles, and avenging the massacre of Jhansi in the storm and capture of that place, at the capture of Kalpi, and at Gwalior where the Rani of Jhansi was killed at the head of her troops, and Sindia was restored to the capital from which he had been expelled

Reorganisation after the Mutiny.

When the country had been pacified, the Government of India was assumed by Queen Victoria, and the East India Company ceased to exist The Company's European regiments were transferred to the crown, and a regular system of relief of British regiments employed in India was instituted, the charges being paid out of the Indian revenues. The Bengal Army had almost disappeared; and while a new army was raised in that Presidency, the Madras and Bombay armies were also reorganised Native artillery was abolished, with the exception of some mountain batteries and the field batteries of the Hyderabad Contingent. The officering of the reorganised armies was carried out by the organisation of a Staff Corps for each Presidency, on which the officers were all borne on a general list and supplied to regiments and to the staff On completion of the reorganisation in 1863, the armies had the following strength —

Bengal Army—19 Cavalry and 49 Infantry regiments
Madras Army—4 Cavalry and 40 Infantry regiments
Bombay Army—7 Cavalry and 30 Infantry regiments
Punjab Frontier Force—6 Cavalry and 12 Infantry regiments
Hyderabad Contingent—4 Cavalry and 6 Infantry regiments
Other Local Corps—2 Cavalry and 5 Infantry regiments

The total strength amounted to 140,000 men, and there were in India 65,000 British soldiers The regiments were officered by a reduced cadre eventually fixed at eight British officers to each corps, except that the Hyderabad Contingent and other local corps had an establishment of four only The promotion of officers was made dependent on length of service, 12 years to Captain, eventually reduced to nine years, 20 years to Major, reduced to 18 years, and 26 years to lieutenant-colonel. The Staff Corps system, which still continues in fact though not in name, has the disadvantage that it entails the frequent transfer of officers from one corps to another.

Minor Campaigns.

During the period succeeding the mutiny, until 1879, when the second Afghan War began, there were many minor campaigns, including the Ambeyla expedition, the China War of 1860, and the Abyssinian War, when Napier of Magdala, who had fought in the Sikh Wars and in the Mutiny, commanded the expeditionary army. There followed the Afghan War, in which the leading figure was Lord Roberts There were expeditions to Egypt and China, and various frontier campaigns, the most important of which was that on the North-West Frontier in 1897, since when that turbulent country has been generally quiet There were also the prolonged operations following on the annexation of Burma, several campaigns in East Africa and Somaliland, and the expedition to Lhasa But since the Afghan War the Army of India, except that portion of the British garrison which was sent to South Africa, has had little severe fighting, although engaged in many ardous enterprises

Reforms.

The twenty years which began in 1885 witnessed many reforms and augmentations of the Indian Army, due to preparations to resist the menace of the Russian advance towards India The composition of the Army was improved by the elimination of unwarlike men from the ranks. In pursuance of this reform many Madras regiments were reduced and replaced by corps composed of more virile races. "Class" troops and

companies were formed instead of men of every caste and creed being mingled in the ranks and in some cases class regiments were raised But it is generally held that, it is better to form regiments of class companies and troops, although the class regiment has its advocates among those who hold that such an organisation facilitates segregation in case of trouble In 1887 we find the British Army in India numbering about 74,000 and the Indian Army 153,000 men In 1888 Indian battalions were grouped in threes, each with a regimental centre, and reserves for the native army were instituted, these have been gradually augmented until the establishment numbers 25,000 In the following year Imperial Service troops, to be placed at the disposal of the British Government in case of emergency, were raised in Native States These number 21,000 men officered by Indians and having Inspecting Officers furnished by British Officers of the Indian Army In 1891 the Staff Corps of the three Presidencies were amalgamated, the first step in the abolition of the Presidency distinctions, furthered two years later by the abolition of the appointments of Commander-in-Chief of the Madras and Bombay Armies While the fighting strength of the Army had been augmented and improved during all these years, the administrative services had not been neglected The Supply and Transport services were improved and the Ordnance and Military Works were reorganised, and measures were taken for the improvement of defences, mobilisation and equipment Changes were made in regimental organisation, and the pay and allowances of the troops were raised from time to time

The number of British officers has been augmented at intervals The establishment in the native infantry formerly consisted of a Commandant, two Wing Commanders, and five Wing Officers In 1900 the Double Company system was instituted, each pair of companies being placed under a Double Company Commander, the Wing Commanders being abolished The establishment of regiments now includes 13 or 14 British officers, squadrons and companies being commanded by native officers, of whom there are 16 in a regiment, Risaldars and Subadars commanding troops and companies, while Jemadars are their subalterns

Lord Kitchener's Work.

The most momentous changes that have taken place in the Indian Army since the post-mutiny reorganisation were carried out under the regime of Lord Kitchener, who assumed the office of Commander-in-Chief at the end of 1902 When Lord Kitchener arrived in India, the Commander-in-Chief had only executive command of the Army, with an Adjutant-General and a Quartermaster-General as his Chief Staff Officers There was no General Staff, the Staff of the Army in India being divided between the departments of the Adjutant-General and Quartermaster-General The administrative departments of the Army were under the Military Member of the Governor-General's Council, of which the Commander-in-Chief was an extraordinary member. The condition of affairs was not satisfactory The proposals of the Commander-in-Chief regarding measures involving expenditure had to be submitted to the Financial Department through the Military Department, which had entire control also of the Supply and Transport, Ordnance, Military Accounts, Remount and Military Works Departments The consequence was frequent differences of opinion between the Military Department and Army Headquarters

Lord Kitchener organised a General Staff, and established a Staff College at Quetta for the training of officers in the requisite duties, a Chief of the Staff was appointed, and the proper division of the work of Staff Officers was made, those of the General Staff being made responsible for the branch dealing with the Art of War, including the training of troops, while routine and administrative duties were undertaken by officers of the Adjutant-General's and Quartermaster-General's Departments

On arrival in India Lord Kitchener found that the military system, originally constituted on sound lines, had gradually departed from the intention of its founders, and much of the power properly belonging to the Commander-in-Chief had been usurped by the Military Department, while a succession of economical Finance Ministers had so cut down the military estimates and held the purse-strings so tightly that it was impossible to force through any costly measure for the defence of the country The military chaos which was the slow growth of a hundred and fifty years of constantly changing conditions required remoulding into an orderly cosmos. The army was in many respects, with its want of proper organisation for external war, its ponderous and antiquated administrative system, its faulty distribution in units scattered on no known strategical plan, more suited to the circumstances of a bygone age, when the country had only recently been conquered and troops had to be retained at remote and isolated stations to overawe the inhabitants. While the Commander-in-Chief was a strong and determined man with a genius for organisation, the Viceroy was also a great personality, holding strong convictions, and naturally a champion of the civil power Lord Kitchener wished to remove the obstruction of the Military Department Lord Curzon could brook no weakening of the power of the Civil Government The question was not merely one of the abolition of a Department which had grown obsolete in its methods It was a question of the status of the Chief Military Authority in the country.

Military Department abolished.

On the recommendation of a Committee composed of Lord Roberts, Sir George White and Sir Edward Law, the Military Department was abolished, and the Military Supply Department established in its place in 1905. Lords Curzon and Kitchener again came into conflict regarding the personnel of the new Department, and the former resigned. The Commander-in-Chief now set about the task of reform He had since his arrival in India been studying the situation, reviewing the state of our military organisation, grasping its defects and contemplating its needs The advance of Russia towards the Hindu Khush dominated the situation as it had done for the best

part of a hundred years Under the old chaotic system the mobilisation scheme provided for the despatch of two armies, one through the Khyber, the other by way of Quetta to Kandahar From the North-West alone, whence the conquering hordes of all the invaders whose march is recorded in history had poured from time immemorial, was the Empire of India subject to menace from without

But under the system then existent the measures arranged for defence provided for a force of only four Divisions of all arms This force was not only inadequate in numbers but in capacity for expansion Its distribution and organisation were more suited for policing internal India than to contend with an external foe The troops were distributed in Districts under generals whose commands were geographical in designation and in area Here were no complete Army Corps, Divisions, and Brigades ready to take the field In case of war the troops for the field army were to be drawn from all parts of India, the various units being sorted out into Brigades and Divisions on arrival at the base of operations, and provided with a scratch lot of generals and staff officers for the occasion

Army Re-distributed.

It was in the reorganisation of the scattered and heterogeneous forces of the Indian Empire that Lord Kitchener's great work lay Some steps had already been taken towards the abolition of those Presidency distinctions which formerly divided the Indian native forces into three armies supplemented by a congeries of local forces But he found three armies, each confined to its own geographical limits, beyond which its units and its personnel did not ordinarily proceed, or when they did, they carried the chains which linked them to their respective Presidencies The units of the Indian Army were renumbered, a fruitful cause of confusion being thus eliminated, Presidency and local distinctions were abolished, and a homogeneous army, though composed of heterogeneous races, free to benefit by the experience of service in any part of India, was created The experience of 1857 proved the measure of safety provided by the presidential system of three armies with nothing in common between them, but the new regime considered that the conditions of fifty years ago were obsolete, and had been entirely changed by increased facilities and rapidity of communication throughout the Empire

The whole army was formed into nine Divisions exclusive of the Burma Division, each with its proper complement of the three arms, under its General with staff complete These Divisions were organised for war, each one could take the field intact, leaving behind sufficient troops for the maintenance of internal order Arrangements were made for the organisation of supply and transport The reserve was not sufficiently large to supply the wastage of war, it was expanded, the infantry reserves being augmented, while the cavalry was included in the system Small and isolated stations were by degrees abandoned, the Divisions, or at least the Brigades, being assembled with a due regard to strategical requirements and to the necessities of training, though some are extended over a wide area of country The nine divisions were distributed between two armies, each with its Commander, their heads resting on the main routes at Quetta and Peshawar.

The Military Supply Department, with its Member on the Governor-General's Council, was abolished in due course, an Army Department was created, to deal with much of the business carried on by its predecessor, with a Secretary in Charge. The Commander-in-Chief is now the only Military Member of Council, and it is a question whether he has not a burthen greater than one man can bear The recommendations of Lord Robert's Committee have been ignored, for that Committee recorded the opinion that "the concentration of the whole responsibility of Supply of the Army under one head, if that head is to be the Commander-in-Chief, would be opposed to all modern principles in regard to Armies." It was feared that the system now obtaining would lead to the diversion of too large a portion of the time of the Commander-in-Chief from his natural military duties, and it certainly appears that the functions and status of that high officer have largely altered

Indian regiments are numbered consecutively, the infantry from 1 to 130, the cavalry from 1 to 39 They have subsidiary titles based upon their composition, their territorial origin, or the names of distinguished officers with whom they were connected

British troops are periodically relieved from England and the Colonies, regiments ordinarily being some fifteen years in India, where they are kept on a war-footing by drafts sent from the regimental depots Native troops consist of every warlike class, a great variety of races being found in the ranks Gurkhas and Sikhs to a great extent, are organised in class regiments There are Rajputs of both Oudh and the United Provinces, Jats, Dograsd, Mahrattas, Pathans, Baluchis and Hazaras Mahrattas are enlisted in Regiments of the old Bombay Army, Mahomedans from the south of India and from Hindustan are found in the ranks of many corps, and most of the Frontier tribes furnish their quotas

The native officers generally rise from the ranks, but some are given direct commissions, although this system has not been largely adopted The Volunteers form a valuable and efficient body of men, who would be most useful in emergency, having a good knowledge of the use of arms and furnishing some of the best shots in the country

The Military Police is largely composed of warlike races, especially in Burma, which is mainly garrisoned by these corps, while in Central India the aboriginal Bhils find employment in the ranks These, however, though a useful auxiliary, do not form part of the Army, and serve under the orders of the Civil Government

The Divisions of the Army are distributed as follows, their headquarters being at the Stations indicated

Northern Army	Headquarters-Murree.
1st Division ..	Peshawar
2nd " .	Rawal Pindi
3rd " ..	Lahore
7th " ..	Meerut
8th " ..	Lucknow

Indian Brigades

Derajat Brigade	..	Dera Ismail Khan
Bannu Brigade	.	Bannu
Southern Army.	Headquarters—	Ootacamund
4th Division	.	Quetta
5th „	..	Mhow
6th „	.	Poona
9th „	..	Ootacamund
Burma Division		Mandalay

Services of the Sepoy Army.

The history of the Army of India has now been traced since its inception down to the present time The military history of the world presents no more remarkable spectacle than that of the great army of soldiers of fortune which, led by a few British officers, has carried our flag into every corner of the Eastern Hemisphere during the past hundred and fifty years Soldiers by birth and breeding the sepoys of Hindustan and of the four quarters of India have served the Empire from Northern China to Ceylon, from Egypt to the islands of the Eastern seas, in Belgium and in France In the conquest of India itself, in seconding the valour of a handful of British soldiers, they have borne a conspicuous part The very men who opposed us so courageously in war—Sikhs, Gurkhas, Pathans of the North-West Frontier, Jats and Rajputs—have fought with no less valour in the ranks of our army They sailed to the conquest of Bourbon, Mauritius and Java With Cornwallis and Harris they traversed the passes which led them to Mysore and Seringapatam Under Stringer Laurence Clive, Eyre Coote, Lake and Wellesley they helped to oust the French from Southern India The great theatre of war in which they fought was diversified by every physical feature and characterised by considerable varieties of climate From Chitral to Makran our soldiers have followed in the footsteps of Alexander the Great On the banks of the Hydaspes, on the very ground where the Macedonians defeated Porus two thousand years before, they fought the battle of Chillianwala against the Sikhs, who have themselves since been among the bravest soldiers of our army Every pass on the frontier traversed by the invaders of old contains the bones of brave men who have fallen in our service The rude mountaineers of the frontier have eagerly entered the ranks of our army Beyond the limits of India our soldiers have entered most of the capitals of the East They have carried the flag to Cabul, to Cairo, to Lhasa, to Peking, to Ava and to Mandalay Sepoys accompanied Baird, and eighty years later Wolseley, to the Nile. The dark page of the Mutiny is itself illumined by many gallant deeds performed in our service by the native soldiers of the Empire. Lucknow was not defended by Europeans alone, among the bravest men on the Ridge before Delhi were men of Indian races, in the glorious campaign in Central India 1858 the wings of Sir Hugh Rose's Army were composed of native cavalry, the mutiny veterans who tottered into the arena at the Coronation Durbar at Delhi had in their ranks many soldiers of native race In 1914, when the Great War broke out, H E the Viceroy, speaking on behalf of the whole country, pledged every man, British and Indian, to the service of the Raj, and a great force of all arms, estimated to reach 150,000, was despatched to the seat of war in France and Belgium, in East Africa, Egypt, Turkish Arabistan and Shantung. This is not the time to speak of the conduct of Indian troops on their first appearance on the continent of Europe, but in the earliest encounters their courage and fortitude earned unstinted praise (Q V India and the War)

The Fighting Races.

The fighting classes that contribute to the composition of the Indian Army are drawn mainly from the north of India Of these there are 35 squadrons and 214 companies of Sikhs, who thus furnish a great part of the strength of both Infantry and Cavalry The Sikhs, of whom an account has already been given, are distributed throughout the Punjab Mahomedans of various races contribute a still larger proportion to both arms These are drawn both from the north and south of India, as well as from beyond the frontier, where the tribes contribute 56 companies to our Infantry, while the Musalmans and Pathans of India itself furnish between them 68 squadrons of Cavalry and 250 companies of Infantry These are all excellent fighting men, hardy and warlike, who have furnished soldiers to all the great powers of India for many hundreds of years Large numbers of Mahomedans were to be found in the ranks of the Mahratta armies which opposed us during the early part of the last century As Cavalry the Mahomedans are perhaps unequalled by any other race in the East, being good horsemen and expert men-at-arms

Next to these in point of numbers are the little Gurkhas of Nepal, of whom 161 companies serve in the ranks of the Infantry These, with the exception of one company in the Guides, are formed in twenty complete battalions As fighters in the hills, the Gurkhas are unsurpassed even by the Pathans of the North-West Frontier Their proficiency as soldiers was first proved in the Nepal War of 1814, when they fought against us and has subsequently been displayed on many a field in the ranks of our army The cheerful and steady discipline of the Gurkha has always rendered him a valuable soldier, while his proficiency in the use of arms, including the national *Kukri*, has made him terrible in war While such a wonderful marcher in the hills, the Gurkha soon tires in the plains

The professional military caste of India from time immemorial has been the Rajput, who inhabits not only Rajputana but the United Provinces and Oudh Of fine physique and martial bearing, these warriors of Hindustan formed the backbone of the old Bengal Army, and have sustained the British flag in every campaign in the East Their high caste and consequent prejudices in no way interfere with their martial instincts and efficiency in war This class now furnishes 10 squadrons of Cavalry and 100 companies of Infantry in our Army Other classes which are found in the ranks are Jats, Dogras, Brahmins and Mahrattas The Jats are a fine and warlike race, found in the Delhi and Rohtak districts and adjacent territory It was these people who held out so bravely at Bharatpur and repelled three attacks delivered against their stronghold by Lord Lake's army in 1805. They now furnish us with 21 squadrons of caval-

ry and 60 companies of infantry. Dogras are good and steady soldiers, found in the hilly districts of Punjab The ruling Chief of Kashmir is of this caste, of which are 11 squadrons and 56 companies in the army Brahmins are not now largely enlisted, while the Mahrattas, famous as predatory horse in the historic past, now compose 54 companies of infantry. They are chiefly recruited in the Deccan and the Konkan. Nor must we forget the Hill Rajputs of Garhwal, good and gallant soldiers, who supply two battalions, and the low caste men of Madras so efficient as Pioneers and Sappers Some 9,000 Madrasis are still in the ranks

Improvements in Conditions.

Many improvements have been made in the pay of the soldier and the conditions of service They are thus summarised in the Report on the Moral and Material Progress of India for the decade 1901-02 to 1911-13 The decade began with an increase of the pay of British troops due to the adoption in India of the proposals of the Home Government for an increase of 2*d* a day from the 1st April 1902 This involved an additional charge on Indian revenues of some £225,000 a year In April 1904 a further increase of from 4*d* to 7*d*. a day was given in the form of service pay The whole of the service pay issued in India was in accordance with the decision of the Lord Chief Justice, acting as arbitrator between the Imperial and Indian Governments, borne by the latter, the extra charge being thus raised to about £700,000 a year From the 1st January 1909, in accordance with the intention announced in the Proclamation of the King Emperor on the fiftieth anniversary of the transfer of Government to the Crown, a general increase of pay for all ranks was granted to the Indian Army, and arrangements were made for the free supply of fuel by Government at a cost of £127,000 a year The increase was Rs 3 a month for non-commissioned officers and men of the silladar cavalry and Rs 2 for other troops Other measures that may be noticed were the raising of the kit-money granted on enlistment and the introduction of a boot allowance, the grant of free grass to silladar cavalry when on the march or at manœuvres and of free passages by rail (within certain limits) for men called home on urgent private affairs—all introduced in 1906, the revision and improvement of the pension rules of the Native Army, and the abolition of the punishment of flogging in time of peace, except for offences for which that punishment is permissible in civil life, in 1907-08, and a revision of the rates of pay of captains and subalterns of the Indian Army, and of regimental salaries, involving a considerable addition to the emoluments of the junior grades in 1909 Since 1910 considerable progress has been made with the improvement of the accommodation for the native troops It had become obvious that this improvement was a matter of urgency in many cases, and with the persistent rise in prices and wages comfortable and durable buildings could no longer be constructed without a considerable increase of expenditure. In the new lines, a sound type of construction has been adopted, and the work has been entrusted to the Military Works Service instead of to regimental agency Finally a bonus of half a month's pay, was granted to all non-commissioned officers, and men and reservists of both the British and Indian armies, and to the equivalent ranks of the Royal Indian Marine, at the Coronation Durbar in 1911, at a cost of about £166,000 On the occasion of the Coronation Durbar of 1902, a money grant to be spent at the discretion of officers commanding, was made to all British and native troops

Reserves.

The Indian Army Reserve dates from 1886 Under existing arrangements, it consists of men with not less than three years' colour service Men passing into the Reserve still belong to their respective regiments, and come up for two months' training once in two years In 1904 when the strength of the Reserve was about 24,500 men, it was decided to raise it gradually to 50,000 men, reducing the reserve pay from Rs 3 to Rs 2 a month, and also to form an Indian cavalry reserve by extending the system to Silladar cavalry regiments Reservists obtain a pension after 25 years' total service There is a body of reserve officers whose numbers were largely increased soon after the outbreak of the war

The Imperial Service Troops.

The voluntary movement towards co-operation in the task of Imperial defence that led to the formation of the force of Imperial Service Troops was initiated in 1887 by an offer made by the Nizam of Hyderabad, whose example was at once followed by a number of the leading Native Princes The troops, which are under regular inspection by British Officers, though available for Imperial service when placed at the disposal of the British Government by their Rulers, belong to the States and are recruited from their subjects Their armament is the same as that of the Native Army, and in training, discipline, and efficiency they have reached a high standard of excellence They have done good service on the North-West Frontier and also in China and Somaliland At the beginning of the decade (1901-02 to 1911-12) twenty-three States between them supplied a total of over 16,000 men Some additional offers of contingents have since been accepted, and the total strength on 1st April 1912 was 22,271, towards which twenty-nine States contributed The total included some 10,000 infantry, and 7,500 cavalry, while transport and camel corps contributed 2,700 and 700 men respectively Sappers also numbered about 700 Gwalior contributes nearly 4,000 men, and Kashmir over 3,500, Patiala, Hyderabad and Alwar contribute over 1,000 each On the outbreak of the war practically the whole body of Imperial Service Troops were immediately placed at the unfettered service of the King Emperor Many of these offers were gratefully accepted and large bodies of Imperial Service Troops proceeded to one or other of the theatres of the war (Q V. India and the War)

Volunteers.

The Volunteers of India may be classed under the head of British forces. They include foot and mounted Rifle regiments, light horse, and garrison artillery, with some electrical engineer

and other specialised companies Their role is the defence of ports, railways, cantonments, and civil stations, a number of rifle corps are recruited from railway employes, forming valuable bodies for the defence of their respective railways Their numbers are as follows —

Total for 1913 . .	43,671
,, ,, 1912	43,059
,, ,, 1911	41,226
,, ,, 1910	40,969
,, ,, 1909	38,875
,, ,, 1908	37,215
,, ,, 1907	35,484
,, ,, 1906	33,972

In 1914, as the result of the stimulus given by the war, the strength of the Volunteer Force increased by over 6,000 of all ranks

The Imperial Cadet Corps.

The Imperial Cadet Corps was founded in 1901 with the object of providing military training for the scions of ruling and noble families The Corps consists of about 20 young men of noble birth who have been educated at the Chiefs' Colleges The course of instruction lasts between two and three years, and the cadets are taught military exercises and military science Its headquarters are at Dehra Dhun

STRENGTH OF THE ARMY.

The sanctioned establishment of the army in India for 1912-13 and its actual strength on 1st April 1913 were as follows —

	Sanctioned Establishment	Actual Strength.
Troops under the orders of the Commander-in-Chief in India		
British officers . . .	5,756	5,686
British warrant and non-commissioned officers and men	73,233	73,395
Native officers, non-commissioned officers, and men	160,091	149,920
Troops not under the orders of the Commander-in-Chief		
British officers .	9	9
Indian officers, non-commissioned officers, and men	24,466	22,751
Total, 1912-13 .	263,555	251,761
,, 1911-12 .	260,582	252,741

In 1912-13 seven battalions of Native infantry and one battery of Indian artillery were employed in the colonies and in China One mountain battery of Royal Garrison artillery was employed in Egypt There was an Indian contingent in Somaliland, and detachments of infantry and cavalry were employed in Persia

The sanctioned establishment of the Native army reserve was 35,717 and its actual strength on 1st April 1913 was 33,712, as against 38,811 on 1st April 1912

The number of Volunteers in the whole of India on 1st April was as under —

	1912	1913
Enrolled strength	38,948	41,083
Efficients .	38,247	33,830
Reservists	3,113	3,178

The net expenditure on the army (exclusive of Military Works and Special Defence Works) in 1912-13 as compared with that in 1911-12 was as follows —

	1911-12.	1912-13
	£	£
Effective charges	15,271,932	15,231,375
Non-effective charges	3,085,248	3,117,348
Total	18,357,180	18,348,723

During the year 1912 there were no adverse conditions to check the remarkable improvement of recent years In the British Army the rates of invaliding and of mortality shown in the table given below were the lowest ever recorded. Enteric, malaria, and dysentery were less prevalent, but cholera, pneumonia, and venereal disease slightly more so Owing, however, to improved treatment, invaliding rates for the last named declined An important cause of the recent rapid improvement in health is personal hygiene, soldiers being instructed how to protect themselves against enteric fever and malaria. As regards enteric fever, they are taught by leaflets and lectures the advantages of inoculation, while mosquito curtains, anti-larval operations, segregation, and quinine treatment are employed to guard against malaria The marked decline in venereal diseases is attributed apart from improvement of treatment to the encouragement of healthy pastimes, to education and a better moral tone, and to the growth of temperance There was greater sickness and mortality during 1912 in the Northern than in the Southern Army There was a decline in invaliding from 512 to 474; diseases of the heart, tubercle of the lungs, nervous, mental, and local injuries being the chief causes The decline of admissions for

enteric from 3 8 to 2 6 per mille and malaria from 90 2 to 82 4 per mille is particularly gratifying The rate for all venereal diseases was 55 5 per mille, as compared with 53 1 per mille, but the average number constantly sick from this cause has decreased The chief causes of death were enteric fever and abscess of the liver, the mortality from these being 0 39 and 0 32 respectively Of the 26 deaths from enteric ten were inoculated

The health of the Native troops was good, though the admission rate has risen, probably owing to the inclusion of what had previously been reckoned as negligible complaints The death-rate was the lowest on record The chief cause of sickness was as usual, malaria, the admission rate for 1912 being 89 per mille as against 105 in 1911, the decrease was due partly to a more favourable year, and partly to anti-malarial measures which are being strenuously carried out in all cantonments Pyrexia, dysentery, and respiratory diseases were other important causes of sickness Pneumonia, as usual, was the chief cause of mortality, the rate being 0 83 per mille Enteric, cholera, and malaria helped to swell the mortality There were 18 deaths from plague during the year. The chief causes of invaliding were tubercle of the lungs, anæmia venereal diseases, and debility Sickness was much higher in the Northern Army, but death-rate was higher in the Southern

EXPENDITURE ON THE MILITARY SERVICES

Expenditure	Accounts, 1910-1911 Rs	Accounts, 1911-1912 Rs	Accounts, 1912-1913 Rs	Revised, 1913-1914 Rs	1914-1915 Budget Rs.
INDIA—					
Effective Services—					
Administration	66,83,360	69,23 994	69,75,270	70,24,000	69,92,860
Military Accounts	29 05,030	29,15 540	29,15,887	29 83,000	29,50,320
Regimental Pay etc	12 36,87,512	12,45,65,223	12,20,93,251	12,25,44 000	12,49,98,430
Supply and Transport	3 13,62,808	3,01,50,763	3,36,92,689	3,46,58,000	3,49,60,900
Veterinary	4,83,010	4,93,567	5,00,023	5,04,000	5,03,920
Clothing	12,67,622	12,58,800	15,68,321	19,47,000	19,93,870
Remounts	58,56,219	47,13,862	49,28,434	46 73,000	54,71,930
Medical Services	59,31,695	57,83,758	56,96,320	57,64,000	60 26,400
Medical Stores	4,71,111	5,65,779	5,06,150	4,89,000	5,06,570
Ordnance	90,19,530	88,17,906	98,54,097	98,29,000	1,06,75,350
Ecclesiastical	4,14,366	4,17,979	4,30,154	4,29,000	4,37,490
Education	12,71,489	12,52,272	12 41,097	13,33,000	14,57,350
Compensation for food, etc	48.22,562	48,96,685	57,56,698	64,68,000	63,95,000
Miscellaneous Services	24,82,495	89,22,432	31,25,192	26,27,000	21,09,280
Hutting	4, 39,805	3,04,955	6 98,816	2,15,000	2,00,000
Conveyance by road, river and sea	8,62,827	8,74,856	15,95,814	8,73,000	9,00,950
Conveyance by rail	37,76,339	43 35,230	38,62,887	44,04,000	46,01,570
Cantonments	16,02,327	13,63,144	14,75,915	24,82 000	13,63,810
Unadjusted Expenditure	8,08,319	—1,52,782	—6,79,193		
TOTAL Rs .	20,41 48,426	20,84,03,972	20.62,37,829	20 92,46,000	21,25,46,000
Non-effective Services— .	1,05,14,653	1,04,85,675	1,07,43,291	1,09,77,000	1,10,03,000
TOTAL INDIA Rs .	21,46,63,079	21,88,89 647	21,69,81,120	22,02,23,000	22, 35,49,000
Equivalent in sterling £ .	14,310,872	14,592 643	14,465,408	14,681,500	14,903,200

EXPENDITURE ON THE MILITARY SERVICES.

	Accounts, 1910-1911.	Accounts, 1911-1912.	Accounts, 1912-1913.	Revised, 1913-1914.	1914-1915 Budget
	£	£	£	£	£
ENGLAND—					
Effective Services—					
Payments to War Office for British Forces	935,055	914,000	941,643	912,000	920,000
Furlough allowances, etc., of British forces	135,116	135,990	141,456	143,000	139,000
Consolidated Clothing Allowances of British Soldiers	17,191	48,460	455	15,200	16,000
Furlough allowances, Indian Service	372,824	363,216	355,676	370,000	365,000
Indian Troop Service	236,927	273,947	266,421	297,200	322,000
Other heads	132,846	61,824	107,854	137,700	108,100
Clothing Stores	83,706	58,676	52,712	100,500	60,000
Ordnance and Miscellaneous Stores	268,084	340,189	506,097	533,000	693,000
Medical Stores	86,247	104,612	95,980	97,400	99,900
Supply and Transport Stores	24,755	51,005	52,879	45,300	57,500
Military Farms Stores				11,200	11,000
Operations in Persian Gulf (Stores)	9,896	50,620	43,848	41,000	50,000
Stores taken to India with Troops	33,579	36,825	24,409	24,300	29,100
TOTAL £	2,336,229	2,439,364	2,589,430	2,727,800	2,870,600
Non-effective Services—					
Payments to War Office for British forces	879,875	898,331	919,183	927,000	945,000
Pensions, Indian Service	1,432,801	1,431,735	1,425,242	1,405,000	1,405,000
Other heads	172,003	174,473	177,263	179,000	182,000
TOTAL £	2,484,679	2,504,539	2,521,688	2,511,000	2,532,000
TOTAL ENGLAND £	4,820,908	4,943,903	5,111,118	5,238,800	5,402,600
TOTAL EXPENDITURE £	19,131,780	19,536,546	19,576,526	19,920,300	20,305,800
RECEIPTS	Rs	Rs	Rs	Rs	Rs
India Rs	95,94,755	1,04,91,423	1,33,60,617	1,28,96,000	1,26,11,000
	£	£	£	£	£
Equivalent in sterling £	639,650	699,428	890,708	859,700	840,700
England	418,999	479,938	337,095	359,100	351,600
TOTAL RECEIPTS £	1,058,649	1,179,366	1,227,803	1,218,800	1,192,300
TOTAL NET EXPENDITURE £	18,073,131	18,357,180	18,348,723	18,701,500	19,113,500

ESTABLISHED STRENGTH of EUROPEAN and NATIVE ARMIES in BRITISH INDIA (exclusive of Native Artificers and Followers) for the year 1913-14

CORPS.	Northern Army			Southern Army.			Total		
	Commissioned Officers	Warrant & Non-Commissioned Officers & Privates	Total.	Commissioned Officers	Warrant & Non-Commissioned Officers & Privates	Total	Commissioned Officers	Warrant & Non-Commissioned Officers & Privates.	Total
EUROPEAN ARMY									
Royal Artillery .	292	7,681	7,973	287	7,509	7,796	579	15,190	15,769
Cavalry .	162	3,594	3,756	81	1,797	1,878	243	5,391	5,634
Royal Engineers	190	..	190	117	..	117	307	.	307
Infantry	781	28,164	28,948	672	24,126	24,798	1,456	52,290	53,746
Invalid & Veteran Establishment	.			.		.			
Indian Army	70		70	21	.	21	91		91
General List, Infantry	10		10	6		6	16		16
General Officers unemployed .	6		6	4		4	10		10
Total, European Army .	1,514	39,439	40,953	1,188	33,432	34,620	2,702	72,871	75,573

CORPS.	British		Native		British		Native		British		Native	
	Officers	Warrant and N-C O	Officers	N-C O and Men	Officers	Warrant and N-C O	Officers	N-C O and Men	Officers	Warrant and N-C O	Officers	N-C O and Men
NATIVE ARMY.												
Artillery	57	.	6,440		11	.	3,603		68		10,043	
Body-Guards	4		280		4		142		8		422	
Cavalry	373		15,446		211		8,804		584		24,250	
Sappers & Miners	32	139	1,971		54	202	3,183		86	341	5,154	
Infantry	1,108		66,600		918		53,392		2,026		119,992	
Total, Native Army	1,574	139	90,737		1,198	202	69,124		2,772	341	159,861	
Imperial Service Troops		.	9,239				13,102		.	.	22,341	
Native Reserves — Artillery			1,234				526				1,760	
Cavalry			893				391				1,284	
Sappers & Miners			557				717				1,274	
Infantry			18,445				11,861				30,306	
Volunteers—												
Efficients .	796	17,637			728	19,745	.		1,524	37,382	..	
Reservists ..	21	1,535	.		9	1,528	..		30	3,063	..	

THE EAST INDIES SQUADRON.

Since 1903 a squadron of the Royal Navy, known as the East Indies Squadron, has been maintained in Indian waters It has naturally varied in strength from time to time, and of late years in particular there have been several changes in its Composition, the most recent being in the direction of strengthening it, owing to the disappearance of strength in the other squadrons of the Eastern Fleet In 1903 the squadron consisted of one second class and three smaller cruisers and four sloops or gunboats In 1906, when the policy of withdrawal from Eastern waters was inaugurated, it consisted of two second class and two third class cruisers, and remained at this strength until 1910 when one second class cruiser was withdrawn and two smaller vessels substituted, and three cruisers were lent from the Mediterranean to assist in the suppression of the arms traffic in the Gulf By 1913 the position of the East Indies squadron had considerably improved The battleship Swiftsure had taken the place of the second class cruiser which had been flagship, and a modern second class cruiser replaced the Perseus This is apparently part of the scheme for constituting a Pacific Fleet of three "units," one unit being the Australian fleet which is ultimately to consist of 8 battle cruisers, 10 protected cruisers, 18 destroyers and 12 submarines, but up to the present it has completed, or nearly so, one battle cruiser, three others, six destroyers and three submarines The other two "units" will be the squadrons stationed in China and Indian waters respectively

The East Indies Squadron now consists of the following ships —

Flagship · Swiftsure, battleship, 11,800 tons.
Rear-Admiral Sir R H Peirse, K C B , M V O , Commander-in-Chief Captain, Cecil Maxwell Lefroy
Dartmouth, cruiser, 5,250 tons: Captain, Judge D'Arcy
Fox, cruiser, 4,050 tons Captain F. W Caulfield
Alert, sloop, 960 tons Lieut A Johnstone
Espiegle, sloop, 1,070 tons Commander, W Nunn.
Odin, sloop, 1,070 tons · Commander C. R Wason

Contributions to the Navy.

A cock and bull story, to the effect that the Native Chiefs of India were going to present three super-Dreadnoughts and nine first class cruisers to the Imperial Navy, was started in November 1912, and directed public attention to the question whether India was paying an adequate amount for the services rendered by the Navy Even the Naval Annual (1913 edition) took part in the agitation for an increased contribution by India It says — "Rumour has been persistent regarding the attitude of India towards the Navy Some exaggerated statements were published during the year, but nothing definite has been done This is the more surprising when it is remembered that, although the seaborne commerce of India totals 115 millions sterling, the annual contribution to the Navy is only £100,000 out of a total revenue of 82 millions sterling It is true that very heavy expenditure is involved in the military forces of India, but the commerce, coast protection, and transporting of troops is dependent upon Britain's sea power. There is a prospect that India will voluntarily follow the example of the self-governing Dominions"

The proportion of contributions from the overseas Dominions towards naval expenditure is shown in the following table issued with the Navy Estimates for 1913-14 —

Received from	Nature of Service	Total
		£
India	Maintenance of His Majesty's Ships in Indian Waters	100,000
	Indian Troop Service (on account of work performed by the Admiralty)	3,400
	Repayment on account of services rendered by His Majesty's Ships engaged in the suppression of the Arms Traffic in the Persian Gulf	64,000
Australian Commonwealth Dominion of Canada	Contributions on account of liability for Retired Pay of Officers and Pensions of Men lent from the Royal Navy	10,800
Australian Commonwealth	Survey of the N W Coast of Australia	7,500
Do.	Maintenance of an Australasian Squadron and of a branch of the Royal Navy Reserve	41,600
Dominion of New Zealand	Maintenance of an Australasian Squadron and of the Imperial Navy generally, also of a branch of the Royal Naval Reserve	100,000
Union of South Africa	General maintenance of the Navy	85,000
Newfoundland	Maintenance of a branch of the Royal Naval Reserve	3,000
	Total	415,300

India's Marine Expenditure.

That table, however, only shows a part of the expenditure made by India on the Navy. Since 1869 India has paid a contribution of varying amounts to the Imperial Government in consideration of services performed by the Royal Navy Under existing arrangements, which date from 1896-7, the subsidy of £100,000 a year, already referred to, is paid for the upkeep of certain ships of the East India Squadron, which may not be employed beyond prescribed limits, except with the consent of the Government of India The chief heads of marine expenditure, which amounts to nearly £400,000 annually, are shown below Charges and receipts in respect of pilotage are no longer brought to account under this head :—

Marine Expenditure.	1911-12
In India —	£
General supervision and accounts	10,263
Marine Survey Establishment	6,139
Dockyards	65,388
Salaries and allowances and victualling	75,828
Marine Stores and Coal	60,215
Total, including other charges	250,796
In England —	
Contribution towards the expenses of His Majesty's ships employed in the Indian seas	100,116
Stores—	62,375
Total, including other charges	199,932
Grand Total Expenditure	450,728
Receipts	84,900
Net Expenditure	£365,882

ROYAL INDIAN MARINE.

The Royal Indian Marine (The Sea Service under the Government of India) traces its origin so far back as 1612 when the East India Company stationed at Surat found that it was necessary to provide themselves with armed vessels to protect their commerce and settlements from the Dutch or Portuguese and from the pirates which infested the Indian coasts The first two ships, the Dragon and Hoseander (or Ostander), were despatched from England in 1612 under a Captain Best, and since those days under slightly varying titles and of various strengths the Government in India have always maintained a sea service

The periods or titles have been as follows —

Hon E I Co's Marine	1612—1686
Bombay ,,	1686—1830
Indian Navy ,,	1830—1863
Bombay Marine	1863—1877
H M Indian Marine	1877—1892
Royal Indian Marine	1892. Present day

The Marine has always been most closely connected with Bombay, and in 1668 when the E India Co took over Bombay, Captain Young of the Marine was appointed Deputy-Governor From then until 1877 the Marine was under the Government of Bombay, and although from that date all the Marine Establishments were amalgamated into an Imperial Marine under the Government of India, Bombay has continued to be the headquarters and the official residence of the Director

War Service of the Marine.

1612–1717 Continuous wars against Dutch, Portuguese and Pirates for supremacy of West Coast of India 1744 War with France, capture of Chandernagore, and French ship Indienne In 1756 Capture of Castle of Gheria, 1774 Mahratta War, capture of Tannah Latter part of the eighteenth century, war with French and Dutch, Capture of Pondicherry, Trincomalee, Jafnapatam, Colombo, etc. 1801 Egyptian campaign under Sir Ralph Abercrombie 1803 War with France 1810 Taking of Mauritius and capture of French ship in Port Louis Early part of the nineteenth century suppression of Jowasmi Pirates in the Persian Gulf 1811 Conquest o

Tara 1813 Expedition against Sultan of Sambar 1817-18 Mahratta War, capture of Forts at Severndroog 1819 Expedition to exterminate piracy in the Persian Gulf 1820 Capture of Mocha 1821 Expedition against the Beni-koo-Ah Arabs 1824-26 First Burma War 1827 Blockade of Berbera and Somali Coast 1835 Defeat of Beni Yas Pirates 1838 Expedition to Afghanistan and capture of Karachi 1838 Capture of Aden 1840–42 War in China 1843 Scinde War Battle of Meanee, capture of Hyderabad 1845–46 Maori war in New Zealand 1848–49 War in Punjab, siege of Mooltan 1852 Second Burma War, Capture of Rangoon, Martaban, Bassein, Prome and Pegu 1855 Persian War, capture of Bushire, Muhammerah and Ahwaz 1856–57 War in China 1857–59 The Indian Mutiny 1859 Capture of the Island of Beyt 1860 China War, Canton, Taku Forts, Fatshan and Pekin 1871 Abyssinian War 1882 Egyptian Campaign 1885 Egyptian Campaign 1885 Third Burma War 1889 Chin-Lshai Expedition 1896 Suakin Expedition 1897 Expedition to Imtirbe, Mombassa E Africa 1899–1902 S African War 1900–01 Boxer Rebellion in China, relief of Pekin 1902–04 Somaliland Expedition

Personnel, 1914

DIRECTOR

Captain Walter Lumsden, C V O, A-D-C R N (Retired), Office Residence, Government Dockyard, Bombay

(The Director, R I M, advises the Government of India on all maritime matters)

DEPUTY DIRECTOR

Captain G S Hewett, R I M, Off Residence, Marine House, Calcutta

ASSISTANT DIRECTOR

Captain E J C Hordern, R I M, Off Residence, R I M Dockyard, Bombay

OFFICERS

Commanders	32
Lieutenants and Sub-Lieutenants	72
Chief Engineers	10
Engineers and Assistant Engineers	73

WARRANT OFFICERS

Gunners	23
Clerks	20
Engine Drivers	21

PETTY OFFICERS AND MEN

2,225 Recruited from the Ratnagiri District of the Bombay Presidency

SHIPS

Troopships	R I M S	Dufferin	6315 tons	10,191	Horse Power
,,	,,	Hardinge	5467 ,,	9,366	,,
,,	,,	Northbrook	5048 ,,	7,249	,,

(The above would be armed in the event of war)

Station Ship	R I M S	Dalhousie	1524 tons	2,202	Horse Power, Aden
,,	,,	Mayo	1125 ,,	2,157	,, Rangoon
Despatch Vessel	,,	Lawrence	903 ,,	1,277	, Persian G

Carries 4 4 pdrs, F gun

Special Service	,,	Minto	960 tons	2,025	,, Persian Gulf

(employed on suppression of arms traffic)

Surveying Ship	R I M S	Investigator	1014 tons	1,500	Horse Power
,,	,	Palmurus	299 ,,	486	,,
River Steamer	,,	Comet	182 ,,	190	,, Baghdad

(carries 2 0 45, 5 Barrel Nordenfelt guns)

River Steamer	R I M S	Bhamo	172 tons	250	Horse Power, Burma
,,	,,	Sladen	270 ,,	360	,, ,,

In addition to the above are 39 launches composed of special service launches, target, towing tugs, powder boats, military service launches, etc

Dockyards.

There are two Royal Indian Marine Dockyards at Bombay and at Calcutta, the former being the more important There are 5 graving docks and a wet basin at Bombay, together with factories which enables the whole of the repairs for the ships of the East India Squadron of the Royal Navy and for the ships of the Royal Indian Marine and local Governments to be carried out, and tugs, lightships, pilot schooners, launches, etc, constructed

PRINCIPAL OFFICERS, BOMBAY DOCK YARD

R I M Officers

Staff Officer, Comr C W. Ramsay, R I M
Inspector of Machinery, Chief Engineer H. Knight, R I M

CIVILIAN OFFICERS.

Chief Constructor, Mr T Avery
Constructor, Mr D H North

PRINCIPAL OFFICERS, CALCUTTA DOCKYARD

R I M Officers

Staff Officer, Commander H Morland, R I M
Inspector of Machinery, Chief Engineer J Lush, R I M

CIVIL OFFICERS

Constructor, Mr G P Newnham.

Appointments

In addition to the regular appointments in the ships of the Royal Indian Marine, and in the R I M Dockyards, the following appointments under local Governments are held by officers in the Royal Indian Marine

BOMBAY

Port Officer, Assistant Port Officer, 1st Engineer and Ship Wright Surveyor and 2nd and 3rd Engineers and shipwright surveyors to the Government of Bombay

CALCUTTA

Port Officer, Deputy Port Officer and Assistant Port Officer, 2nd and 3rd Engineers and shipwright surveyors to the Government of Bengal

BURMA

Principal Port Officer, Burma, First Assistant Port Officer, Rangoon Engineer and shipwright surveyor to Government of Burma
Assistant Do do do do

Port Officer, Akyab, Moulmein and Bassein. Marine Transport Officer, Mandalay, and Superintending Engineer, Mandalay

MADRAS,

Presidency Port Officer and Deputy Conservator of the Port

CHITTAGONG

Port Officer, and Engineer and Shipwright Surveyor

ADEN—Port Officer

KARACHI—Port Officer

PORT BLAIR—Engineer and Harbour Master.

Expenditure.

Recent expenditure on the Royal Indian Marine under all heads has been —

1912-13 .	£ 479,928
1913-14	£ 498,700

Against this were receipts, from Dockyards, for outside work done, and from sales of vessels, stores, etc, which amounted in 1912-13 to £ 87,669 and in 1913-14 to £ 84,300 so that the actual cost to the State for the whole service was —

1912-1913	£ 3,32,259
1913-1914	£ 414,400

THE NICHOLSON COMMITTEE.

The Earl of Crewe (Secretary of State for India) announced in the House of Lords on November 2, 1911, that the Government of India was conducting an inquiry into the various departments, with the view of seeing what economies might be effected, and in that operation the Department of the Army was properly included, but there would be no sacrifice of the safety of India or any risk in maintaining order They had been asked by the Government that they should be assisted in making an inquiry into the whole military position by a Committee over which Field-Marshal Sir W Nicholson would preside

The Committee met in Simla in May 1912, consisting of —F M Sir W (afterwards Lord) Nicholson, Lt General Sir Percy Lake, Chief of the General Staff in India, Lt-Gen Sir Robert Scallon, Indian Army, and Sir William Meyer, Chief Secretary to the Government of Madras (now Finance Member of Council) The Committee were instructed by their terms of reference '—First, to carry out a comprehensive survey of the various circumstances requiring the use of Military Force which may arise out of the external or interal situation in India under the conditions which now exist or may probably arise during the next few years. Secondly, to consider and report on the numbers and constitution of the armed force which should be maintained in India to meet these obligations Thirdly, to consider and report whether any, and if so, what measures for the reduction of Military expenditure are compatible with the efficient maintenance of that force Its deliberations, which were private, continued until Lord Nicholson left India in April, 1913, and it was announced in the House of Commons that the Committe's report would not be published According to the Military correspondent of *The Times* (June 2, 1913) it has "been known for some time past that a division of opinion has taken place within the Committe. Lord Nicholson and Sir William Meyer have signed what must be called by courtesy a majority report, because the distinguished Field-Marshal was given the invidious advantage of a casting vote But Sir Percy Lake and Sir Robert Scallon are credited with having taken strong exception to many of the proposals made by their colleagues, and will doubtless draft a minority report" During a discussion in the Imperial Legislative Council on January 14th, 1914, it was officially stated that the report would not be published.

Indian Finance.

Three important facts have to be borne in mind in considering the finances of India. The first is that the Budget of the Government of India includes also the transactions of the Local Governments, and that the revenues enjoyed by the latter are mainly derived from sources which they share with the Central Government. The principles underlying the relations of the supreme with the local governments are explained in the chapter dealing with this question. Generally speaking, certain heads of revenue are divided equally between the provinces and the Imperial Government, and certain heads are enjoyed entirely by the local governments. These vary with different provinces, but broadly it may be said that the divided heads are land revenue, excise, stamps, income-tax and the in-comings from the large irrigation works The Provincial Governments take the whole of the receipts under forests and registration, and the income of the spending departments which they manage, such as ordinary public works, police, education, medical, courts and jails. The Government of India take the whole of the revenue accruing from the export of opium, salt, customs, mint, railways, posts and telegraphs, military receipts and tribute from Native States As regards the expenditure, the Government of India are mainly responsible for the outlay relating to defence, railways, posts and telegraphs, interest on debt and home charges, and the provinces for charges connected with land revenue and general administration, forests, police, courts and jails, education and medical, whilst charges for irrigation and ordinary public works are common to both Imperial and Provincial The second point is that a very large proportion of the revenue of the Government of India is derived not from taxation but from great State enterprises It may be taken roughly that nearly two-thirds of the gross revenue is derived from sources other than taxation, such as the land revenue, opium, forests, tribute from Native States, posts and telegraphs, railways and irrigation. The third point is that the Secretary of State for India enters into very large financial transactions on behalf of the Indian Government in order to meet what are generically known as the Home Charges. These amount now to some eighteen millions sterling and are met by the Secretary of State selling for gold drafts in rupees on the Indian Treasuries known as the Council Bills or telegraphic transfers. These Home Charges were for many years erroneously described as a "drain" on India. A large proportion however goes to defray the interest on the sterling debt and the outlay on the purchase of stores and railway materials which cannot be acquired in India. The only part of the Home Charges which by any stretch of the imagination can be termed a "drain" is that which stands for civil and military officers on leave or pension, and here it is now recognised that India receives exceedingly good value for services rendered. One supplementary point which needs consideration is that the finances of India have been artificially inflated for several years by the unusual opium receipts. The Government of India used to sell opium for export to China or the right of exporting opium to China and in view of the approaching end of this trade inflated prices were given for opium for export. This led to large windfall surpluses which for several years made the Government finances appear more prosperous than they really are

Ten Years' Finance.

We may now turn to the financial results of the last ten years in pounds sterling

	Revenue	Expenditure.	Surplus.
	£	£	£
1903-4 .	71,000,000	68,000,000	3,000,000
1904-5 .	71,100,000	67,700,000	3,400,000
1905-6 .	70,800,000	68,700,000	2,100,000
1906-7	73,100,000	71,500,000	1,600,000
1907-8	71,900,000	70,700,000	300,000
1908-9	69,800,000	73,500,000	*3,700,000
1909-10	74,600,000	74,000,000	600,000
1910-11	80,300,000	76,900,000	3,400,000
1911-12	82,835,750	78,895,416	3,940,334
1912-13	86,985,300	83,623,400	3,361,900
1913-14	84,262,000	83,675,000	587,000
1914-15	85,033,000	86,962,000	*1,929,000

* Deficit.

Provincial and Imperial.—At this stage one point should be made clear According to the unexplained figures the Government of India deliberately budgetted for a deficit of nearly £ 2 millions This arises from the intermingling of Provincial with Imperial finance During the halcyon years when large surpluses accrued to the treasury from the opium surpluses and the general prosperity of the country, the Government did not reduce taxation, but devoted these surpluses in part to the extinction of floating debt and the avoidance of further debt by financing public works from revenue; and in part to large grants to the Local Governments for ameliorative works, chiefly in improving education and sanitation But the spending of this money involved long preparation, with the result that the Local Government accumulated very large balances in excess of the normal. As these plans have matured, the Local Governments are ready to draw on the accumulations It is estimated in the current year, for example, that they will reduce the balances by no less than £ 3 2 millions. If the provincial overdraft is excluded from the Budget estimate, there is provided an Imperial surplus of £ 1·2 millions This is a larger surplus than it has been the practice to budget for in the past and in accounting for it the Finance Member explained that it was desirable to have an unallotted balance of about this amount to assist the Government in their heavy capital commitments Such a surplus, he added, also serves the purpose of a reserve against unforeseen contingencies, seasonal or otherwise, the occurrence of which might cause embarrassment.

The influence of provincial finance on the Imperial Budget is clearly set out in the following table —

Budget Estimates for 1914-15. [*In Millions of £*]

	Revised, 1913-14.			Budget, 1914-15		
	Imperial	Provincial	Total	Imperial	Provincial	Total.
Revenue	53 619	30 643	84 262	54 261	30 772	85 033
Expenditure	52 291	31·384	83 675	52 981	33 981	86 962
Surplus (+) or Deficit(—)	+1 328	— 741	+ 587	+1 280	—3 209	—1 929

Budget Features — Every Indian budget is based on the expectation of a normal monsoon But very few Indian monsoons are normal, consequently the story of Indian finance is one of alternate surpluses and deficits Close estimating being impossible, cautious estimates of revenue must be made, again, it is no uncommon experience to find that the spending departments are not able to spend up to their estimates, owing to the delay in obtaining material from England, shortage of labour, or the necessity of maturing plans before works can be launched Although the increased resourcefulness of the people, owing to the extension of industry and the large sums of money that have flowed into the country owing to the high prices of export crops, has introduced a steadying force into finance, budgetting is still largely what an ex-Finance Member described it, "a gamble in rain" Calculating on these principles the budget for the year 1914-15 places the aggregate revenue for the year at £ 85,033,000, or about £ ¾ million more than the revenue of the previous year Under **Opium** an improvement of £ 115,000 was anticipated The trade in opium with China is dead, the Government of India having practically agreed not to ship further supplies to that country The large stocks which had accumulated at the Treaty ports owing to the restrictive practices enforced by the Chinese Government were largely liquidated and the embarrassments which threatened to accrue from this source were removed Apart from the China trade, there is a considerable, though much less remunerative, trade with Far Eastern Countries, such as the Straits Settlements, Hongkong, and the Dutch East Indies, and as high prices are expected, the opium revenue was put at this larger figure The net revenue from **Railways** is put at £ 190,000 below the figure of the current year, as the trade conditions are not brilliant and the increase in working expenses is considerable **Customs** and **Mint** are estimated to be less productive by £ 118,000 and £ 155,000 respectively **Land Revenue** is estimated at £ 612,000 more than in the previous year, owing to the expected recovery of the United Provinces from famine conditions Taking the revenues as a whole, the Finance Member budgeted for an aggregate increase of £ 771,000 of which the Government of India would obtain £ 642,000 and the Provincial Governments £ 129,000. The Finance Member claimed that reading the figures as a whole it is manifest that they point to sound and stable fiscal conditions

Expenditure.

The aggregate Imperial and Provincial expenditure budgeted for in 1914-15 is £ 86,962,000, or an increase of £ 3,287,000 above the expenditure of the previous year The increase under Imperial heads is estimated at £ 690,000 only, the remainder being due to Provincial, and being due in the main to drawings on the abnormally large balances at present in the possession of the Local Governments Amongst the most marked features on the expenditure side of the account is an addition of £ 262,000 under the head of **Interest** due to the heavy borrowings to finance the railway and irrigation programme, and £ 487,000 under **Military** services The cause of the larger military expenditure was first the high cost of provision demanding a corresponding increase in the sepoys' pay, which is fixed on a sliding scale governed by the price of grain, and stores and new rifles for the Army

Education and Sanitation —After for providing for the needs of the services and other agencies and for the surplus of £ 1 28 millions alluded to the Government of India found themselves with £ 240,000 not allotted Out of this sum £100,000 was allotted to the Government of **Burma** for expenditure in improving communications Burma is almost a roadless Province, and for many years there has been a strong demand for a regular system of feeder roads in order to assist in the development of the enormous possibilities of the country So strongly did Burma feel on the point that it offered to find the money required by a further and voluntary cess on the exports of rice That scheme has not been sanctioned, but the special allotment by the Government of India for communications involves the recognition that the province cannot be longer neglected Next £ 40,000 (recurring) were allotted for the remission of a number of miscellaneous contributions which the local authorities pay to the Local Governments for services rendered by the provincial establishments This allotment is a step in the direction of further increasing the funds of the **Local Bodies**, by relieving them of charges which have pressed on their limited resources Then further recurring grants of £ 60,000 for **Education** and £ 40,000 for **Sanitation** were provided, thus disposing of the balance of £ 240,000 at the discretion of the Finance Member.

Six Years' Progress.—The grants under these two heads may be small in comparison with the huge allocations of recent years But this appearance vanishes if the accompanying circumstances are analysed The grants for education and sanitation must be considered in conjunction with those for civil works, because much of this comes under these two heads The following table shows the expenditure under these heads since 1910-11, that year being taken because it is the last year before large grants began to be given by the Government of India

[*In thousands of* £]

	Education			Medical			Civil Works		
	Imperial	Provincial	Total	Imperial	Provincial	Total	Imperial	Provincial	Total
1910-11 .	73	1,773	1,846	78	905	983	714	3,823	4,537
1911-12	58	1,963	2,021	67	1,088	1,155	831	4,619	5,453
1912-13	120	2,190	2,610	185	1,142	1,327	1,124	4,936	6,060
1913-14, Budget	144	3 934	4,078	163	1,858	2,021	1,076	5,506	6,582
1913-14, Revised	119	3,123	3,242	142	1,236	1,378	1,092	5,954	7,046
1914-15, Budget . ..	164	3,836	4,000	181	1,701	1,885	1,108	6,347	7,455

From this it will be seen that the scale of expenditure under Education and Medical has practically doubled, and that there has been an increase of 64 per cent under Civil Works The figures given below illustrate how far this increased expenditure has been financed by special grants from the Government of India

Expenditure from special Imperial grants included in provincial expenditure

[*In thousands of* £]

	Education	Medical	Civil Works		
			Education.	Medical.	Other objects.
1911-12 .	114	136	70	40	142
1912-13	488	108	199	222	290
1913-14, Revised . .	920	185	265	341	517
1914-15, Budget	1,604	526	252	263	710

Taking the two tables together, and comparing 1914-15 with 1910-11 it will be seen that the direct expenditure on education has increased by £ 2,154,000, and with Educational Civil Works included£ 2,406,000 , expenditure under Medical (which includes sanitation) has increased by £ 902,000, or £ 1,165,000, including Civil Works and the expenditure under Civil Works by £ 2,918,000 Although the grants for these purposes during the current year are relatively small it does not follow that there will be any slackening of the progress recorded during recent years The Local Governments are well supplied with funds, and if they reduce their balances by the figure estimated £ 3 2 millions, during the year, they will still have closing balances on March 31st, 1915, aggregating £ 6 6 millions In fact, it is very doubtful if they will be able to spend upto their budget estimates

Capital Account.—Reference has been made to the manner in which the financial statement of the Government of India is complicated by transactions on capital account—by provision for railways and irrigation, and since the transfer of the capital, for the new Delhi It has been the practice in the past to finance these works in part from revenue surpluses and in part from borrowings in India and in London Revenue surpluses have been drawn upon so largely for this purpose that there is really no unproductive debt in India, and the nominal figure of unproductive

debt is only £ 12 millions (*q v* Debt) The large balances accruing from the opium surpluses, over and above the allotments made to the Local Governments and the redemption of temporary debt, allowed the allocation of exceptionally large sums from balances to the avoidance of debt Last year, for instance, a capital programme of £19½ millions was financed so largely from balances and surpluses that the total sum borrowed was only £ 2 millions, and that in India During the current year there are not these resources on which to draw, and the Finance Member was confronted with the problem of financing a capital programme amounting to £17 9 millions, chiefly from borrowings The manner in which this was done indicates a new departure in policy It was agreed to borrow £ 8 millions in London Whilst this sum is largely in excess of recent borrowings in London, financiers are agreed that it is modest in comparison with the borrowings of other developing countries like Canada and Australia, especially seeing that the money is spent on England in railway material, and is not exported even for reproductive expenditure in India itself Then it was decided to raise the borrowings in India to five crores of rupees (£ 3 3 millions) This is the largest internal loan ever attempted in a single year by the Government of India, the previous largest figure being Rs 4½ crores in 1906-07. Thirdly it was decided to increase the facilities for depositing in the Post Office Savings Banks, raising the limit of an annual deposits from Rs 500 gross to Rs 750 *net*, and the total amount a depositor may hold in ordinary deposit from Rs 2,000 to Rs 5,000 The effect of these changes of policy was to give the capital programme the following shape —

	£ Million
Outlay	
Capital outlay on (*a*) Railways	12 0
(*b*) Irrigation	1 2
(*c*) Delhi	7
Repayment of India Bonds, etc	7
Outlay from Provincial balances	3 2
Local Loans Account, Imperial and Provincial	1
TOTAL	17·9

	£ : Million.
Assets.	
From balances	4 6
Imperial surplus of 1914-15	1·3
Rupee loan	3 5
Sterling borrowings	6 2
Unfunded debt	1 8
Famine insurance allotment and minor items	·7
TOTAL	17 9

Some adverse comment was caused by the reduced provision for **Irrigation** whilst maintaining the full provision of £ 12 millions for **Railways**, but this arose from the shortage of labour The Irrigation allotment represented the full amount which the Engineers estimated they could spend The effects of the new policy of developing the internal credit of the country were remarkable The five crores loan was a great success, the total applications amounting to Rs 12 crores whilst the average price was Rs 95-9-7, or more than As 4 above the figure estimated by experienced financiers The issue was immediately followed by a rise in Government Paper above 96. The revision of the Post Office Savings Bank rules induced a large increase in deposits The Indian loans in London were also floated with ease It is important to consider however that, although no public announcement was made on the question, the Finance Member effected an important improvement in the Treasury system, offering to lend from the Government Balances to the Presidency Banks at moderate rates of interest, and keeping larger balances with the Presidency Banks, instead of locking them up in sterile Reserve Treasuries (*q v* Currency)

Railways —This is a question which properly belongs to the railway heading (*q v*) but inasmuch as since the disappearance of the profits from the opium trade with China the railway profits have come bulk largely in the budget, they may be indicated here The financial aspect of the railway property of the Government of India for the past five years is indicated in the following table.

In thousands of £.

	1910–11.	1911–12	1912–13	1913–14	1914–15.
Capital outlay to end of each year	300,996	308,961	318,903	331,083	343,086
Net profit from railways during the year after meeting all charges including interest	2,017	3,788	4,803	4,650	3,921
Percentage of net profit to capital outlay	·67	1 23	1 51	1 40	1·14

The disadvantage of the railway head is that it still further makes the finances of India dependent on the character of the monsoon Railway profits entirely hinge on trade, and this hinges on the rainfall, whereas the opium surplus was largely independent of the character of the monsoon

REFERENCES.—The Indian Budget (*Gazette of India*, March 2nd, 1914; London 232 of 1914.)

India, its administration and Progress (Macmillan) By Strachey.

India and the Durbar (Finance. By Sir William Meyer) Murray.

The details of the budget are set out in the following table. As the manner in which the great heads of income like land revenue, railways, irrigation and customs are realised is described in separate articles (*q v.*) they need not detain us here.

REVENUE.	Accounts, 1912-1913	Revised Estimate, 1913-1914.	Budget Estimate, 1914-1915.
	£	£	£
Principal Heads of Revenue—			
Land Revenue	21,282,468	21,096,700	21,708,800
Opium	5,124,592	1,605,600	1,751,100
Salt	3,334,374	3,419,700	3,436,900
Stamps	5,069,115	5,237,500	5,371,600
Excise	8,277,919	8,906,700	9,148,500
Customs	7,197,243	7,355,100	7,236,800
Other Heads	5,553,119	5,437,400	5,337,300
TOTAL PRINCIPAL HEADS	55,838,830	53,058,700	53,991,000
Interest	1,473,708	1,377,300	1,376,000
Post Office	2,262,436	2,400,800	2,552,100
Telegraph	1,174,124	1,178,300	1,180,300
Mint	487,359	404,500	249,800
Receipts by Civil Departments	1,334,847	1,394,100	1,437,300
Miscellaneous	765,207	715,700	731,700
Railways Net Receipts	17,371,789	17,519,400	17,329,700
Irrigation	4,411,217	4,553,100	4,559,300
Other Public Works	355,447	279,900	239,400
Military Receipts	1,387,634	1,379,800	1,386,100
TOTAL REVENUE	86,862,598	84,261,600	85,032,700
EXPENDITURE			
Direct Demands on the Revenues	8,653,304	9,354,500	9,341,000
Interest	1,810,535	1,554,000	1,607,800
Post Office	2,026,567	2,109,200	2,082,000
Telegraph	1,105,946	1,182,700	1 268,000
Mint	142,343	136,500	104,300
Salaries and Expenses of Civil Departments	16,688,755	18,047,800	19,778,400
Miscellaneous Civil Charges	4,926,232	5,418,800	5,397,700
Famine Relief and Insurance	1,000,000	1,000,000	1,000,000
Railways Interest and Miscellaneous Charges	12,568,435	12,869,900	13,409,000
Irrigation	3,301,928	3,553,400	3,631,400
Other Public Works	6,063,769	7,048,800	7,456,500
Military Services	20,953,100	21,399,200	21,886,100
TOTAL EXPENDITURE, IMPERIAL AND PROVINCIAL	79,240,914	83,674,800	86,962,200
Add—Provincial Surpluses, that is, portion of allotments to Provincial Governments not spent by them in the year	4,514,050	63,900	. . ..
Deduct—Provincial Deficits that is, portion of Provincial Expenditure defrayed from Provincial Balances	.. .	805,000	3,209,300
TOTAL EXPENDITURE CHARGED TO REVENUE	83,754,964	82,933,700	83,752,900
SURPLUS	3,107,634	1,327,900	1,279,800
TOTAL	86,862,598	84,261,600	85,032,700

THE LAND REVENUE.

The principle underlying the Land Revenue system in India has operated from time immemorial. It may be roughly formulated thus—the Government is the supreme landlord and the revenue derived from the land is equivalent to rent. On strictly theoretical grounds, exception may be taken to this statement of the case. It serves, however, as a substantially correct description of the relation between the Government and the cultivator. The former gives protection and legal security. The latter pays for it according to the value of his

holding. The official term for the method by which the Land Revenue is determined is "Settlement" There are two kinds of settlement in India—Permanent and Temporary Under the former the amount of revenue has been fixed in perpetuity, and is payable by the landlord as distinguished from the actual cultivator The Permanent Settlement was introduced into India by Lord Cornwallis at the close of the eighteenth century It had the effect intended of converting a number of large revenue farmers in Bengal into landlords occupying a similar status to that of landowners in Europe The actual cultivators became the tenants of the landlords While the latter became solely responsible for the payment of the revenue, the former lost the advantage of holding from the State This system has prevailed in Bengal since 1795 and in the greater part of Oudh since 1859 It also obtains in certain districts of Madras

Temporary Settlements

Elsewhere the system of Temporary Settlements is in operation At intervals of thirty years, more or less, the land in a given district is subjected to a thorough economic survey, on the basis of the trigonometrical and topographic surveys carried out by the Survey Department of the Government of India Each village area, wherever the Temporary Settlement is in vogue, has been carefully mapped, property-boundaries accurately delineated, and records of rights made and preserved Under the Permanent Settlement in Bengal the occupant does not enjoy these advantages The duty of assessing the revenue of a district is entrusted to Settlement Officers, members of the Indian Civil Service specially delegated for this work The duties of a Settlement Officer are thus described in Strachey's *India* (revised edition, 1911) —"He has to determine the amount of the Government demand, and to make a record of all existing rights and responsibilities in the land. He has a staff of experienced subordinates, almost all of whom are natives of the country, and the settlement of the district assigned to him is a work which formerly required several years of constant work The establishment of agricultural departments and other reforms have however led to much simplification of the Settlement Officer's proceedings, and to much greater rapidity in the completion of the Settlements All the work of the settlement officer is liable to the supervision of superior officers, the assessments proposed by him require the sanction of the Government before they become finally binding; and his judicial decisions may be reviewed by the Civil Courts It is the duty of the settlement officer to make a record of every right which may form the subject of future dispute, whether affecting the interests of the State or of the people The intention is to alter nothing, but to maintain and place on record that which exists"

The Two Tenures.

Under the Temporary Settlement land tenures fall into two classes—peasant-holdings and landlord-holdings, or *Ryotwari* and *Zemindari* tenures Broadly speaking, the difference between the two in a fiscal sense is that in Ryotwari tracts the *ryot* or cultivator pays the revenue direct; in *Zemindari* tracts the landlord pays on a rental assessment. In the case of the former, however, there are two kinds of *Ryotwari* holdings—those in which each individual occupant holds directly from Government, and those in which the land is held by village communities, the heads of the village being responsible for the payment of revenue on the whole village area. This latter system prevails in the North In Madras, Bombay, Burma and Assam ryotwari tenure is on an individual basis, and the Government enters into a separate agreement with every single occupant The basis of assessment on all classes of holdings is now more favourable to the cultivator than it used to be Formerly what was believed to be a fair average sum was levied on the anticipated yield of the land during the ensuing period of settlement Now the actual yield at the time of assessment alone is considered, so that the cultivator gets the whole of the benefit of improvements in his holding subsequently brought about either by his own enterprise or by "uncarned increment" The Government, however, may at a new settlement re-classify a holding so as to secure for itself a fair share in an increment that may have resulted from public works in the vicinity, such as canals and railways, or from a general enhancement of values But the principle that improvements effected by private enterprise shall be exempt from assessment is now accepted by the Government and provided for in definite rules

Incidence of the Revenue.

The incidence of the revenue charges varies according to the nature of the settlement, the class of tenure, and the character and circumstances of the holding Under the Permanent Settlement in Bengal Government derive rather less than £3,000,000 from a total rental estimated at £12,000,000 Under Temporary Settlements, 50 per cent of the rental in the case of *Zemindari* land may be regarded as virtually a maximum demand In some parts the impost falls as low as 35 and even 25 per cent and only rarely is the proportion of one-half the rental exceeded In regard to *Ryotwari* tracts it is impossible to give any figure that would be generally representative of the Government's share But one-fifth of the gross produce is the extreme limit, below which the incidence of the revenue charge varies greatly About twelve years ago the Government of India were invited in an influentially signed memorial to fix one-fifth of the gross produce as the maximum Government demand In reply to this memorial and other representations the Government of India (Lord Curzon being Viceroy) issued a Resolution in defence of their Land Revenue Policy. In it it was stated that "under the existing practice the Government is already taking much less in revenue than it is now invited to exact" and "the average rate is everywhere on the down grade" This Resolution, together with the statements of Provincial Governments on which it was based, was published as a volume, it is still the authoritative exposition of the principles controlling the Land Revenue Policy of the Government of India. In a series of propositions claimed to be established by this Resolution the following points are noted —(1) In *Zemindari* tracts

progressive moderation is the key-note of the Government's policy, and the standard of 50 per cent. of the assets is more often departed from on the side of deficiency than excess, (2) in the same areas the State does not hesitate to interfere by legislation to protect the interests of the tenants against oppression at the hands of the landlords, (3) in *Ryotwari* tracts the policy of long-term settlements is being extended, and the proceedings in connection with new settlements simplified and cheapened, (4) local-taxation (of land) as a whole is neither immoderate nor burdensome, (5) over-assessment is not, as alleged, a general or widespread source of poverty, and it cannot fairly be regarded as a contributory cause of famine At the same time the Government laid down as principles for future guidance—(*a*) large enhancements of revenue, when they occur, to be imposed progressively and gradually, and not *per saltum*, (*b*) greater elasticity in revenue collection, suspensions and remissions being allowed according to seasonal variations and the circumstances of the people, (*c*) a more general resort to reduction of assessments in cases of local deterioration

Protection of the Tenants.

In regard to the second of the five propositions noted above, various Acts have been passed from time to time to protect the interests of tenants against landlords, and also to give greater security to the latter in possession of their holdings The Oudh Tenancy Act of 1886 placed important checks on enhancement of rent and eviction, and in 1900 an Act was passed enabling a landowner to entail the whole or a portion of his estate, and to place it beyond the danger of alienation by his heirs The Punjab Land Alienation Act, passed at the instance of Lord Curzon, embodied the principle that it is the duty of a Government which derives such considerable proportion of its revenue from the land, to interfere in the interests of the cultivating classes This Act greatly restricted the credit of the cultivator by prohibiting the alienation of his land in payment of debt It had the effect of arresting the process by which the Punjab peasantry were becoming the economic serfs of money-lenders A good deal of legislation affecting land tenure has been passed from time to time in other provinces, and it has been called for more than once in Bengal, where under the Permanent Settlement (in the words of the Resolution quoted above), "so far from being generously treated by the Zemindars, the Bengal cultivator was rack-rented, impoverished, and oppressed."

Government and cultivator.

While the Government thus interferes between landlord and tenant in the interests of the latter, its own attitude towards the cultivator is one of generosity Mention has already been made of the great advantage to the agricultural classes generally of the elaborate systems of Land Survey and Records of Rights carried out and maintained by Government. In the Administration Report of Bombay for 1911-12, it is stated —"The Survey Department has cost the State from first to last many lakhs of rupees But the outlay has been repaid over and over again The extensions of cultivation which have occurred (by allowing cultivators to abandon unprofitable lands) have thus been profitable to the State no less than to the individual, whereas under a *Zemindari* or kindred system the State would have gained nothing, however much cultivation had extended throughout the whole of 30 years' leases" On the other hand the system is of advantage to the *ryots* in reducing settlement operations to a minimum of time and procedure In the collection of revenue the Government consistently pursues a generous policy In times of distress suspensions and remissions are freely granted after proper inquiry

The amount of gross revenue raised on the land is estimated in 1914-15 at £21,708,800 out of a total from all sources in the same year of £85,032,700 This compares very favourably with the £34,000,000 of land revenue recorded as having been raised annually from a smaller empire by Aurangzebe

The literature of the subject is considerable The following should be consulted by readers who require fuller information —"Land Revenue Policy of the Indian Government," 1902 (Superintendent of Government Printing), Baden Powell's "Land Systems of British India", Sir John Strachey's "India, its Administration and Progress, 1911," (Macmillan & Co) M Joseph Chailley's "Administrative Problems of British India" (Macmillan & Co, 1910), and the Annual Administration Reports of the Respective Provincial Governments

EXCISE.

The Excise revenue in British India is derived from the manufacture and sale of intoxicating liquors, hemp drugs and opium It is a commonplace amongst certain sections of temperance reformers to represent the traffic in intoxicating liquors as one result of British rule There is, however, abundant evidence to show that in pre-British days the drinking of spirituous liquors was commonly practised and was a source of revenue

The forms of intoxicating liquor chiefly consumed are country spirit, fermented palm juice, beer made from gram, country brands of rum, brandy, etc, locally manufactured malt beer and imported wine, beer and spirits Country spirit is the main source of revenue, except in the Madras Presidency, and yields about two-thirds of the total receipts from liquors It is usually prepared by distillation from the Mahuva flower, molasses and other forms of unrefined sugar, fermented palm juice and rice The British inherited from the Native Administration either an uncontrolled Out-Still System or in some cases a crude Farming System and the first steps to bring these systems under control were the limitation of the number of shops in the area farmed, and the establishment of an improved Out-Still System under which the combined right of manufacture and sale at a special shop was annually granted This of course was a kind of control, but it only enabled Government to impose hap-hazard taxation on the liquor traffic as a whole, by means of vend fees It did not enable Government to

graduate the taxation accurately on the still-head duty principle nor to insist upon a standard of purity or a fixed strength of liquor Moreover for political and other reasons the extent of control could not at first be complete There were tribes of aborigines who regarded the privilege of making their own liquor in their private homes as a long established right, and who believed that liquor poured as libations to their god should be such as had been made by their own hands The introduction of any system amongst those peoples had to be worked very cautiously Gradually, as the Administration began to be consolidated, the numerous native pot-stills scattered all over the country under the crude arrangements then in force began to be collected into Central Government enclosures called Distilleries, thus enabling Government to perfect its control by narrowing the limits of supervision, and to regularize its taxation by imposing a direct still-head duty on every gallon issued from the Distillery Under Distillery arrangements it has also been possible to regulate and supervise thoroughly the manufacture of liquor and its disposal subsequent to its leaving the Distillery by means of a system of transport passes, establishment supervision, improved distribution and vend arrangements

Various Systems.

The Out-Still System may be taken to include all systems prior in order of development to the imposition of Still-head duty Briefly stated the stages of development have been—First farms of large tracts, Second farms of smaller areas, Third farms of the combined right to manufacture and sell at particular places without any exclusive privilege over a definite area, Fourth farms of similar right subject to control of means and times for distilling and the like The Provincial Governments have had to deal with the subject in different ways suited to local conditions, and so the order of development from the lower forms of systems to the higher has not been always everywhere identical in details Yet in its essence and main features the Excise Administration in most provinces of British India has progressed on uniform lines, the key note lying in attempts, where it has not been possible to work with the fixed duty system in its simplest forms, to combine the farming and fixed duty systems with the object of securing that every gallon of spirit should bear a certain amount of taxation The Out-Still System has in its turn been superseded by either the Free-supply system or the District Monopoly system The Free-supply system is one of free competition among the licensed distillers in respect of manufacture The right of vend is separately disposed of The District monopoly system on the other hand is one in which the Combined monopoly of manufacture and sale in a district is leased to a farmer subject to a certain amount of minimum still-head duty revenue in the monopoly area being guaranteed to the State during the term of the lease.

The recommendations of the Indian Excise Committee of 1905-06 resulted in numerous reforms in British India, one of them being that the various systems have been or are gradually being superseded by the Contract Distillery System under which the manufacture of spirit for supply to a district is disposed of by tender, the rate of still-head duty and the supply price to be charged are fixed in the contract and the right of vend is separately disposed of This is the system that now prevails over the greater portion of British India. The other significant reforms have been the revision of the Provincial Excise Laws and regulations, and the conditions of manufacture, vend, storage and transport, an improvement in the quality of the spirit, an improved system of disposal of vend licences, reductions and re-distributions of shops under the guidance and control of local Advisory Committees, and gradual enhancement of taxation with a view to checking consumption

The average incidence of taxation per proof gallon of distillery spirit amounted in 1911-12 to Rs 5-2-6, Rs 4-8-6 was derived from still-head duty and Re 0-10-0 from vend fees The average consumption per 1,000 of the population in distillery areas varies from 23 gallons in Eastern Bengal to 173 gallons in the Bombay Presidency Proper (1910-11)

Sap of the date, palmyra, and cocoanut palms, called toddy, is used as a drink either fresh or after fermentation In Madras and Bombay the revenue is obtained from a fixed fee on every tree from which it is intended to draw the liquor. In Bengal and Burma the sale of shop licenses is the sole form of taxation Country brands of rum, and so called brandies and whiskies, are distilled from grape juice, etc. The manufacture is carried out in private distilleries in various parts of India A number of breweries has been established, mostly in the hills, for the manufacture of a light beer for European and Eurasian consumption The uniform fee of 3 annas per gallon is levied all over India at the time of issue

Foreign liquor is subject to an import duty at the tariff rates, the most important of which is Rs 9-6-0 per proof gallon on spirit and 3 annas per gallon on beer. It can only be sold under a license

DRUGS.—The narcotic products of the hemp plant consumed in India fall under three main categories namely, ganja or the dry flowering tops of the cultivated female hemp plant; charas, or the resinous matter which forms an active drug when collected separately; and bhang, or the dried leaves of the hemp plant whether male or female cultivated or uncultivated. The main features of the existing system are restricted cultivation under supervision, storage in Bonded Warehouses, payment of a quantitative duty before issue, retail sale under licenses and restriction on private possession Licenses to retail all forms of hemp drugs are usually sold by auction

OPIUM.—Opium is consumed in all provinces in India The drug is commonly taken in the form of pills, but in some places, chiefly on social and ceremonial occasions, it is drunk dissolved in water. Opium smoking also prevails in the City of Bombay and other large towns. The general practice is to sell opium from the Government Treasury, or a Central Warehouse, to licensed vendors The right of retail to the public is sold by annual auction to one or several sanctioned shops

The opium revenue in 1914-15 is estimated at £1,751,100, the Excise revenue at £9,148,500,

SALT.

The salt revenue was inherited by the British Government from Native rule, together with a miscellaneous transit dues These transit dues were abolished and the salt duty consolidated and raised There are four great sources of supply, rock salt from the Salt range and Kohat Mines in the Punjab, brine salt from the Sambhar Lake in Rajputana, salt brine condensed on the borders of the lesser Rann of Cutch, and sea salt factories in Bombay, Madras and at the mouth of the Indus

The Salt Range mines contains an inexhaustible supply They are worked in chambers excavated in salt strata, some of which are 250 feet long, 45 feet wide and 200 feet high The Rajputana supply chiefly comes from the Sambhar Lake where brine is extracted and evaporated by solar heat In the Rann of Cutch the brine is also evaporated by solar heat and the product is known as Baragara salt In Bombay and Madras sea water is let into shallow pans on the sea-coast and evaporated by solar heat and the product sold throughout India In Bengal the damp climate together with the large volume of fresh water from the Ganges and the Brahmaputra into the Bay of Bengal render the manufacture of sea salt difficult and the bulk of the supply, both for Bengal and Burma, is imported from Liverpool, Germany, Aden, Bombay and Madras

Broadly, one-half of the indigenous salt is manufactured by Government Agency, and the remainder under license and excise systems. In the Punjab and Rajaputana the salt manufactories are under the control of the Northern India Salt Department, a branch of the Finance Department In Madras and Bombay the manufactories are under the supervision of Local Governments Special treaties with Native States permit of the free movement of salt throughout India, except from the Portuguese territories of Goa and Damaun, on the frontiers of which patrol lines are established to prevent the smuggling of salt into British India

From 1888-1903 the duty on salt was Rs 2-8 per maund of 82 lbs In 1903, it was reduced to Rs 2, in 1905 to Rs 1-8 and in 1907 to Re. 1 at which figure it now stands The successive reductions in duty have led to a largely increased consumption, the figures rising by 25 per cent between 1903-1908 To illustrate the growth of consumption, in 1902-03, with a tax of Rs 2-8-0 per maund, the revenue was 838 lakhs, for 1914-15 with a duty of Re 1, the estimated revenue is 515 lakhs or £3,436,900.

CUSTOMS.

The Indian fiscal system consists of a moderate tariff for revenue purposes only There is a general import duty of five per cent *ad valorem* on all goods imported by sea, with special conditions for textiles and a large free list Export duties are levied only on rice, at the rate of three annas per maund of 82 pounds The export is principally from Burma

The import duties have varied from time to time according to the financial condition of the country. Before the Mutiny they were five per cent. in the days of financial stringency which followed they were raised to 10 and in some cases 20 per cent In 1875 they were reduced to five per cent, but the opinions of Free Traders, and the agitation of Lancashire manufacturers who felt the competition of the Indian Mills, induced a movement which led to the abolition of all customs dues in 1882 The continued fall in exchange compelled the Government of India to look for fresh sources of revenue and in 1894 five per cent duties were reimposed, yarns and cotton fabrics being excluded Continued financial stringency brought piece-goods within the scope of the tariff, and after various expedients the demands of Lancashire were satisfied by a general duty of 3½ per cent on all woven goods—an import duty on goods by sea, an excise duty on goods produced in the country The products of the hand-looms are excluded These excise duties are intensely unpopular in India, for reasons set out in the special article dealing with the subject. In 1910-11, in order to meet the deficit threatened by the loss of the revenue on opium exported to China, the silver duty was raised from 5 per cent to 4d an ounce, and higher duties levied on petroleum, tobacco, wines, spirits, and beer These were estimated to produce £ 1 million annually.

The principal exemptions from the tariff are food grains, machinery, railway material and coal Iron and steel pay a nominal duty of one per cent

The Customs revenue for the current year is estimated at Rs 10,85,52,000, or £ 7,236,800

The Customs Department is administered by an Imperial Customs Service responsible to the Imperial Government in the Department of Commerce and Industry, but acting through the Local Governments The senior Collectors are Covenanted Civilians specially chosen for this duty, the subordinates are recruited in India and in England **(Customs Tariff q. v.)**

Income Tax.

The income tax was first imposed in India in 1860, in order to meet the financial dislocation caused by the Mutiny It was levied at the rate of four per cent or a little more than 9½ d in the pound on all incomes of five hundred rupees and upwards Many changes have from time to time been made in the system, and the present schedule was consolidated in the Act of 1886 This imposed a tax on all incomes derived from sources other than agriculture which were exempted On incomes of 2,000 rupees and upwards it fell at the rate of five pies in the rupee, or about 6¼d in the pound; on incomes between 500 and 2,000 rupees at the rate of four pies in the rupee or about 5d in the pound In March 1903 the minimum taxable income was raised from 500 to 1,000 rupees The tax is paid by about 300,000 people, and although it is unpopular chiefly because it was nominally only temporarily imposed, and because it falls most heavily on those with fixed incomes, there is no likelihood of its repeal The yield of assessed taxes is estimated at (1914-15) Rs 2,82,06,000,

For the influence of the War on India Finance, q v. India and the War.

THE DEBT OF INDIA.

The registered debt of India consists of rupee loans raised in India and sterling loans raised in England At the end of 1910-11 the rupee loans, bearing interest, amounted to Rs 37,92,40,200 (=£91,949 347) and the sterling debt to £177,981,751 There were also at the end of the year Rs 17,31,955 (=£115,464) and £16,584 of the rupee and sterling loans, respectively not bearing interest, chiefly representing unconverted paper

When the trading charter of the East India Company expired in 1835, the rupee debt was Rs. 33.2 95 millions Fifteen years later, in 1850-51, the debt reached Rs 453 36 millions, and it stood at almost exactly that sum in the year preceding the mutiny of 1857 That convulsion caused a large increase in the rupee debt which stood at Rs 635 55 millions in 1859-60, the year following the suppression of the revolt The debt then gradually rose to Rs 697 57 millions by 1874-75, and another large increase occurred in the succeeding decade, due to the great famine of 1877-78 and to the military operations in Afghanistan which followed the famine By 1883-84 the rupee debt rose to Rs 931 25 millions There was then a further increase to Rs 980 4 millions in 1887-88, to Rs. 1,007 48 millions in 1888-89, and to Rs 1,052 8 millions in 1893-94 A three per cent loan was raised in July 1896, and the debt stood at Rs 1,082 12 millions at the end of 1896-97 and increased to Rs 1,191 99 millions in 1903-04, to Rs 1 258 75 millions in 1905-06, to Rs 1,366 67 millions in 1909-10, and to Rs 1,397 93 millions in 1911-12

Growth of Debt

The interest-bearing sterling debt was very small until the mutiny year, but the increase was rapid after that As in India, the rate of interest on the sterling debt has been gradually reduced from 4, 4½, and 5 per cent to 2½, 3, and 3½ per cent respectively At the end of 1910-11 proportions of the debt held at these rates are £11,892,207 at 2½ per cent, £66,724,530 (including 3 per cent, India stock of the nominal value of £3,000,000 issued in August 1900, £2,009,500 issued in 1901-02, £1,500,000 issued in May 1902, £1,500,000 issued in 1903-04, £2,500,000 issued in 1904-05, £12,089,146 issued in 1905-06 and £2,000,000 issued in 1906-07) at 3 per cent and £85,511,748 at 3½ per cent In May 1907 a 3½ per cent. sterling loan of £3,500,000 was raised and in January 1908 a further 3½ per cent loan of £5,000,000 was raised towards providing for railway capital expenditure of 1908-09 and for the discharge of certain Bombay, Baroda and Central India Railway debentures Similarly in February 1909, a loan of £7,500,000 and in January 1910 a further loan of £7,500,000 were issued at the same rate of interest. In October 1910, 3½ per cent India Bonds for £4,000,000 were issued for the discharge of the Madras and Indian Midland Railway debentures and in March 1911 a new 3½ per cent sterling loan of £3,500,000 was issued to provide funds for capital expenditure in 1911-12

Railway Expenditure.

A large proportion both of the sterling and of the rupee debt was incurred in connection with the construction of railways and other public works Considerable additions to the rupee and sterling debt were made in the two years 1896-97 and 1897-98 in consequence of famine, plague, war, and the prosecution of railway extension, and to the sterling debt in 1900 and subsequent years for the purchase of the G I P Railway, the discharge of its debentures, and advances of Indian Railway Companies In addition to the loans raised during 1907-08 the Secretary of State incurred liability in respect of £2,144,800 debentures of the Madras Railway Company on the purchase of the undertaking on the 31st December 1907 At the end of 1911-12 the total registered debt in India and England was distributed in the proportion of 12 and 88 per cent between "Ordinary Debt" (£33,041,732 with interest £1,435,152) and "Debt incurred for Railways and Irrigation Works" (£238,753,945 with interest £7,817,077)

Interest.

The interest on the rupee debt was at the rate of six per cent in 1822, and the debt bearing this rate was not finally paid off until 1858-59 Meanwhile the Government borrowed, from 1823 until 1852-53, at five per cent and from 1824 (but in a small way until 1835) at four per cent The bulk of the five per cent debt was converted to four per cent in 1854, but the shock to the credit of the State caused by the mutiny necessitated more borrowing at the higher rate of five per cent and that loan was not finally extinguished until 1871 Meanwhile the Government were compelled to borrow at 5½ per cent in 1859, and this 5½ per cent loan was not closed until 1878-79 A small sum was borrowed at 4½ per cent in 1856-57, and the debt at this rate of interest was largely increased in 1871 by the conversion of the 5½ per cent loan By 1878-79 practically the whole rupee debt bore interest at 4½ and 4 per cent Rs 151 48 millions at 4½, and Rs 613 38 millions at 4 per cent The 4½ per cent loans were all converted to 4 per cent by 1893, save for a sum of Rs 10 millions, being a loan from the Maharaja Holkar on account of the Indore State Railway, which is not convertible until about 1970 In the same year a small loan of Rs 35 5 millions was raised at 3½ per cent and in the following year the bulk of the 4 per cent. loans was converted to the rate of 3½ per cent In 1896-97 a new loan of Rs 40 millions was raised at 3 per cent On the 4th July 1900 a loan of Rs 30 millions was raised at 3½ per cent and this was followed by other loans, at the same rate of interest, of Rs 10 millions on the 14th August 1901, Rs 15 millions on the 9th July 1902, Rs 20 millions on the 22nd July 1903, Rs 30 millions on the 13th July 1904, Rs. 40 millions on the 2nd August 1905, Rs 45 millions on the 31st July 1906, Rs. 25 millions on the 17th July 1907, Rs 20 millions on the 4th August 1908, Rs 25 millions on the 28th July 1909, Rs 15 millions on the 20th July 1910, and Rs 20 millions on the 19th July 1911 At the end of 1911-12, Rs. 1,269 14 millions bore interest at 3½ per cent. Rs 84·49 millions at 3 per cent and Rs. 34·3 millions at 4 per cent.

Of the rupee debt it is estimated that including Rs 121 3 millions held in London, Rs 703·7 millions were held by Europeans at the end of 1911, and Rs 696 millions by Indians, the holdings by Indians being 50 per cent of the whole debt It should be noted, however, that the invested currency reserve is included in the sum held by Europeans No portion of the sterling debt is held by Indians

At the close of 1912-13 the debt may be placed at £280,000,000, of this about £42,000,000 is ordinary debt (*i e*, debt not represented by tangible assets) and £238,000,000 debt incurred for railways and irrigation The net unproductive debt is actually £ 12½ millions (1914)

AMOUNT of the RUPEE and STERLING DEBT and of the INTEREST thereon, annual INCREASE or REDUCTION of the DEBT; and the PROPORTION of the RUPEE DEBT held in LONDON, from 1820-21 to 1912-13

	Registered debt in India	Registered debt in London.	Interest payable.		Amount borrowed and paid off each year (Borrowed +, paid off—)		Proportion of the registered rupee debt held in London on 31st March.
					In India	In England	
	Rs.	£	Rs.	£	Rs.	£	Rs.
1820-21	27,24,77,630	5,762,888	1,63,15,400	253,247	—26,73,970	—109,268	
1830-31	33,12,96,680	3,750,479	1,74,19,770	93,377	+75,52,710	—45,413	
1840-41	29,47,65,040	1,756,992	1,35,37,050	59,856	+1,15,89,400	—400	
1850-51	45,42,87,550	3,920,592	2,12,39,750	136,482	+1,00,72,750	—100	
1860-61	63,44,58,100	28,496,917	2 88,34,460	1,249,832	—10,05,920	+4,138,000	
1861-62	63,42,08,450	32,116,217	2,88,32,440	1,457,874	—2,49,650	+3,619 300	
1862-63	63,82,11,060	31,860,017	2,89,95,320	1,430,765	+40,02,610	—256,200	(*a*)
1863-64	63,40,38,320	26 332,517	2,88,06,180	1,209,621	—41,72,740	—5,527,500	
1864-65	63,36,66,840	26,146,017	2,88,00,400	1,233,165	—3,71,480	—186,500	
1865-66	62,38,10,770	26,967,317	2,84,13,900	1,274,230	—98,56,070	+821,300	
1866-67	62,97,84,230	28,559,917	2,87,13,200	1,402,540	+59,73,460	+1,592,600	
1867-68	63,76,50,020	29,718,417	2,91,57,860	1,448,875	+78 65,790	+1,158,500	
1868-69	63,41,06,910	31,218,917	2,89,87,270	1,469,916	—35 43,110	+1,500 500	15,38,06,930
1869-70	65,59,34,220	35,217,617	2,98,17,500	1 629,868	+2,18,27,310	+3 998,700	16,24,51,720
1870-71	66,80,96,570	37,627,617	3,01,56,310	1,726,268	+1,21,62,350	+2,410,000	17,64,70,910
1871-72	67,96,89,420	39,012,617	2,98,08,300	1,731,618	+1 15,92,850	+1,385,000	13,56,38,630
1872-73	66,45,83,690	39,012,617	2,89,20,500	1,831,467	—1,51,05,730		13,04,77,110
1873-74	66,41,72,910	41,117,617	2,89,50,060	1,867,121	—4,10,780	+2 105,000	13,27,22,050
1874-75	69,84,99,590	48,597,033	3,03,35,320	2 165,364	+3.43,26,680	+7 479,416	14,05,71,800
1875-76	72,77,29,810	49,797,033	3,15,20,180	2,212,582	+2,92,30,220	+1,200,000	15,45,77,080
1876-77	71,92,31,260	55,397,033	3,10,98,710	2,436,271	—84,98,550	+5 600,000	14,21,01,660
1877-78	74,95,45,200	59,677,033	3,22,68,610	2,607,472	+3,03,13,940	+4,280,000	15,78,70,170
1878-79	78,83,89,260	59,029,117	3,25,77,260	2,581,555	+3,88,44,060	—647,916	17,14,82,760
1879-80	82,87,25,090	68,855,556	3,41,76,560	1,937,886	+4,03,35,830	+9,826,439	20,52,60,670
1880-81	85,95,97,460	71,429,133	3,55,92,700	2,846,478	+3,08,72,370	+2,573,577	20,26,31,450

(*a*) No information.

AMOUNT of the RUPEE and STERLING DEBT—(*contd*)

—	Registered debt in India.	Registered debt in London	Interest payable.		Amount borrowed and paid off each year (Borrowed +, paid off—)		Proportion of the registered rupee debt held in London on 31st March.
					In India	In England	
1881-82	88,65,31,620	68,181,947	3,66,43,280	2,708,198	+2,69,34,160	—3,287,186	22,65,59,550
1882-83	90,68,87,660	68,585,694	3,74,11,490	2,725,748	+2,03,56,040	+443,747	22,58,11,320
1883-84	93,19,13,840	68,108,837	3,84,91,140	2,704,207	+2,50 26,180	—476,857	22,08,75,180
1884-85	93,18,36,600	69,271,088	3,84,18,550	7,691,828	—77,240	+1,162.251	21,83,98,370
1885-86	92,70,39,820	73,806,621	3,77,38,380	2,833.068	—47,96,780	+4,535,533	20,71,23,580
1886-87	92,65,36,360	84,228,177	3,82,02,570	3,165,411	—5,03,460	+10,421,556	19,14,95,570
1887-88	98,08,98,620	84,140,148	4,03,78,580	2,918,039	+5,43,62,260	—88,029	20,81 88,870
1888-89	100,87,97,420	95,033,610	4,13,73,120	3,230,474	+2,78,98,800	+10,893,462	21,71,40,680
1889-90	102,76,11,750	98,192,391	4,21,56,080	3,327,348	+1,88,14,330	+3,158,781	21,59,40,490
1890-91 . . .	102,74,65,550	104,408,208	4,17,51,110	3,524,376	—1,46,200	+6,215,817	26,73,12,950
1891-92 . . .	102,69,23,170	104,404,143	4,17,15,000	3,602,349	—5 42,380	+2 995 935	27,50,58,410
1892-93	102,93,75,520	106,683,767	4,12,77,760	3,570,682	+24,52,350	—720,376	25,93,38,610
1893-94	105,54,60,780	114,113,792	4,20,92,060	3,687,986	+2,60,85,260	+7,430 025	24,16,55,410
1894-95	104,37,37,400	116,005,826	3,61,09,140	4,825,323	—1,17,23,380	+1,892,034	23,62,59,660
1895-96	1,3,78,89,280	115,903,732	3,64,00,740	3,607,832	—58,48,120	—102,094	25,35,07,520
1896-97	109,11,50,530	114,883,233	3,78,43,760	3,813 208	+5,37,61,250	—1,020,499	24,06,66,620
1897-98	111,69,56,340	123,274,680	3,87,11,060	3,940,776	+2,58,05,810	+8,391,447	21,50,87,030
1898-99	112,65,46,980	124,268,605	3,91,13,340	3,882,758	+95,90,640	+993,925	21,44,12,330
1899-1900	112,47,47,010	124,144,401	3,90,56,317	3,877,026	—17,99,970	—124,204	20,81,88,234
1900-01 . . .	115,33,19,058	133,435,377	4,00,58,600	4 158,351	+2,85,72.048	+9,290,978	22,18,12,135
1901-02	116,19,13,833	134,307,090	4,03,60,615	4,213,821	+85,94,775	+871 711	20,36,22,034
1902-03	117,55,40,660	133,796.261	4,08,37,864	4,213,537	+1,36,26,827	—510,829	18,63,35,034
1903-04 ..	119,42,43,035	133,045,844	4,14,90,065	4,238,273	+1,87,02,375	—750,417	17,13,92,234
1904-05	122,29,78,235	132,887,191	4,24,92,526	4,282,744	+2,87.35,200	—158,653	16,81,55,234
1905-06 .. .	126,08,10,618	146,457,439	4 38,10,365	4,715,233	+3 78,32,383	+13,570,248	16,43,82,933
1906-07	130,45,50,655	147,518,634	4,53,38,937	4,743,108	+4,37,40,037	+1,061,195	16,49,16,833
1907-08	132,82,94,955	156 481,074	4,61,66,110	5,053,632	+2,37 44,300	+8,962,440	15.23,21,733
1908-09 .	134,56,60,505	160,973,369	4,68,19,197	5,210,695	+1,73,65,550	+4.492,295	14,43,66,433
1909-10	136,84,33,105	170,105,911	4,76,47,428	5,530 758	+2 27,72,600	+9,132,542	15,21,19,933
1910-11 .. .	138,09,72,155	177,998,335	4,81,24,302	5,668,417	+1,25,39,050	+7,892,424	12,78,49,733
1911-12	139,96,36,205	178,486 597	4,87,76,458	5,705,597	+1,86,64,050	+488,262	11,73,03,533
1912-13	142,83,64,790	179,179,193	....	5,754,885	....	. ..	.

THE RUPEE DEBT.

Return of the Interest Bearing Rupee Debt of the Government of India as at 31st August 1914.

In Thousands of Rupees.

Particulars	Date of Issue	Conditions of Repayment.	Amount	Total.
Railway Loans—				
Maharaja Holkar 4½ p c	(1870–77)	After 101 years ..	10000	
Maharaja Scindia 4 p c .		Perpetual ..	15000	
Nawab of Rampur 4 p c	(1892–93)	After one year's notice to be given on or after 1st Dec 1917	4700	29700
Special Loans—				
Gwalior, 4 p c. 1887	....	By annual instalments of 12 lakhs.	12200	12200
Three and Half per cent				
1842–43 .. .	1st Feb 1843		225166	
1854–55	30th June 1854		331852	
Three and Half p c coupon			6150	
1865	1st May 1865		376507	
Reduced, 1879	16th Jan 1879		39712	
1900–1 .. .	30th June 1900		395769	
				1378156
1896–97	22nd July 1896		82141	82141
		TOTAL .		1502197

DISTRIBUTION OF RUPEE DEBT.

	Calcutta	Inland	Madras.	Bombay.	Total India.
Railway Loans ..	.	29700	. .	. .	29700
Special Loan ..	..	12200	....	. .	12200
3½ per cent. ..	58919	266687	87883	339699	1283388
3 per cent. ..	47571	12843	6417	12353	79184
	636690	321430	94300	352032	1404472

	Proportion in India held by		Held in London.	Unissued.	Total as above.
	Indians.	Europeans			
Railway Loans ..	29700	....	....	....	29700
Special Loan ..	12200	....	....	....	12200
3½ per cent. ..	723574	559814	94768	....	1378156
3 per cent. ..	30280	48904	2957	....	82141
	795754	608718	97725	....	1502197

STERLING DEBT.

Debt Bearing Interest	Capital of Debt. 31st March 1913	Capital of Debt. 31st March 1914	Rate %	Annual Interest payable 31st March 1913	Annual Interest payable 31st March 1914
		£			£
India 3½ per cent Stock ..	91276210	91211186	3½	3194667	3192392
India 3 per cent Stock ..	66480596	66212384	3	1994417	1986372
India 2½ per cent Stock .	11806336	11806337	2½	295158	295158
India Bonds	3000000	2500000	3½	105000	87500
East India Railway Debenture Stock .	1435650	1435650	4½	64604	64604
Eastern Bengal Ry Debenture Stock .	348666	348666	4	13946	13947
South India Ry Debenture Stock ..	425000	425000	4½	19125	19125
G. I P Railway Debenture Stock .	2701450	2701450	4	108058	108058
Indian Midland Ry Debentures	421200	407500	3½	16848	14262
	179162608	177048173			
Debt not bearing Interest—					
India 5 per cent Stock .	9305	9305			
India 4 per cent Stock ..	7278	7279			
		16,584			
Total Debt and Annual Interest thereon on 31st March 1914		177064757		.	5781418

INDIAN RAILWAY ANNUITIES.

	31st March 1913.	31st March 1914
East Indian Railway		£
Annuity terminating in 1953	850537	850538
Interest in lieu of deferred annuity . .	262000	262000
Eastern Bengal Railway Annuity terminating in 1957	116850	116851
Sindh Punjab & Delhi Railway Annuity terminating in 1958	371361	371361
G I P Railway Annuity terminating in 1948 .	1268516	1268516
Madras Railway Annuity terminating in 1956	488381	488381
Total Indian Railway Annuties on 31st March 1914 ..	3357615	3357647

THE INDIAN MINTS.

The Mint in Calcutta dates from the end of the 17th century. The present building, designed by Major N. W. Forbes, was opened in 1831, the central portico being held to be "a copy, on half dimensions, of the temple of Minerva at Athens." The Copper Mint, to the north-east of the Silver Mint, was opened in 1865

Mint Master, Lt.-Col W. G R. Cordue, R E.
Deputy Mint Master, Capt. G. H. Willis, M.V.O., R E
Assay Master, Lieut-Col. J. J. Bourke, I M S.
Deputy Assay Master, Lieut-Col. F. T. C. Hughes, I A., F.C.S.

The Bombay Mint—The first Mint established in Bombay, in 1670, was for the coinage of "rupees, pies and bujruks," authority for its working being granted by letters patent. The erection of the present Mint was sanctioned by the East India Company in 1823, and was designed by Major John Hawkins of the Bombay Engineers The cost of construction was estimated at 36 lakhs

Mint Master, Major A L. C. McCormick, R E.
Assistant Mint Master, Mr. A. E. B. Gordon.
Assay Master, Lt.-Colonel J. Lloyd Thomas Jones, I M S
Deputy Assay Master, Captain H. B. Drake, I M S

During the year 1912-1913 gold to the value of Rs 24,87,91,744 was tendered at the two Mints.

The Silver coinage for the year 1912-13 was as follows —

—	*Calcutta*	*Bombay.*	*Total.*
	Value in Rs	*Value in Rs*	*Value in Rs*
Rupees	7,79,22 000	10,96,07,154	18,75,29,154
Half-Rupees .. .	16,94,957	7,52,378	24,47,335
Quarter Rupees . .	23,96,761	5,69,097	29,65,858
One-Eighth Rupees .	17,44,933	6,82,664	24,27,597
Total	8,37,58,651	11,16,11,293	19,53,69,944

The work in 1912-13 was not confined to the re-coinage of 1835 and 1840 rupees and uncurrent coin, but new coinage on a large scale was undertaken from silver purchased in England The outturn of rupees was more than that of the previous year by about 16½ crores

During the year 5,672,075 British dollars of the outturn value in standard tolas of Rs 1,28,70,459 were coined at the Bombay Mint, against 37,470,509 British dollars of the outturn value of Rs 8 50,23 954 in the previous year The Bombay Mint also coined 444,628 five-cent pieces for the Singapore Government Coinage to the extent of Rs 24,08,653 was undertaken on behalf of the Junagadh Darbar which has adopted British silver currency in place of Koris in its territories

39,776,000 nickel one-anna pieces of the nominal value of Rs 24,86,000 were coined at the Bombay Mint during the year as compared with 41,760,000 pieces of the nominal value of Rs 26,10,000 in the preceding year

The net gain on the nickel coinage which passed into circulation amounted to Rs 22,02,778 against Rs 24,35,338 in the preceding year

The bronze coinage of the year consisted of pice, half-pice and pie-pieces of the aggregate value of about Rs 19,18,461 against Rs 9,25,625 in the previous year

The copper coinage comprised (1) cents of the value of Rs 76,028 executed for the Ceylon Government, and (2) of the value of Rs 6,750 for the Straits Government

During the year 1912-13 there was a net gain of Rs 12,72,178 on bronze and copper coinage, against Rs 9,02,671 in the preceding year

The Revenue and Expenditure of the two Mints (including interest on capital outlay and other *pro forma* charges) amounted to Revenue, Rs 42,93,964 and Expenditure, Rs, 28,61,157

The Gold and Silver Assays made during the year numbered

	Calcutta.		*Bombay.*	
Year.	*Gold*	*Silver.*	*Gold*	*Silver*
1912–13	423	31,313	858	38,926

The Indian denominations with their British equivalents are —

Pie	-	1/12 penny
Pice (3 pies)	-	1 farthing
Anna (12 pies)	=	1 penny.
Rupee (16 annas)	=	*1s 4d*

A lakh (lac) is 100,000 rupees and a crore is 100 lakhs

The equivalents of the rupee in various currencies are approximately as follows —

One rupee	=	1 68 franc (France, Italy, Belgium, &c)
,,	=	1 36 mark (Germany)
,,	=	1 6 krone (Austria-Hungary)
,,	=	0 324 dollar (United States)
,,	=	0 65 yen (Japan)

The denominations of currency notes in circulation are 5, 10, 20, 50, 100, 500, 1,000, and 10,000 rupees

HISTORY OF THE COINAGE.

The Indian mints were closed to the unrestricted coinage of silver for the public from the 26th June 1893, and Act VIII of 1893, passed on that date, repealed Sections 19 to 26 of the Indian Coinage Act of 1870, which provided for the coinage at the mints for the public of gold and silver coins of the Government of India After 1893 no Government rupees were coined until 1897, when, under arrangements made with the Native States of Bhopal and Kashmir, the currency of those States was replaced by Government rupees. The re-coinage of these rupees proceeded through the two years 1897 and 1898. In 1899 there was no coinage of rupees; but in the following year it seemed that coinage was necessary, and it was begun in February 1900, the Government purchasing the silver required, and paying for it mainly with the gold accumulated in the Paper Currency Reserve. In that and the following month a crore of rupees was coined and over 17 crores of rupees in the year ending the 31st March 1910, including the rupees issued in connection with the conversion of the currencies of Native States. From the profit accruing to Government on the coinage it was decided to constitute a separate fund called the Gold Reserve Fund as the most effective guarantee against temporary fluctuations of exchange The whole profit was invested in sterling securities, the interest from which was added to the fund. In 1906 exchange had been practically stable for eight years, and it was decided that of the coinage profits devoted to this fund, six crores should be kept in rupees in India, instead o being invested in gold securities The Gold Reserve Fund was then named the Gold Standard Reserve. It was ordered in 1907 that only one-half of the coinage profits should be paid into the reserve, the remainder being used for

capital expenditure on railways The Gold Standard Reserve was called into action before the year 1907-08 was out Exchange turned against India, and in March 1908, the Government of India offered bills on the Secretary of State up to half a million sterling, while the Secretary of State sold £1,000,000 Consols in order to meet such demands. During April to August, further sterling bills were sold for a total amount of £8,058,000. On a representation by the Government of India, the Secretary of State agreed to defer the application of coinage profits to railway construction until the sterling assets of the Gold Standard Reserve amounted to £25,000,000 On the 31st March 1913, the Reserve amounted to £22,571,333

Gold.

Since 1870 there has been no coinage of double mohurs in India and the last coinage of single mohurs was in the year 1891-92.

Act XXII of 1899, passed on the 15th September 1899, provided that gold coin (sovereign and half-sovereigns) shall be a legal tender in payment or on account at the rate of fifteen rupees for one sovereign

Silver.

The weight and fineness of the silver coins are :—

	Fine Silver grains	Alloy grains	Total grains.
Rupee .	165	15	180
Half-rupee	82½	7½	90
Quarter-rupee or 4-anna piece	41¼	3¾	45
Eighth of a rupee or 2-anna piece .	20⅝	1⅞	22½

One rupee = 165 grains of fine silver
One shilling = 80$\frac{4}{11}$ grains of fine silver
One rupee = shillings 2·0439.

Copper and Bronze.

Copper coinage was introduced into the Bengal Presidency by Act XVII of 1835, and into the Madras and Bombay Presidencies by Act XXII of 1844

The weight of the copper coins struck under Act XXIII of 1870 remained the same as it was in 1835. It was as follows :—

	Grains Troy
Double pice or half-anna .	200
Pice or quarter-anna .	100
Half-pice or one-eighth of an anna .	50
Pie, being one-third of a pice or one-twelfth of an anna . .	33⅓

The weight and dimensions of bronze coins are as follows :—

	Standard weight in grains troy	Diameter in millimetres
Pice . .	75	25·4
Half-pice	37½	21·15
Pie . .	25	17·45

Nickel.

The Act of 1906 also provides for the coinage of a nickel coin It was directed that the nickel one-anna piece should thenceforth be coined at the Mint and issue The notification also prescribed the design of the coin, which has a waved edge with twelve scollops the greatest diameter of the coin being 21 millimetres, and its least diameter 19 8 millimetres The desirability of issuing a half anna nickel coin was considered by the Government of India in 1909, but after consultation with Local Governments it was decided not to take action in this direction until the people had become thoroughly familiar with the present one-anna coin

The Paper Currency.

Under Acts VI of 1839, III of 1840, and IX of 1843, the Presidency Banks of Bengal, Bombay, and Madras were authorised to issue notes payable on demand, but the issue of the notes was practically limited to the three cities of Calcutta, Bombay, and Madras These Acts were repealed, on the 1st March 1862, by Act XIX of 1861, providing for the issue of a paper currency through a Government Department, by means of notes of the Government of India payable to bearer on demand Since then no banks have been allowed to issue notes in India

Act II of 1910 amended and consolidated the law on the subject By it, a note of the value of five, ten, or fifty rupees, as well as a note of any other denominational value which the Governor General in Council may, by notification in the *Gazette of India*, so specify, was declared to be a "universal currency note," that is, legal tender throughout British India and encashable at any office of issue in British India ; the then existing sub-circles of Cawnpore, Lahore, Karachi, and Calicut were abolished, and the first three of these constituted separate circles of issue in addition to Calcutta, Madras, Bombay, and Rangoon. At the same time, by a notification issued under the Act, the further issue of 20-rupees note was discontinued By another notification issued in 1911 under section 2 of the same Act a currency note of the denominational value of one hundred rupees was declared to be a "universal currency note"

Act VII of 1911 raised the invested portion of the Currency Reserve from 12 crores to 14 crores with permission to make the additional investment in sterling securities if desired.

Department of Paper Currency.

The function of this department is to issue without any limits, promissory notes (called currency notes) of the Government of India payable to the bearer on demand, of the denominations of Rs 5, 10, 50, 100, 500, 1,000, and 10,000, the issue being made in exchange for rupees or half rupees or for gold coin, which is legal tender, from any Paper Currency office or agency, and for gold bullion and gold coin, which is not legal tender, from circle offices on the requisition of the Comptroller General.

Supply and issue of Currency Notes.

Currency notes are supplied by the Secretary of State through the Bank of England on an indent from the Head Commissioner. The Head Commissioner or Commissioners supply

Currency Agents with all the notes required for the purposes of the Paper Currency Act Every such note, other than a "universal" note, bears upon it the name of the place from which it is issued and every note is impressed with the signature of the Head Commissioner or of a Commissioner or Deputy Commissioner

The officers in charge of the circles of issue are authorised to issue, from the office or offices established in their circles, currency notes in exchange for the amount thereof (1) in rupees or half-rupees or in gold coin which is legal tender under the Indian Coinage Act, or in rupees made under the Native Coinage Act, IX of 1876, and (2) on the requisition of the Comptroller General, to all treasuries, in gold coin which is not legal tender under the Coinage Act or gold bullion at the rate of one Government rupee for 7·53344 grains troy of fine gold Currency notes can also be issued against gold coin of bullion or silver bullion or sterling securities held by the Secretary of State for India in Council

Notes when legal tender.

Every note is a legal tender in its own circle (except by Government at the office of issue) for the amount expressed in that note, that is to say, whenever a note forms the integral sum or a portion, of any payment, either to Government on account of a revenue or other claim, or to any body corporate or person in British India, it is a legal tender Five, ten, fifty and hundred rupee notes are legal tender throughout British India

Notes of higher denominations than five, ten, fifty and hundred rupees are payable only at the office or offices of issue of the town from which they have been issued In ordinary circumstances every Government treasury, of which there are about 250 in British India, cashes or exchanges notes if it can do so without inconvenience, and when this cannot be done conveniently for large sums, small sums can generally be exchanged for travellers

Reserve.

The whole amount of currency notes in circulation is secured by a reserve of gold and silver coin or bullion and securities of the Government of India or of the United Kingdom The total amount of such securities is limited to 140 millions of rupees, of which not more than 40 millions of rupees may be in sterling securities Under the Act of 1882 the maximum limit of the securities was fixed at sixty millions of rupees, but, the issues having largely expanded, the Government of India was empowered by Act XV of 1890 to raise the limit to eighty millions The power was utilised to raise the invested reserve to seventy millions on the 19th December 1890, and to eighty millions a year later, on the 3rd December 1891 By notification No 5366 of the 18th December 1896, the invested reserve was raised to one hundred millions, the power to do so having been given by Act XXI of 1896 Act III of 1905 raised the limit to 120 millions and in August of that year 20 millions of the reserve were invested by the Secretary of State in consols and exchequer bonds In 1908-09 the exchequer bonds were replaced by Consols. By Act VII of 1911 the limit was raised further to 140 millions, and in April of that year 20 millions were invested by the Secretary of State in Consols.

Currency Chest.

Under the Gold Note Acts of 1898 and 1900, the Government of India had obtained authority to hold a part of the metallic portion of the reserve in gold coin (or temporarily in silver bullion) in London instead of in India. The object of these enactments was merely to afford temporary relief to the Indian money market in seasons of stress. A certain amount of gold had in this way been held in London during 1899 and 1900, but not to any large extent, and the occasion for doing so ceased, except in regard to gold in transit, from the middle of 1900 Act II of 1910, however, gives full power to hold the metallic portion of the reserve or any part of it, either in London or in India or partly in both places, and also in gold coin or bullion or in rupees or silver bullion, at the free discretion of Government subject only to the exception that rupees should be kept only in India and not in London A currency chest was accordingly opened in London and a sum of £6,000,000 was remitted from India in pursuance of this policy, and a further sum of £1,045,000 was transferred to the chest from the Secretary of State's balances during the course of 1905-06 On the 31st March 1913 the London currency chest held £6,000,000 on behalf of the Currency Reserve

Metallic Reserve.

The metallic reserve may consist of sovereigns, half sovereigns, rupees, and half rupees, and gold and silver bullion, the last named being valued at the sum spent on the purchase of such bullion No gold was contained in the reserve between March 1876 and February 1898, and the quantity increased very slowly until February 1899, but from that date it rose rapidly till the end of March 1900 when it amounted to £7,500,012 Government then took measures to reduce what was considered to be an inconveniently large gold reserve, and at the end of March 1901 the value of the gold reserve had fallen to £5,778,518 In the next three years it again increased continuously from £7,023,921 at the end of 1901-02 to £9,859,564 at the end of 1902-03 and £10,789,567 at the end of 1903-04 During the next three years it remained practically steady, the amount held on the 31st March 1907 being £10,688,841 In 1907-08 the serious monetary crisis in America and the contraction in the exports from India owing to the famine led to a very large increase in the demand for gold at the Currency offices with the result that on the 31st March 1908 the value of the gold reserve had fallen to £6,417,841 inclusive of £3,705,000 held in England Adverse trade conditions continued in 1908-09 and on the 31st March 1909 the gold reserve had dwindled down to £1,523,414, of which £1,500,000 was held in England Normal conditions returned in 1909-10 and the stock of gold in the reserve rose to £8,701,716 on 31st March 1910 On the 31st March 1913 the stock in the reserve amounted to £25,500,000.

Effect of the War.

The outbreak of the war found the Government of India, in the matter of the Paper Currency Reserve, as of all other reserves, in a strong position At the close of the financial year,

that is to say March 31st 1914, the actual state of the reserve, was as follows —

	31st March 1914 Rs
TOTAL CIRCULATION	66,11,75,935
Silver Coin in India .	20,53,47,916
Gold Coin and Bullion in India	22,43,53,073
Gold Coin and Bullion in England .	9,15,00,000
Securities held in India ..	9,99,99,946
Securities held in England .	4,00,00,000
TOTAL RESERVE	66,12,00,935

On the eve of the war, July 31st, the Reserve stood at the following figures —

	31st July 1914 Rs
TOTAL CIRCULATION .. .	75 41 53,000
Silver Coin in India	33,91,01,201
Gold Coin and Bullion in India	18,36,01 853
Gold Coin and Bullion in England	9,15 00,000
Securities held in India	9 99,99,946
Securities held in England	4,00,00 000
TOTAL RESERVE	75,41,53,000

It was the policy of the Government of India to give gold from the Paper Currency Reserve freely on demand But when the war broke out, it became apparent that gold was being withdrawn from the Reserve not to meet legitimate demands, but to speculate sovereigns were at a premium in the bazaar, and those who commanded funds took sovereigns from the Paper Currency Reserve and sold them at a profit Government accordingly declined to issue sovereigns in sums smaller than ten thousand pounds at a time, but as the speculators then clubbed together and formed syndicates to withdraw sovereigns, an absolute embargo was placed on the issue of gold The effect of these withdrawals, of the abolition of the Silver Branch of the Gold Standard Reserve, and of the transfer of gold from the Paper Currency Reserve to the Gold Standard Reserve in payment of Reverse Councils is seen in the last official statement showing the composition of the Paper Currency Reserve —

	7th November 1914 Rs
TOTAL CIRCULATION	60,79,91,870
Silver Coin in India . ..	31,93,97,948
Gold Coin and Bullion in India ..	7,20,93,976
Gold Coin and Bullion in England ..	7,65,00,000
Securities held in India ..	9,99,99,946
Securities held in England .	4,00,00,000
TOTAL RESERVE .	60,79,91,870

Interest.

The interest accruing on the invested reserve is entered in a separate account, and paid to the credit of the Government of India,under the head "Profits of note circulation" The interest on the one hundred and forty millions of rupees in the invested reserve amounted in 1911-12 to Rs 44,90,450 made up of Rs 34,70,420 in India and Rs 10,20,030 in England, the expenditure of the Department being about Rs 18,57,190 on the average for the last five years

Circulation

The average monthly circulation of the notes has been in millions of rupees —

Five years ending .	1885-86	142 65
" "	1890-91	171 67
" " ..	1895-96	282 44
" "	1900-01	265 39
" "	1905-06	361 80
" " .	1910-11	481 97
" "	1911-12	573 65

The circulation of the different denominations of notes on the 31st March 1893 and 1912 was as follows —

	1893 Rs	1912 Rs
5-rupee	24,77,280	1,29,99,385
10 "	3 91 73,560	15,09,07,400
20 "	66,01,660	13,12,660
50 "	1,16,24,100	1,89,62,750
100 "	5,68,06,800	16,52,20,900
500 "	2,53,24 000	2,80,51,000
1,000 " .	6,79,81 000	9,29,71,000
10,000 "	5,40,30,000	14 32,00,000

According to the latest official estimate the circulating medium is as follows —

Rupees	£120,000,000
Sovereigns . ..	£ 40,000,000
Currency Notes	£ 40,000,000

The Gold Reserve Fund.

The Gold Reserve Fund was first started in the beginning of 1901 when the profits which had accrued from the coinage of rupees from April 1900 amounting to £3 millions were credited to the fund, gradually remitted to England from time to time and there invested in sterling securities. In the following years the demand for rupees for trade requirements necessitated further heavy coinage and the investments held in the Gold Reserve Fund rapidly swelled by the credit of the profits and the interest thereon and amounted at the close of 1905-06 to £12½ millions. During the latter half of this year, abnormal trade activity resulted in an unprecedented demand for silver currency and necessitated exceptionally heavy coinage in a short space of time To avoid the possibility of a recurrence of similar inconvenience, a separate silver branch of the Gold Reserve Fund was formed and was brought up to its proposed limit of rupees 6 crores (£4 millions) by March 1907; and after being for a short time known as the "Gold and Silver Reserve Fund" it was finally named the Gold Standard Reserve At the close of 1906-07, the Reserve contained nearly £17 millions, of which £12½ millions were held in securities, £4 millions in rupees in India and the rest in gold in India and as a book credit It is not necessary in this report to recount the events of the latter half of 1907-08 It will be sufficient to mention that the sale in India during the first half of 1908-09 of sterling bills on London resulted in the withdrawal

from circulation in India of some Rs. 12 crores, the equivalent being withdrawn in gold by the Secretary of State from the Reserve in London, securities to the value of over £8 millions being put on the market By November 1908, the silver in the Reserve in India had reached 18 65 crores The subsequent improvement in trade conditions necessitated a portion of this silver being transferred to the Paper Currency Department to meet notes and frequent similar transfers continued to be made, the account being adjusted by a transfer in the opposite direction in London, made in gold from the Currency Reserve held there to the Gold Standard Reserve By March 1911, the silver branch in India contained only, 2 90 crores and the balance remained at this figure till September 1912, when the resumption of comage made it possible gradually to increase it up to Rs 6 crores, of which 4½ were held in Bombay

Effects of the War —The recommendations of the Currency Commission regarding the policy to be pursued towards the Gold Standard Reserve will be found explained in detail in the section Currency Commission (q v) Briefly, they were that the silver branch of the Reserve should be abolished, and the rupees in the Reserve transferred to the Paper Currency Reserve in exchange for an equivalent in gold, that a much larger gold holding, in liquid gold, should be aimed at, and that the Secretary of State should be prepared to sell sterling bills and telegraphic transfers on London, or Reverse Councils as they are sometimes called, on demand Unfortunately the war broke out before there was time for this policy to be carried into effect, so the emergency found the Reserve in a transition stage The measures adopted were prompt and efficacious The silver branch of the Reserve was abolished by transferring the rupees therein to the Paper Currency Reserve in exchange for an equivalent in sovereigns, so that the Reserve was composed entirely of gold and gold securities After a brief interval, necessary to consult, the Secretary of State, who naturally had to colour his arrangements by the abnormal financial conditions prevailing in London, a notification was issued early in August to the effect that Government would be prepared to sell sterling bills and telegraphic transfers on London to the extent of a million sterling a week, at the following rates —Bills 1-3-29 32d and telegraphic transfers 1-3-27 32 d This at once steadied the exchanges, which whilst they have been sluggish, have not fallen below gold point The appended tables will show the composition of the Gold Standard Reserve brought about by this policy, and the extent of the demand for sterling bills —

Strength of the Reserve —The balance of the Gold Standard Reserve on the 31st October 1914, in India and in England, amounted to £25,836,753 and was held in the following form —

	£
(1) Gold in India	6,233,000
(2) Gold set aside in the Bank of England ..	2,300,000
(3) Cash held with cash balance at the Bank of England	907,178
(4) British and Colonial Government Securities and Corporation of London Bonds (Market price on 31st March)	12,421,567
(5) British and Colonial Government Securities and Birmingham Corporation Bills since purchased (cost price)	949,898
(6) Book credit in Treasury Accounts—India	25,110
(7) Temporary loan to Treasury balances—India	3,000,000
	£ 25,836,753

Sterling Bills —The following table shows the details of the weekly allotments since the reverse remittances were first offered —

Date	Offered	Tendered	Allotted
	£	£	£
August 6	1,000,000	1,091,000	1,000,000
August 13	1,000,000	813,000	813,000
August 20	1,000,000	632,000	632,000
August 27	1,000,000	538,000	538,000
September 3	1,000,000	474,000	474,000
September 10	1,000,000	360,000	360,000
September 17	1,000,000	335,000	335,000
September 24	1,000,000	346,000	346,000
October 1	1,000,000	355,000	355,000
October 8	1,000,000	345,000	345,000
October 15	1,000,000	601,000	601,000
October 22	1,000,000	427,000	427,000
October 29	1,000,000	177,000	177,000
November 5	1,000,000		
November 12	1,000,000	94,000	94,000
November 19	1,000 000	390,000	390,000
November 26	1,000,000	560,000	560,000

GROSS REVENUE IN INDIA AND ENGLAND, IN £ (15 RUPEES=£1)

HEADS OF REVENUE.	1904–5	1905–6	1906–7	1907–8.	1908–9	1909–10.	1910–11	1911–12
PRINCIPAL HEADS OF REVENUE	£	£	£	£	£	£	£	£
Land Revenue	18,927,083	18,835,986	19,793,791	18,719,322	19,759,060	21,332,141	20,877,521	20,764,697
Opium	6,021,499	5,468,780	5,660,528	5,244,986	5,884,788	5,534,683	7,521,962	5,961,278
Salt	5,354,768	4,376,410	4,362,706	3,338,988	3,276,159	3,319,518	3,175,950	3,391,212
Stamps	3,738,362	3,926,364	4,029,908	4,259,649	4,344,156	4,548,304	4,811,691	4,815,129
Excise	5,353,425	5,687,820	5,898,219	6,227,010	6,389,628	6,537,854	7,030,314	7,609,753
Provincial Rates	1,036,653	953,664	516,671	525,829	533,595	539,223	554,378	548,680
Customs	4,361,771	4,348,017	4,351,692	5,004,494	4,832,264	4,965,118	6,619,009	6,468,567
Assessed Taxes	1,269,225	1,321,393	1,423,787	1 504,113	1,553,419	1,558,964	1,593,301	1,652,878
Forest	1,601,997	1,779,566	1,768,911	1,732,610	1,700,894	1,735,386	1,829,557	1,952,179
Registration	338,690	361,959	379,736	415,311	430,936	430,377	425,855	445,862
Tributes from Native States	633,844	597,430	600,986	584,520	589,636	588.307	607,447	595,005
TOTAL	48,637,317	47,657,389	48,786,935	47,556,832	49,294,535	51,089,875	55,046,985	54,205,240
INTEREST	839,322	934,181	972,193	965,757	987,325	1,184,343	1,465,439	1,448,741
POST OFFICE	1,574,241	1,650,724	1,751,146	1,823,999	1,825,620	1,927,229	1,996,922	2,134,279
TELEGRAPH	897,923	909,854	953,006	1,006,797	978,097	902,851	997,159	1,087.425
MINT	206,410	321,183	419.498	443,918	102,654	125,953	196,110	367,100
RECEIPTS BY CIVIL DEPARTMENTS								
Law and Justice								
Courts of Law	251,938	275,538	271,423	264,087	280,117	293,339	310,663	323,660
Jails	245,405	253,229	251,718	254,403	246,234	230,155	237,791	253,354
Police	173,992	169,872	150.310	153,651	158,123	148,950	155,373	122,738
Ports and Pilotage	142,163	145,496	143,962	138,870	139,988	140,083	146,531	151,737
Education	122,818	136,436	140,988	145,285	158,430	165,875	183,636	205,610
Medical	57,581	69,316	55,646	52,469	56,549	58,235	63,697	66 847
Scientific and other Minor Departments	86,608	84,323	86,782	89,154	106,536	109,438	113,432	114,185
TOTAL	1,080,505	1,134,210	1,100,829	1,097,919	1,145,977	1,146,075	1,211,123	1,238,131
MISCELLANEOUS RECEIPTS								
Receipts in aid of Superannuation, &c	191,885	196,421	191,887	221,636	195,011	192,086	195,489	201,470
Stationery and Printing	71,782	73,715	78,745	91,472	95,568	95,324	97,656	96,891
Exchange	94,065	82,870	190,022	94,511	.	44,481	70,084	105,697
Miscellaneous	272,527	334,487	478,947	304,012	285,126	373,997	314,662	409,018
TOTAL	630,259	687,493	939,601	711,631	575,705	705,888	677,891	813,076

GROSS REVENUE IN INDIA AND ENGLAND . IN £ (15 RUPEES=£1)—(*contd*)

HEADS OF REVENUE.	1904–5	1905–6	1906–7.	1907–8.	1908–9	1909–10	1910–11.	1911–12
	£	£	£	£	£	£		£
RAILWAYS:								
State Railways (Gross Receipts)	22,863,855	23,589,579	25,781,078	27,296,944	26,799,888	28,923,931	30,629,756	33,579,129
Deduct—								
Working Expenses and Surplus Profits paid to Companies.	11,276,013	11,647,231	13,252,245	15,078,834	16,913,089	16,536,801	16,787,641	17,745,049
Net Receipts	11,587,842	11,942,348	12,528,833	12,218,110	9,886,799	12,387,130	13,842,115	15,834,080
Guaranteed Companies (Net Traffic Receipts)	1,074,814	921,975	398,801	228,615	—961	—48		
Subsidized Companies (Government share of Surplus Profits and Repayment of Advances of Interest).	47,314	42,628	56,189	52,606	72,203	58,296	39,346	57,645
TOTAL .. .	12,709,970	12,906,951	12,983,823	12,499,331	9,958,041	12,445,378	13,881,461	15,891,725
IRRIGATION								
Major Works								
Direct Receipts	1,994,331	1,869 156	2,342,231	2,208,014	2,247,624	2,307,077	2,288,051	2,381,533
Portion of Land Revenue due to Irrigation .	893,250	968,779	1,006,981	1,040,533	1,091,044	1,117,388	1,178,005	1,351,465
Minor Works and Navigation . . .	179,100	164,673	183,705	232,045	219,334	235,691	228,465	247,054
TOTAL .	3,066,681	3,002,608	3,532,917	3,480,592	3,558,002	3,660,156	3,694,521	3,980,052
OTHER CIVIL PUBLIC WORKS .	254,481	254,504	287,863	249,066	287,938	268,786	293,833	326,924
RECEIPTS BY MILITARY DEPARTMENT								
Army								
Effective	844,384	1,058,373	1,095,514	908 549	764,740	875,557	948,154	1,061,030
Non-effective . . .	116,541	131,028	122,055	113,930	98,199	102,171	110,495	118,336
Re-organisation . .	6	295	.			.		
	960 931	1,189,696	1,217,569	1,022,479	862,939	977,728	1,058,649	1,179,366
Marine	203,791	143,770	148,175	87,686	125,448	83,460	91,787	84,900
Military Works	45,462	49,306	50,999	57,268	59,254	75,773	70,593	78,791
TOTAL	1 210,184	1,382,772	1,416,743	1,167,433	1,047,641	1,136,961	1,221,029	1,343,057
TOTAL REVENUE	71,107,293	70,841,869	73,144,554	71,003,275	69,761,535	74,593,495	80,682,473	82,835,750

The Currency Commission.

The Royal Commission on Indian Currency and Finance was appointed in April 1913, in order to inquire into certain questions arising out of the management of the Indian currency system and the control of Indian finance For some years, and particularly since the American crisis of 1907, when the Indian currency system was severely tried, much criticism had been levelled against the manner in which the principles laid down by the Fowler Committee of 1898 had been developed, and against the extent to which Indian funds and reserves had been drawn to London These criticisms were brought to a head when strong complaint was made in Parliament of the agency through which large purchases of silver were made for the Government of India in 1912

It was to settle these issues that the Commission was appointed, and it took evidence throughout the latter part of the year 1913

The Royal warrant appointing the Commission named Mr Austen Chamberlain, M P, as Chairman, and the following members Lord Faber, Lord Kilbracken, Sir Robert Chalmers, Sir Ernest Cable, Sir Shapurji Broacha, Sir James Begbie, Mr R W Gillan, C S I, Mr H N. Gladstone, and Mr John Maynard Keynes The personnel of the Commission commanded a wide measure of confidence. Mr Austen Chamberlain's long connection with the Treasury made him an excellent Chairman Lord Faber was well-known as the organiser of the Country Bankers' Association, Lord Kilbracken was long connected with the India Office as Sir Arthur Godley, Sir Henry Chalmers, in addition to his long experience at the Treasury, was Secretary to the Fowler Committee (he was appointed Governor of Ceylon and left England during the recess), Sir Ernest Cable is one of the best known business men of Calcutta, Sir Shapurji Broacha is the foremost Indian broker of Bombay, Sir James Begbie, a Presidency Banker and economist of great experience, is the senior Presidency Banker in India, Mr Gillan, after filling the office of Comptroller-General and head Commissioner of Paper Currency in India with distinction, holds the post of Financial Secretary to the Government of India, Mr Gladstone is partner in an important Calcutta firm and adds to his Indian experience a knowledge of business conditions in London, and Mr Keynes is a well-known writer on economics who has devoted a considerable amount of attention to the Indian currency system But apart from the actual personnel of the Commission, it was recognized that the Government, in appointing to the Commission none who were strongly identified with the system under criticism, had given conspicuous evidence of their desire to investigate impartially the whole question.

Terms of Reference.

The specific points referred to the Commission were to inquire into the location and management of the general balances of the Government of India, the sale in London of Council Bills and transfers, the measures taken by the Indian Government and the Secretary of State for India in Council to maintain the exchange value of the rupee in pursuance of, or supplementary to, the recommendations of the Currency Committee of 1898, more particularly with regard to the location, disposition, and employment of the Gold Standard and Paper Currency Reserves, and whether the existing practice in these matters is conducive to the interests of India, also to report as to the suitability of the financial organisation and procedure of the India Office, and to make recommendations To understand the trend of the inquiry, it is necessary to hark back a little The currency system of India until 1893 was based on the free coinage of silver Anyone tendering silver bullion at the Indian mints was entitled to receive an equivalent quantity of silver rupees, whose par value was two shillings But the discovery and development of the silver mines in America and elsewhere so vastly increased the quantity of silver produced that its value measured in gold rapidly declined At one time the gold value of the rupee fell as low as a fraction over a shilling This caused great embarrassment to the Government of India, which has every year to meet in gold in England large sums included generally under the name of the Home Charges These include interest on the sterling debt, pensions and furlough allowances payable in England, and stores They amount roughly to eighteen million pounds sterling a year. The depreciation in the sterling value of the rupee necessitated the devotion of a larger and larger number of rupees to this purpose, until the alternatives were either the imposition of additional taxation to a point which would be politically dangerous, or the adoption of some measures to raise the exchange value of the rupee Between 1878 and 1892, when these difficulties were most acute, the main object of the Government of India was to facilitate an international agreement which might cause a rise in the gold price of silver, and thus diminish the inconvenience arising from the retention of a silver standard for India. But when the prospects of an international agreement receded it was then decided to take independent action Acting on the recommendations of a Committee which was appointed in 1892 and reported in 1893, commonly called after its President, the Herschell Committee, the Government decided to close the Indian Mints to the free coinage of silver and to announce that although closed to the public, the mints would issue rupees to the public in exchange for gold at the ratio of fifteen to one, equivalent to one shilling and four pence the rupee

The Indian System.

The effect of this policy was steadily to raise the exchange value of the rupee, until in 1898 it had approximately reached the ratio to gold of fifteen to one The next point was to determine what further steps should be taken to give full effect to the principles laid down by the Herschell Committee and accepted by both Governments. These questions were referred to the Commission presided over by Sir Henry Fowler, which reported in 1898 This Commission produced a report of remarkable lucidity and ability, and contrary to general expectation it was practically unanimous. It recommended that a gold standard

should be established, and the ratio between the rupee and the sovereign was to be fifteen to one. The mints were to be opened for the comage of gold, but to remain closed to the public for the comage of silver Government alone were to have the right to com silver, subject to directions laid down, and the profits accumulated from this comage were to be accumulated to form a special reserve in gold. It is of the greatest importance to remember that the Fowler Committee recommended that there should be the normal accompaniment of a gold standard—a gold currency and a gold mint, and emphatically put aside the suggestion that there should be a gold standard without a gold currency—a system which has since obtained some measure of academic support under the name of the gold exchange standard The chief criticisms of the policy actually pursued centre round the broad issue that whilst accepting the Fowler Committee's recommendations in principle the Government of India, or rather the Secretary of State acting on the advice of a Finance Committee on which the Indian element was reduced until it disappeared, departed from them in practice With this introduction, we can consider the criticisms levelled at the practices specifically referred to the Chamberlain Committee.

Cash Balances.

The cash balances of the Government of India are held in part in India and in part in London This arises from the necessity of meeting obligations in both countries Formerly the Secretary of State managed his disbursements with a balance of between four and five millions sterling But from 1907 onwards this policy was reversed and enormous balances were heaped up in London

The growth of these balances is illustrated by the following figures,—

	£
1907	4,607,266
1908	7,983,898
1909 .	12,799,090
1910 . ..	16,697,245
1911	15,292,638
1912 .	18,390,013

It was contended that these balances should have been retained in India, and there used either for the reduction of taxation or for expenditure on ameliorative works like education, sanitation and medical relief The official explanation was that these balances were drawn to London to meet the convenience of trade, which had grown used to the convenience afforded by the sale of Council Bills far in excess of the Secretary of State's budgetted demands. Arising out of this question was a subsidiary one. It was remarked that the whole of the Secretary of State's cash balances were lent in London at low rates of interest In part these went to "approved" borrowers, on security, and when these were glutted, to the London joint stock banks—including those banks represented on the Finance Committee of the India Office Council—without security On the other hand the surplus balances of the Government of India in India were withdrawn from the money market and locked up in the Reserve Treasuries, with the effect of making money artificially dear every busy season, to the great disadvantage of the internal trade; and all attempts to have these funds placed at the disposal of the market had met with a practical *non possumus*

Council Bills.

Arising out of this question of the balances in London was the subsidiary one of the rates at which the Secretary of State sold Bills and Telegraphic Transfers on India The Secretary of State has to meet his Home Charges in London. To do this he sells what are called Council Bills every week These Bills are offered for tender at the Bank of England every Wednesday morning and successful tenderers are given Bills on Bombay, Calcutta and Madras, which are cashed at the Treasuries Inasmuch as a fortnight is lost by the time in transit, it is worth paying extra to obtain what are called Telegraphic Transfers, by means of which rupees can be obtained from the Treasuries in India almost immediately after the payment of gold into the account of the Secretary of State in London Telegraphic Transfers usually sell at a rate of one thirty-second above the rate for Bills In addition to the weekly allotment the India Office sell bills called "specials" between the weekly allotments, at one thirty-second above the auction rate The criticism directed against this practice was to the effect that on occasion lower rates were accepted than might have been obtained, and that Bills against the Gold Standard and Paper Currency Reserves were sold below gold export point, thereby diverting the natural flow of gold to India

Exchange Value of the Rupee.

The buttress of the gold standard under the system recommended by the Fowler Committee was to have been twofold—a gold currency, and a special reserve, built up out of the profits on coining It was made the ground of criticism that having decided to adopt these principles, the India Office did practically nothing to establish an effective gold circulation After one abortive attempt, the policy of accustoming the people to a gold circulation was abandoned On the other hand, the coining of rupees was prodigiously heavy During the years 1905-07 £42 millions' worth of rupees were added to the token currency, which is said to be the heaviest comage in the history of the world The result was that instead of endowing India with a gold currency and a subsidiary token comage, the vast bulk of the metallic circulation was in rupees The standard was gold, but the circulating medium was silver According to the latest returns the currency of India is made up of sixty crores of gold, sixty crores of notes, and one hundred and eighty crores of rupees. A certain amount of gold has flowed into the country and had passed into the circulation in the form of sovereigns, but it was contended that the prodigious coining of token rupees, the lack of any definite policy to popularise the sovereign, and the failure to open the Indian mints to the coinage of a gold piece of more convenient value than the fifteen rupees sovereign, had resulted in the establishment of a system never contemplated by the Fowler Committee, namely, an enormous token currency with a small gold circulation.

Gold Standard Reserve.

Failing an effective gold circulation, the fund formed from the profits on coining, called the Gold Standard Reserve, became the only effective buttress of exchange It was complained that whereas the principles laid down for the management of this fund were clear and definite, they had been systematically departed from in practice For instance, it is now admitted that the Fowler Committee meant that this fund should be held in gold in India. Contrary to the express desire of the Government of India, the Secretary of State decided that it should be held in securities in London. Then in 1906, in order to meet an embarrassing demand for rupees at the height of the busy season in India, it was decided to hold £4 millions of the Reserve in silver in India In 1907, pressed to find money for railway construction in India, the India Council decided to devote half the profits on coining to capital expenditure on railways These changes were made without consulting the great commercial interests affected, and so far as the diversion of a moiety of the profits on coining were concerned, in direct opposition to the policy of the Government of India

The critics maintained that their position was made good by the results of the crisis in America in 1907. The sudden cessation of the demand for Indian produce caused by the financial collapse in the United States, combined with a partial famine in India and the heavy arrival of imports in response to long-dated contracts, reversed the tide of exchange for the first time since the gold standard was established There was a demand for gold in London rather than for rupees in India The Gold Standard Reserve, which should have been readily available for this purpose, then stood at £50,000 in money at short notice and £14 million in securities There is no doubt that the weakness of the position thus revealed paralysed the action of the Government when the emergency arose Council Bills were unsaleable Gold was released only in driblets of £10,000 at a time, and exchange, which was to have been maintained at one and four pence, fell to one-three eleven-sixteenths Later, the India Office had to agree to sell sterling bills on London at gold export point, and £ 8 millions were taken in this way before the demand was stayed Various other expedients had to be adopted in order to weather the storm, and it has been calculated that the deterioration in the Secretary of State's position in the year of the crisis was not far short of £ 25 millions This experience has been cited as illustrative of the necessity of strengthening the gold reserves of India without any further tampering with the Gold Standard Reserve, of allowing that Reserve to grow without limit, and of keeping a substantial portion, if not the whole, in actual gold.

Apart from the withdrawal of the Gold Standard Reserve to London and its investment there, under an Act of 1905 a sum of £ 6 million of gold in the Paper Currency Reserve was withdrawn from the Indian treasuries and deposited in the Bank of England under the unfettered control of the Secretary of State The declared object of this fund was to facilitate the purchase of silver for coining. On the other hand critics pointed out that inasmuch as the Paper Currency was only redeemable in India, the proper place for the Paper Currency Reserve was in India and not in London Further, that although the fund was specially removed to London for the purchase of silver, silver had since been purchased from the cash balances.

Financial Organisation of the India Office.

The financial business of the India Office is managed by the Finance Committee This Committee exercises very wide powers In practice, it is said, the powers of the India Office are mainly exercised by the different committees into which it is divided The collective authority and influence of the Council are weak, and the Secretary of State and the Committees are supreme. Whilst this generally applies to the work of the India Office, it applies with particular force to the work of the Finance Committee Finance is a technical subject, with which few of the members of the Council are competent to deal Moreover, much of the work must be done from day to day, and cannot wait for the weekly meeting of the Council It was made a matter of complaint that the constitution of this Committee, which, to use the words of an ex-Viceroy, Lord Curzon, exercises wide powers, and acts, not only as financial arbiter, but almost financial autocrat, had undergone a marked change Whilst formerly there used to be upon it some member who had served the Government of India in the Finance Department, and on occasion a member who had been in the employ of one of the Presidency Banks this Indian element had been gradually reduced to vanishing point, until the Finance Committee of the India Office Council consisted of two London joint stock bankers and one member of the Home Civil Service, none of whom had any experience of Indian conditions It was argued that the Finance Department of the Government of India should always be represented on this Committee, by a retired officer, and if practicable, the Presidency Banks and Indian Commerce and industry

The Evidence.

The Commission commenced its sittings on May 27th, and rose for the recess on August 6th It then issued what has been called an interim report, but which never pretended to be anything of the sort, and was confined to a reprint of the evidence given up to that point, without comment of any description This blue book contained the important correspondence which had passed between the Government of India and the India Office on currency and finance questions, together with memoranda from the India Office outlining their policy on the principal subjects under examination It also contained the evidence of the official witnesses on behalf of the India Office—Mr. Lionel Abrahams, C. B., Assistant Under Secretary of State for India; Mr F. W. Newmarch, Financial Secretary at the India Office; Mr. Walter Badock, C.S I., Accountant General at the India Office; and Mr. H. H. Scott, Broker to the Secretary

of State in Council. Then followed many miscellaneous witnesses, whose names and qualifications are given below.

Sir Daniel Mackinnon Hamilton, nominated by the Bengal Chamber of Commerce. Indian landowner

Mr. J A Toomey, Manager of the National Bank of India, Limited.

Mr T. Fraser, Manager of the Chartered Bank of India Australia and China Nominated as their representatives by the Exchange Banks doing business in India

Mr O T. Barrow, C S I, formerly Comptroller and Auditor General in India (1906-1910), retired Witness on behalf of the Government of India

Mr Alfred Clayton Cole, Governor of the Bank of England, 1911-1913

Mr Harry Marshall Ross, retired Calcutta Export Merchant, late Honorary Secretary, Central Committee, Indian Currency Association. Nominated by the Bengal Chamber of Commerce

Sir Alexander McRobert, Indian Woollen Manufacturer, a former President of the Upper India Chamber of Commerce, and a former Member of the Legislative Council of the United Provinces Nominated by the United Provinces Government

Mr Bhupendra Nath Mitra, C I E, Assistant Secretary to the Government of India in the Finance Department Witness on behalf of the Government of India

Mr James N. Graham, nominated by the Bombay Chamber of Commerce

The Hon Montagu de P Webb, C I E, Chairman of the Karachi Chamber of Commerce

Mr William Bernard Hunter, Secretary and Treasurer of the Bank of Madras, and Chairman of the Madras Chamber of Commerce

Mr Charles Campbell McLeod, nominated by the Bengal Chamber of Commerce and the East India Section of the London Chamber of Commerce

Mr Marshall F Reid, C I E, Merchant, Member of the Legislative Council, Bombay

Mr Le Marchant, a former Member of the Indian Council and a former Chairman of its Finance Committee A Member of the Indian Currency Committee of 1898

Mr L. G Dunbar, Secretary and Treasurer of the Bank of Bengal

Mr H F Howard, C I E, I C S, Collector of Customs, Calcutta Witness on behalf of the Government of India

Mr Thomas Smith, nominated by the Government of the United Provinces for his knowledge of the Currency and Banking problems of North India

Mr M R Sundara Iyer, Secretary to the Economic Association, Madras. Nominated by the Madras Government

Final Meetings.

The Committee re-assembled on October 23rd and sat until November 14th During this period it heard the following witnesses —

Sir James Meston, K C S I, Lieutenant Governor of the United Provinces and formerly Secretary to Government in the Financial Department

Mr Morton Frewen.

Mr Vidya Sagar Pandya, Secretary of the Indian Bank Ld., Madras Nominated by the Madras Government

Mr Stanley Reed, L L D, Editor of 'The Times of India," Bombay

Mr F C Harrison C S I, Indian Civil Service (retired), who has held various posts in the Finance Department

Mr Lawence Currie, Member of the Indian Council and its Finance Committee

Lord Inchcape, a former member of the Indian Council and a former Chairman of its Finance Committee

Sir Felix Schuster, Bart,, Member of the Indian Council and Chairman of its Finance Committee

Mr Dadiba Merwanjee Dalal, Senior Partner Messrs Merwanjee and Sons, Stock, Bullion Exchange and Finance Brokers, Bombay Nominated by the Bombay Government

Sir Guy D A Fleetwood Wilson, G C I E, K C B, K C M G, late Finance Member of the Viceroy's Council

Mr Lionel Abrahams, C B, Assistant Under Secretary of State for India

Sir T W Holderness K C S I, Under Secretary of State for India.

THE REPORT.

The report was dated February 24th, 1914, some delay occurring through the necessity of referring it to Sir Henry Chalmers, who had taken up his post as Governor of Ceylon, and Sir Shapurji Broacha, who had been obliged to return to Bombay on account of the severe financial crisisis consequent on the failure of certain of the swadeshi banks The report was long and detailed, so the Commission furnished a summary of it, which condensed their opinions and recommendations in the following passages —

1. The establishment of the exchange value of the rupee on a stable basis has been and is of the first importance to India

2 The measures adopted for the maintenance of the exchange value of the rupee have been necessarily and rightly rather supplementary to, than in all respects directly in pursuance of, the recommendations of the Committee of 1898

3 These measures worked well in the crisis of 1907-08, the only occasion upon which they have been severely tested hitherto

4. The time has now arrived for a reconsideration of the ultimate goal of the Indian Currency system The belief of the Committee of 1898 was that a Gold Currency in active circulation is an essential condition of the maintenance of the Gold Standard in India, but the history of the last 15 years shows that the Gold Standard has been firmly secured without the condition

5 It would not be to India's advantage to encourage an increased use of gold in the internal circulation.

6. The people of India neither desire nor need any considerable amount of gold for circulation as currency, and the currency most generally suitable for the internal needs of India consists of rupees and notes

7. A mint for the coinage of gold is not needed for purposes of currency or exchange, but if Indian sentiment genuinely demands it and the Government of India are prepared to incur the expense, there is no objection in principle to its establishment either from the Indian or from the Imperial standpoint provided that the coin minted is the sovereign (or the half-sovereign), and it is pre-eminently a question in which Indian sentiment should prevail

8. If a mint for the coinage of gold is not established, refined gold should be received at the Bombay Mint in exchange for currency

9 The Government should continue to aim at giving the people the form of currency which they demand, whether rupees, notes or gold, but the use of notes should be encouraged

10. The essential point is that this internal currency should be supported for exchange purposes by a thoroughly adequate reserve of gold and sterling

11. No limit can at present be fixed to the amount up to which the Gold Standard Reserve should be accumulated.

12. The profits on coinage of rupees should for the present continue to be credited exclusively to the Reserve

13. A much larger proportion of the Reserve should be held in actual gold By an exchange of assets between this Reserve and the Paper Currency Reserve, a total of about £10,000,000 in gold can be at once secured This total should be raised as opportunity offers to £15,000 000 and thereafter the authorities should aim at keeping one-half of the total Reserve in actual gold

14 The Indian branch of the Gold Standard Reserve in which rupees are now held should be abolished, the rupees being handed over to the Paper Currency Reserve in exchange for gold

15 The proper place for the location of the whole of the Gold Standard Reserve is London

16. The Government should definitely undertake to sell bills in India on London at the rate of 1s 3 29-32*d* per rupee whenever called upon to do so.

17. The Paper Currency system of India should be made more elastic The fiduciary portion of the note issue should be increased at once from 14 crores to 20 crores, and thereafter fixed at a maximum of the amount of notes held by Government in the Reserve Treasuries plus one-third of the net circulation, and the Government should take power to make temporary investments or loans from the fiduciary portion within this maximum in India and in London, as an alternative to investment in permanent securities.

18 We recommend the immediate universalisation of the 500 rupee note and the increase of the facilities for the encashment of notes

19 The aggregate balances in India and London in recent years have been unusually large This has been due mainly, though not entirely, to accidental causes and to the exceptional prosperity of India

20, Caution is justifiable in framing Budgets in India, but has been carried rather further than was necessary in recent years

21 A change in the date of the commencement of the financial year from the 1st April to the 1st November or the 1st January would probably enable the Government of India to frame more accurate Budgets Such a change would also enable the India Office to fix the amount of their borrowings in London with closer regard to immediate needs We commend this proposal for favourable consideration

22 The practice of transferring revenue surpluses to London to be used in avoiding or reducing fresh borrowings for capital expenditure has been thoroughly justified in the interest of India, and the Secretary of State has made good use, for this purpose or for actual reduction of debt, of the balances from time to time accumulated in his hands

23 But the recommendations which we make as regards loans by Government in India may lead to a revision of the occasions though not of the extent, of transfers of money to London

24 The independent Treasury system of the Indian Government is not an ideal one It is partly responsible for the stringency which recurs annually in the Indian money markets

25. We recommend that the Government of India should make a regular practice of granting loans to the Presidency Banks from their surplus balances in India against security on terms to be negotiated with the Presidency Banks

26. In deciding upon the location of surplus balances, the Government of India and the Secretary of State should act in consultation, and, while the transmission of the necessary funds to London at favourable rates of exchange is the first consideration, the authority should have regard to all the factors including the possibility of utilising surplus balances for loans in India

27. In carrying out these recommendations, the authorities should proceed tentatively and with caution

28. We recommend that the amount of the annual rupee loans in India should be increased as much as possible The figures of recent loans appear to have been somewhat over cautious We call attention to the questions of relaxing

present regulations in regard to endorsements on rupee paper and of creating new forms of securities

29. The Secretary of State sells Council Drafts, not for the convenience of trade, but to provide the funds needed in London to meet the requirements of the Secretary of State on India's behalf

30. The India Office perhaps sold Council Drafts unnecessarily at very low rates on occasions when the London balance was in no need of replenishment, but we do not recommend any restrictions upon the absolute discretion of the Secretary of State as to the amount of drafts sold or the rate at which they are sold, provided that it is within the gold points The amount and occasion of sales should be fixed with reference to the urgency of the Government's requirements and the rate of exchange obtainable, whether the drafts are against Treasury balances or against the Reserves

31 There has been some excess of caution in the renewal of debt by the India Office during recent years

32 The system of placing portions of the India Office balance out on short loan with approved borrowers in the city of London is on the whole well managed, but we draw attention to—

(*a*) The term for which loans are made

(*b*) The desirability of giving greater publicity to the methods by which admission is gained to the list of approved borrowers

(*c*) Some defects in the list of approved securities and especially its narrow range

33 There is no ground for the suggestion that the City members of the Secretary of State's Council showed any kind of favouritism in placing on deposit with certain banks, with the directorates of which they were connected, a part of the India Office balance at a time when it was too large to be placed entirely with the approved borrowers But we call the attention of the Secretary of State to the desirability of avoiding as far as possible all occasion for such criticism, though it may be founded on prejudice and ignorance of the facts

34. We observe that in our opinion the time has come for a general review of the relations of the India Office to the Bank of England

35. The working of the present arrangements for the remuneration of the Secretary of State's broker should be watched, and if necessary they should be revised

36. We record our high opinion of the way in which the permanent staff, both in India and in London, have performed the complicated and difficult financial duties placed upon them

37. We recommend a continuance of a Finance Committee of Council as providing the machinery most suitable for the work required.

38 The Finance Committee should, if possible, contain three members with financial experience, representing —

(*a*) Indian Official Finance

(*b*) Indian Banking and Commerce.

(*c*) The London Money Market

In any case there should be at least one member with Indian financial experience The absence of any representative of Indian finance on the Committee since 1911 has resulted in giving undue prominence to the representation of London City experience

39 While we suggest that the changes recently proposed and now under discussion in the constitution of the India Council may require some modification in order to provide for the continuance of a Finance Committee of Council, we are in sympathy with the desire for expediting financial business, which is one of the objects in view.

40 The present arrangement under which the Assistant Under Secretary of State, having financial experience, is able to share with the Financial Secretary the responsibility for financial business in the India Office has many advantages For the future we recommend that either (1) the Under Secretary or Assistant Under Secretary of State should have financial experience as at present, or (2) there should be two Assistant Under Secretaries, of whom one should have financial experience

41 We are not in a position to report either for or against the establishment of a State or Central Bank, but we regard the subject as one which deserves early and careful consideration, and suggests the appointment of a small expert committee to examine the whole question in India, and either to pronounce against the proposal or to work out in full detail a concrete scheme capable of immediate adoption

A Note of Dissent.

The report was signed by Sir James Begbie subject to a note of dissent In this he pointed out that the currency policy directed to the attainment of stability in the exchange value of the rupee by means of gold reserves collected from the profits realised on the coinage of rupees had brought into existence an extensive token currency, which was not a desirable form of currency for a country which absorbs gold on a very large scale Sir James Begbie therefore held the view

" That the true line of advance for the currency policy is to discourage an extension of the token currency by providing increased facilities for the distribution of gold when further increases in the currency become necessary These greater facilities should, I consider, include the issue of gold coins from an Indian mint of a value more suitable for general currency use than the sovereign and half-sovereign, for the purpose of assisting the distribution of gold when, as is frequently the case, the balance of trade is strong in India's favour and gold arrives in considerable quanti-

ties I also think that supplies of gold coins should be laid down in the up-country districts with the object of giving the general public effective opportunities of obtaining gold coins

Action in India.

The publication of the report aroused surprisingly little interest Only one paper in India, and none in England, exhaustively analysed it Broadly speaking, it may be said that the report was approved by those engaged in the foreign trade, whilst a strong body of those interested in the internal trade shared the views of Sir James Begbie The statement of the Commission, that India neither desires nor needs a gold currency, was warmly canvased and in an address to the Finance Member in July the Indian Merchants' Bureau declared that the currency needs of India are silver and gold, not notes, and gold rather than silver In the course of the year the silver branch of the Gold Standard Reserve was abolished by transferring it to the Paper Currency Reserve, in return for an equivalent in gold, and a Notification was issued guaranteeing to sell sterling bills on the Secretary of State on demand, at gold export point. The actual sales are enumerated in the Gold Reserve Fund (p 179) The other steps to be taken were left to be decided after consultation with the official and unofficial bodies concerned So far as opinion was manifested it was opposed to the establishment of a State Bank and of a gold mint

The Railways.

The history of Indian Railways very closely reflects the financial vicissitudes of the country Not for some time after the establishment of Railways in England was their construction in India contemplated, and then to test their applicability to Eastern conditions three experimental lines were sanctioned in 1845 These were from Calcutta to Raniganj (120 miles), the East Indian Railway, Bombay to Kalyan (33) miles, Great Indian Peninsula Railway, and Madras to Arkonam (39 miles), Madras Railway. Indian Railway building on a serious scale dates from Lord Dalhousie's great minute of 1853, wherein, after dwelling upon the great social, political and commercial advantages of connecting the chief cities by rail, he suggested a great scheme of trunk lines linking the Presidencies with each other and the inland regions with the principal ports This reasoning commended itself to the Directors of the East India Company, and it was powerfully reinforced when, during the Mutiny, the barriers imposed on free communication were severely felt As there was no private capital in India available for railway construction, English Companies, the interest on whose capital was guaranteed by the State, were formed for the purpose By the end of 1859 contracts had been entered into with eight companies for the construction of 5,000 miles of line, involving a guaranteed capital of £52 millions. These companies were (1) The East Indian, (2) the Great Indian Peninsula, (3) the Madras, (4) the Bombay, Baroda and Central India, (5) the Eastern Bengal (6) the Indian Branch, now the Oudh and Rohilkund State Railway, (7) the Sind, Punjab and Delhi, now merged in the North Western State Railway, (8) the Great Southern of India, now the South Indian Railway The scheme laid the foundations of the Indian Railway system as it exists to-day

Early Disappointments.

The main principle in the formation of these companies was a Government guarantee on their capital, for this was the only condition on which investors would come forward This guarantee was five per cent, coupled with the free grant of all the land required, in return the companies were required to share the surplus profits with the Government, after the guaranteed interest had been met; the interest charges were calculated at 2*2d* to the rupee, the Railways were to be sold to Government on fixed terms at the close of twenty-five years and the Government were to exercise close control over expenditure and working The early results were disappointing Whilst the Railways greatly increased the efficiency of the administration, the mobility of the troops, the trade of the country, and the movement of the population, they failed to make profits sufficient to meet the guaranteed interest Some critics attributed this to the unnecessarily high standard of construction adopted, and to the engineers' ignorance of local conditions the result was that by 1869 the deficit on the Railway budget was Rs 166½ lakhs. Seeking for some more economical method of construction, the Government secured sanction to the building of lines by direct State Agency, and funds were allotted for the purpose, the metre gauge being adopted for cheapness Funds soon lapsed and the money available had to be diverted to converting the Sind and Punjab lines from metre to broad-gauge for strategic reasons Government had therefore again to resort to the system of guarantee, and the Indian Midland (1882-85), since absorbed by the Great Indian Peninsula, the Bengal-Nagpur (1883-87), the Southern Maratha (1882), and the Assam-Bengal (1891) were constructed under guarantees, but on easier terms than the first companies Their total length was over 4,000 miles

Famine and Frontiers.

In 1879, embarrassed by famine and by the fall of the exchange value of the rupee, Government again endeavoured to enlist unaided private enterprise Four companies were promoted —the Nilgiri, the Delhi-Umballa-Kalka, the Bengal Central, and the Bengal North-Western The first became bankrupt, the second and third received guarantees, and the Tirhut Railway had to be leased to the fourth A step of even greater importance was taken when Native States were invited to undertake construction in their own territories, and the Nizam's Government guaranteed the interest on 330 miles of line in the State of Hyderabad This was the first of the large system of Native State Railways In the first period up to 1870, 4,255 miles were opened, of which all save 45 were on the broad gauge, during the next ten years there were opened 4,239, making the total 8,494 (on the broad gauge, 6,562, the metre 1,865, and narrow 67) Then ensued a period of financial ease It was broken by the fall in exchange and the costly lines built on the frontier The Penjdeh incident, which brought Great Britain and Russia to the verge of war, necessitated the connection of our outposts at Quetta and Chaman with the main trunk lines The sections through the desolate Harnai and Bolan Passes were enormously costly, it is said that they might have been ballasted with rupees, the long tunnel under the Khojak Pass added largely to this necessary, but unprofitable outlay

Rebate Terms Established.

This induced the fourth period—the system of rebates Instead of a gold subsidy, companies were offered a rebate on the gross earnings of the traffic interchanged with the main line, so that the dividend might rise to four per cent, but the rebate was limited to 20 per cent of the gross earnings. Under these conditions, there were promoted the Ahmedabad-Prantej, the South Behar, and the Southern Punjab, although only in the case of the first were the terms strictly adhered to. The Barsi Light Railway, on the two feet six inches gauge, entered the field without any guarantee, and with rolling stock designed to illustrate the carrying power of this gauge. The rebate terms being found unattractive in view of the competition of 4 per cent. trustee stocks, they were revised in 1896 to provide for an

absolute guarantee of 3 per cent with a share of surplus profits, or rebate, up to the full extent of the main line's net earnings in supplement of their own net earnings, the total being limited to 3½ per cent on the capital outlay. Under these terms, a considerable number of feeder line companies was promoted, though in none were the conditions arbitrarily exacted. As these terms did not at first attain their purpose, they were further revised, and in lieu was substituted an increase in the rate of guarantee from 3 to 3½ per cent and of rebate from 3½ to 5 per cent. with equal division of surplus profits over 5 per cent in both cases. At last the requirements of the market were met, and there has since been a mild boom in feeder railway construction and the stock of all the sound companies promoted stands at a substantial premium.

Railway Profits Commence.

Meantime a much more important change was in progress. The gradual economic development of the country vastly increased the traffic, both passenger and goods. The falling in of the original contracts allowed Government to renew them on more favourable terms. The development of irrigation in the Punjab and Sind transformed the North-Western State Railway. Owing to the burden of maintaining the unprofitable Frontier lines, this was the Cinderella Railway in India—the scapegoat of the critics who protested against the unwisdom of constructing railways from borrowed capital. But with the completion of the Chenab and Jhelum Canals, the North-Western became one of the great grain lines of the world, choked with traffic at certain seasons of the year and making a large profit for the State. In 1900 the railways for the first time showed a small gain to the State. In succeeding years the net receipts grew rapidly. In the four years ended 1907-08 they averaged close upon £2 millions a year. In the following year there was a relapse. Bad harvests in India, accompanied by the monetary panic caused by the American financial crisis, led to a great falling off in receipts just when working expenses were rising, owing to the general increase in prices. Instead of a profit, there was a deficit of £1,240,000 in the railway accounts for 1908-09. But in the following year there was a reversion to a profit, and the net Railway gain has steadily increased. For the year ended March 1913 this gain amounted to £5 49 millions (Rs. 823 lakhs). Although in a country like India, where the finances are mainly dependent upon the character of the monsoon, the railway revenue must fluctuate, there is no reason to anticipate a further deficit, but every ground for hoping that the railway profits will fill the vacuum in the Indian revenues caused by the cessation of the opium trade with China.

Contracts Revised.

A very important factor in this changed position is the revision of the original contracts under which the guaranteed lines were constructed. The five per cent dividend, guaranteed at 22*d* per rupee, and the half-yearly settlements made these companies a drain on the State at a time when their stock was at a high premium. The first contract to fall in was the East Indian, the great line connecting Calcutta with Delhi and the Northern provinces. When the contract lapsed, the Government exercised their right of purchasing the line, paying the purchase-money in the form of terminable annuities, derived from revenue, carrying with them a sinking fund for the redemption of capital. The railway thus became a State line, but it was released to the Company which actually works it. Under these new conditions the East Indian Company brought to the State in the ten years ended 1909, after meeting all charges, including the payments on account of the terminable annuity by means of which the purchase of the line was made, and interest on all capital outlay subsequent to the date of purchase, a clear profit of nearly ten millions. At the end of seventy-four years from 1880, when the annuity expires, the Government will come into receipt of a clear yearly income of upwards of £2,700,000, equivalent to the creation of a capital of sixty to seventy millions sterling. No other railway shows results quite equal to the East Indian, because, in addition to serving a rich country by an easy line, it possesses its own collieries and enjoys cheap coal. But with allowance for these factors, all the other guaranteed companies which have been acquired under similar conditions as their contracts expired, have proportionately swelled the revenue and assets of the State. It is difficult to estimate the amount which must be added to the capital debt of the Indian railways in order to counterbalance the loss during the period when the revenue did not meet the interest charges. According to one estimate it should be £50 millions. But even if that figure be taken, Government have a magnificent asset in their railway property.

Improving Open Lines.

These changes induced a corresponding change in Indian Railway policy. Up to 1900 the great work had been the provision of trunk lines. But with the completion of the Nagda-Muttra line, providing an alternative broad gauge route from Bombay to Delhi through Eastern Rajputana, the trunk system was virtually complete. A direct broad gauge route from Bombay to Sind is needed, but chiefly for strategic purposes. The poor commercial prospects of the line and the opposition of the Rao of Cutch to any through line in his territories, keep this scheme in the background. There does not exist any through rail connection between India and Burma, although several routes have been surveyed, the mountainous character of the region to be traversed, and the easy means of communication with Burma by sea, rob this scheme of any living importance. Further Survey work was undertaken in November 1914, the three routes to be surveyed being the coast route, the Manipur route, and the yukond valley route. The metre gauge systems of Northern and Southern India must also be connected. But these works are subordinate to the necessity for bringing the open lines up to their traffic requirements and providing them with feeders. The sudden increase in the trade of India found the main lines totally unprepared. Costly works were necessary to double lines, im-

prove the equipment, provide new and better yards and terminal facilities and to increase the rolling stock Consequently the demands on the open lines have altogether overshadowed the provision of new lines Even then the railway budget was found totally inadequate for the purpose, and a small Committee sat in London, under the chairmanship of Lord Inchcape, to consider ways and means This Committee found that the amount which could be remuneratively spent on railway construction in India was limited only by the capacity of the money market. They fixed the annual allotment at £12,000,000 a year. Even this reduced sum could not be reached in practice, at once reached in practice although it has been provided during the past two years

Government Control

As the original contracts carried a definite Government guarantee of interest, it was necessary for Government to exercise strong supervision and control over the expenditure during construction, and over management and expenditure after the lines were open for traffic For these purposes a staff of Consulting Engineers was formed, and a whole system of checks and counterchecks established, leading up to the Railway Branch of the Public Works Department of the Government of India As traffic developed, the Indian Railways outgrew this dry nursing, and when the original contracts expired, and the interests of Government and the Companies synchronised, it became not only vexatious but unnecessary. Accordingly in 1901-02 Mr Thomas Robertson was deputed by the Secretary of State to examine the whole question of the organisation and working of the Indian Railways, and he recommended that the existing system should be replaced by a Railway Board, consisting of a Chairman and two members with a Secretary The Board was formally constituted in March 1905 The Board is outside, but subordinate to the Government of India in which it is represented by the Department of Commerce and Industry It prepares the railway programme of expenditure and considers the greater questions of policy and economy affecting all the lines Its administrative duties include the construction of new lines by State agency, the carrying out of new works on open lines, the improvement of railway management with regard both to economy and public convenience, the arrangements for through traffic, the settlement of disputes between lines, the control and promotion of the staff on State lines, and the general supervision over the working and expenditure of the Company's lines Two minor changes have taken place since the constitution of the Railway Board In 1908, to meet the complaint that the Board was subjected to excessive control by the Department of Commerce and Industry, the powers of the Chairman were increased and he was given the status of a Secretary to Government with the right of independent access to the Viceroy; he usually sits in the Imperial Legislative Council as the representative of the Railway interest In 1912 in consequence of complaints of the excessive interference of the Board with the Companies, an informal mission was undertaken by Lord Inchcape to reconcile differences The constitution of the Board is now undergoing further inquiry, and the development generally favoured in the establishment of a Railway Member of the Viceroy's Executive Council

Management.

The Railways managed by Companies have Boards of Directors in London They are represented in India by an Agent, who has under him a Traffic Manager, a Chief Engineer, a Locomotive Superintendent, a Storekeeper, a Police Superintendent, (who is appointed by Government), and an Auditor The State Railways are similarly organised, with a slightly different nomenclature, the head of the line is termed the Manager.

Clearing House.

Proposals have several times been made for the establishment of a Clearing House but the distances are too great The work which would ordinarily be done by the Clearing House is done by the Audit Office of each Railway

The Railway Conference.

In order to facilitate the adjustment of domestic questions, the Railway Conference was instituted in 1876 This Conference was consolidated into a permanent body in 1903 under the title of the Indian Railway Conference Association It is under the direct control of the railways, it elects a President from amongst the members, and it has done much useful work

The Indian Gauges.

The standard gauge for India is five feet six inches When construction was started the broad gauge school was strong, and it was thought advisable to have a broad gauge in order to resist the influence of cyclones. But in 1870, when the State system was adopted it was decided to find a more economical gauge, for the open lines had cost £17,000 a mile After much deliberation, the metre gauge of 3 feet 3⅜ inches was adopted, because at that time the idea of adopting the metric system for India was in the air The original intention was to make the metre gauge lines provisional, they were to be converted into broad gauge as soon as the traffic justified it, consequently they were built very light But the traffic expanded with surprising rapidity, and it was found cheaper to improve the carrying power of the metre gauge lines than to convert them to the broad gauge. So, except in the Indus Valley, where the strategic situation demanded an unbroken gauge, the metre gauge lines were improved and they become a permanent feature in the railway system Now there is a great metre gauge system north of the Ganges connected with the Rajputana lines and Kathiawar Another System in Southern India embracing the Southern Maratha and the South India Systems These are not yet connected, but the necessary link from Khandwa by way of the Nizam's Hyderabad-Godaveri Railway, cannot be long delayed All the Burma lines are on the metre gauge. Since the opening of the Barsi line, illustrating the capacity of the two feet six inch gauge, there has been developed a tendency to construct feeders on this rather than on the metre gauge.

STATISTICAL POSITION.

The Administration Reports on Indian Railways hitherto published have had reference to the working of each calendar year, the last report issued being that for the year 1912 Owing to the adoption by the principal railway administrations of the Government financial year for all accounts and statistical purposes, the reports will henceforth be published for the Government financial year which begins on the first of April, and the present statement accordingly deals with the transactions of the year 1st April 1913 to 31st March 1914

Capital.—The actual capital outlay (booked cost) on lines in which the State is financially interested (excluding premia for the purchase of Companies' lines) from the commencement of operations on all lines open at the close of the year 1913-14 amounted to Rs 4,40,15·43 lakhs and on lines then under construction to Rs 7,68 53 lakhs In addition Rs 79 34 lakhs were expended on miscellaneous items The total outlay thus amounted to Rs 4,48,63·30 lakhs

The actual expenditure during 1913-14, amounted to Rs 18 46 lakhs, distributed as follows —

	Rs
Open line works (excluding rolling-stock)	9,29,00,000
Rolling-stock	7,31,00,000
New Lines (excluding rolling-stock)	1,86,00,000
Total .	18,46,00,000

Results of Working.

The financial result of the working of the State Railways during the year 1913-14 is a return of Rs 856 lakhs Out of this a sum of Rs 145 lakhs (£968 thousand) was expended in the form of annuity payments in redemption of capital

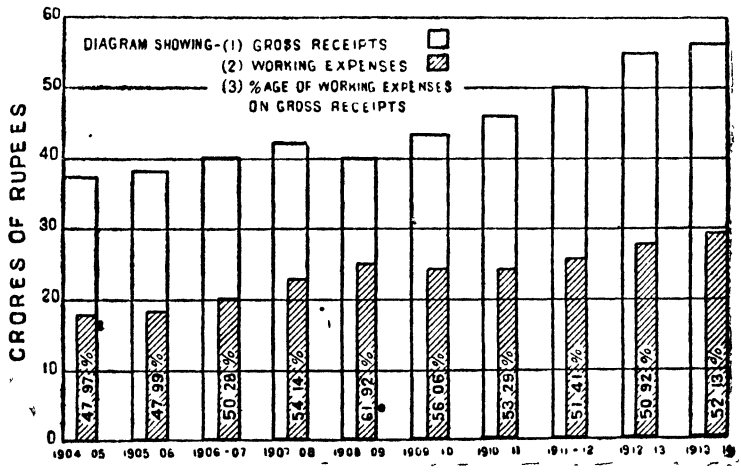
Yield Per Cent.

The gross earnings of all Indian railways during the year 1913-14 amounted in round figures to Rs 6,358 56 lakhs, compared with Rs 6,170 87 lakhs in 1912-13, being an increase of Rs 187 69 lakhs, while the working expenses were Rs 174 80 lakhs more than in 1912-13 The net earnings amounted to Rs 3,056 52 lakhs, against Rs 3,052 63 lakhs in 1912-13, or an increase of Rs. 12 89 lakhs These net earnings yielded a return on the capital outlay (Rs 49,509 00 lakhs) on open lines, *i e* on mileage earning revenue, of 6 19 per cent, as compared with 6 48 per cent in 1912-13. The corresponding actual return per cent for the previous calendar years is compared as follows —

1904	1905	1906	1907	1908	1909	1910	1911	1912	1913-14
6 00	6 07	5 96	5 86	4 33	4 81	5 46	5 87	6 77	6 19

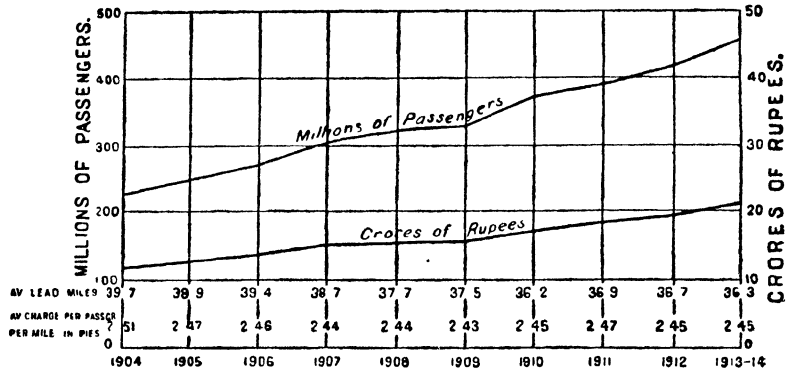
Percentage of Expenses.

The following diagram shows graphically the ratio of aggregate revenue expenditure to gross receipts of State lines, worked by the State and Companies, for the past ten years —



Passenger Earnings.

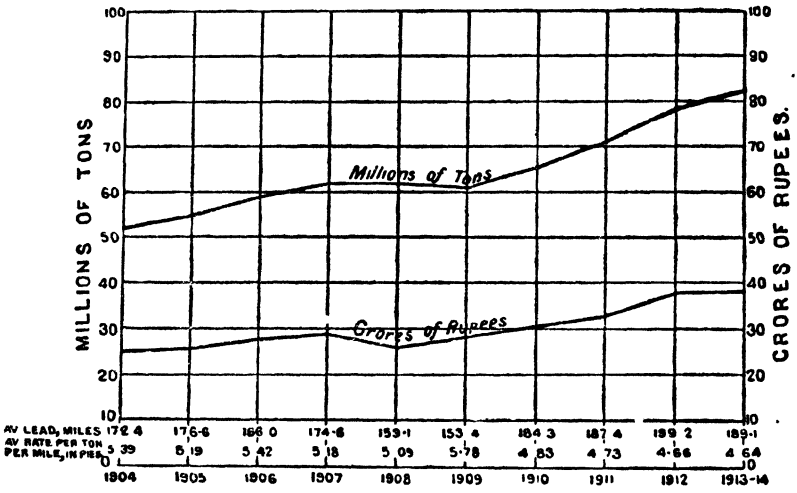
The number of passengers carried and the earnings therefrom are compared in the next diagram.



The increase in the passenger traffic during the year under review indicates a general development of traffic, brisk trade, an increased number of people attending *melas* and fairs and the result of opening new lines

Goods Traffic.

A similar comparison of the tonnage of, and earnings from, goods traffic is afforded by the following diagram —



It will be observed that though there was a considerable increase in the tonnage carried during the year under review this was not accompanied by a corresponding growth of earnings. The explanation is that the long distance traffic to the ports fell off on account of reduced exports of grain to Europe, owing to the failure of crops in the United Provinces and some parts of Bengal.

Mileage.—During the year 1913-14, 1,053 47 miles of railway were opened to traffic, bringing the total mileage open (after allowing for minor corrections due to realignments, etc) up to 34,656 miles The additional mileage was made up as follows —

	5'6" gauge	3'3⅜" gauge	2'6" gauge	2'0" gauge	Total
	Miles	Miles	Miles	Miles	Miles
State lines worked by the State	143 97	10 18	88 91		243 06
State lines worked by Companies	205 85	10 07	214 52		430 44
Branch line Companies' railways assisted under 'rebate terms'	70 24		71 65	14 28	156 17
Assisted Companies' lines subsidised by District Boards			36 80		36 80
Assisted Companies' lines receiving land only from Government		39 29			39 29
Native State lines worked by Native States		104 15	19 73		123 88
Native State lines worked by Companies			23 83		23 83
Total	420 06	163 69	455 44	14 28	1053 47

Ten Years' Progress —The progress made during the past ten years is summarised in the following table —

Gauge	Mileage opened at the end of									
	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913-14
5'6"	14,733	15,028	15,548	15,821	15,951	16,309	16,701	17,016	17,189	17,641
3'3⅜"	11,562	11,959	12,149	12,613	12,863	13,323	13,530	13,759	14,165	14,389
2 6"	942	980	1,071	1,234	1,394	1,443	1,436	1,632	1,692	2,174
2'0"	328	328	329	342	368	415	432	432	438	452
Total	27,565	28,295	29,097	30,010	30,576	31,490	32,099	32,839	33,484	34,656

Feeder Railways —As noted in the introduction, efforts have been made to secure the participation of private capital in railway construction in India under what are called the branch line terms In 1910 more liberal terms were offered for this purpose, and private enterprise was offered two alternative forms of assistance '—(1) a rebate paid by the parent line from its net earnings from traffic brought to it by the feeder railway sufficient to make up 5 per cent on the capital outlay, thus limiting the liability of the main line railway but holding out a fair prospect of a 5 per cent return , or (2) a firm guarantee of 3½ per cent on capital outlay

The result of offering these very liberal terms has been apparent during the period under review. Up to the end of the year 1912, 127¼ lakhs had been raised under the Branch line terms of 1910 fo the construction of 304 miles of railway During the period under review, Rs. 224 lakhs of capital was raised for the construction of 341 miles.

Of the ten companies which have been floated since 1911 under these terms, eight have taken advantage of the first alternative, the rebate terms, while two only have availed themselves of the guarantee terms The guarantee terms, however, offer one very distinct advantage so far as the shares of these companies are available for the investment of trust funds. In order to encourage investments of this class, one of the modifications introduced in 1913, was a clause in the terms which rendered it possible for companies to be floated partly on the rebate and partly on the guarantee terms, a concession of which advantage has been taken since the close of the period under review

Apart from concessions actually granted, there were under negotiation at the close of the year 1913-14, proposals for the construction of 22 miles of railway on the 2'-0" gauge, 1,648 miles on the 2'-6" gauge, 413 miles on the 3'-3⅜" gauge and 274 miles on the 5'-6" gauge, or an aggregate of 2,357 miles of railway involving a capital outlay of at least 12 crores of rupees equal to £8 million sterling It will be observed that light railways on the 2'-6" gauge, have so far proved most attractive to those interested in this class of enterprise.

Local Boards —Another agency for the financing of feeder railways has been found in the District Boards These local bodies have become fully alive to the advance in the general welfare of a district which is to be anticipated from the improvement of communications Since the year 1884, District Boards in Madras have been empowered to levy a special railway

cess not exceeding 3 pies per rupee of land revenue, and advantage had been taken of this, to collect, up to 31st March 1914, a sum of Rs 96,31,820, the greater part of this sum having been accumulated since 1903 During the period under review, it has been decided that all local Governments who may wish to do so, may legislate for the levy of a similar cess, by which means it is hoped that much encouragement may be given to the construction of local feeder railways at the cost of local funds Between the 1st January 1913 and the 31st March 1914, the following lines were sanctioned for construction at the cost of local funds —

(1) Podanur-Pollachi Railway (3′-3¾″) by the District Board of Coimbatore, 25 miles in length, and estimated to cost Rs 11½ lakhs

(2) Tenali-Repali Railway (5′ 6″) by the District Board of Guntur, 23 miles in length, and estimated to cost Rs 14 lakhs

In the former case, the District Board were permitted to raise a debenture loan of 5 lakhs to supplement the funds in hand from the proceeds of the cess

Accidents —The number of passengers killed from causes beyond their own control was 0 12 per million of passengers travelling, which gives an average of 1 in 286 45 millions of miles travelled

The large increase in the number of passengers killed by accidents during the year 1913 14, compared with the number killed during previous years, was due to serious accidents which occurred on the Great Indian Peninsula Railway on the 30th April 1913 and on the East Indian Railway on the 28th June 1913

The following are particulars of the more serious train accidents —

A goods train which was held up by the signals outside Borgaon Station, Great Indian Peninsula Railway, was run into on the 30th April 1913, by a passenger train moving in the same direction from Katepurna Three third class carriages were completely wrecked and 33 persons were killed and 20 seriously injured The direct cause was the defective working of the block instruments which would, if in order, have prevented the admission of the second train on the section until the goods train had reached Borgaon

The accident should have been averted by the adoption of the precautions enjoined by rules Observance of those rules in this case would have led the goods train staff to protect the train by sending a man back to warn any following train by means of hand signals and of detonators placed on the line The case was the subject of exhaustive departmental and judicial investigation as a result of which the responsible members of the inspecting station and train staff were sentenced to varying terms of imprisonment.

Another disastrous accident, in which 23 persons were killed and about the same number injured, occurred on the Ondal-Sainthia branch of the East Indian Railway Owing to abnormally heavy rain, the Salko river rose rapidly to an unprecedented extent and washed away the railway embankment just behind the south abutment of the bridge near Panchra station early in the morning of the 28th June 1913 A passenger train left Panchra at six o'clock, and fell into the gap caused by the breach, ten out of the eighteen vehicles on the train were completely destroyed, the engine and other vehicles also being badly damaged The impact of the train at the back of the abutment destroyed this and wrecked the bridge which had not itself been directly injured by the flood

A careful examination of this part of the line had been made only shortly before the date of the accident, and the occurrence can only be attributed to causes which could not have been foreseen, the flood level is reported to have been eight feet above any previously recorded On the same occasion a light engine ran into a breach caused by a washaway in the railway embankment near the Bukleswar bridge, the engine crew, with the exception of the fireman who was killed, fortunately escaped

Railway Staff —The total number of servants in railway employ at the close of the year was 633,691, of which number 7,988 were Europeans, 10,437 Anglo-Indians, 615,269 Indians Of the Europeans and Anglo-Indians 15,606 were enrolled as Volunteers At the close of 1913-14 there were 10,992 children and 8,943 apprentices and workmen attending the Railway Schools

THE CHIEF RAILWAYS IN INDIA.

The Assam-Bengal Railway, which is constructed on the metre gauge, starts from Chittagong and runs through Surma Valley across the North Cachar Hills into Assam It is worked under a limited guarantee by a company whose contract is terminable in 1921 The main line has an open mileage of 811 73, 54 38 miles are under construction or sanctioned bringing the total to 866·11. The total capital outlay is Rs 1,570 lakhs, gross earnings 70 lakhs, net earnings, 22 lakhs and the percentage of net earnings on the capital outlay 1 45 The loss to the State for 1913-14 was Rs 26,38,825

Bengal and North-Western.

The Bengal and North-Western Railway was constructed on the metre gauge system by a company without any Government assistance other than free land and was opened to traffic in 1885 The system was begun in 1874 as the Tirhut State Railway. In 1890 this line was leased by Government to the Bengal and North-Western Railway. Since then extensive additions have been made in both sections It is connected with the Rajputana metre gauge system at Cawnpore and with the Eastern Bengal State Railway at Khatihar and the Oudh and Rohilkhand Railway at Benares The open mileage is 2028 28 under construction or sanction 34 70, total 2,063 07 The total capital outlay amounts to Rs 989 lakhs, gross earnings 106 lakhs, net earnings Rs 63 lakhs and interest divided between the Government and Company Rs 119 lakhs, percentage of total net income on capital outlay 6 81

Bengal-Nagpur.

The Bengal-Nagpur Railway was commenced as a metre gauge from Nagpur to Chhatisgarh in the Central Provinces in 1887 A company was formed under a guarantee which took over the line, converted it to the broad gauge and extended it to Howrah, Cuttack and Katni In 1901 a part of the East Coast State Railway from Cuttack to Vizagapatam was

transferred to it and in the same year sanction was given for an extension to the coal fields and for a connection with the Branch or the East Indian Railway at Hariharpur Open mileage 2,730 35, under construction or sanctioned 283 36, total 3,013 71. The total capital outlay is Rs. 3,874 lakhs, gross earnings Rs 420 lakhs, net earnings 215 lakhs, percentage of net earnings on capital outlay is 5 55. The gain to the State is 73 lakhs

Bombay Baroda.

The Bombay, Baroda and Central India Railway is one of the original guaranteed railways It was commenced from Surat *via* Baroda to Ahmedabad, but was subsequently extended to Bombay. The original contract was terminable in 1880, but the period was extended to 1905, and then renewed under revised conditions In 1885 the Rajputana Malwa metre gauge system of State railways was leased to the Company and has since been incorporated in it On the opening of the Nagda-Muttra, giving broad gauge connection through Eastern Rajputana with Delhi, the working was entrusted to this Company On the acquisition of the Company in April 1907 the purchase price was fixed at £11,685,581 The statistical working of the broad gauge shows a mileage of 993 23, the capital outlay 2,356 lakhs, gross earnings 360 lakhs, net earnings 183 lakhs, percentage of net earnings on the capital outlay 7 80, gain to the State 67 lakhs

The metre gauge system of the Company shows a mileage of 1,815 64, total capital outlay 1,678 lakhs, gross earnings 289 lakhs net earnings, 147 lakhs, percentage of net earnings on the capital outlay 18 76, gain to the State 93 lakhs

Burma Railways.

The Burma Railway is an isolated line, and although various routes have been surveyed there is little prospect of its being connected with the Railway system of India on account of the difficult and sparsely populated country which intervenes It was commenced as a State Railway and transferred in 1896 to a Company under a guarantee The mileage is 1,341 85, total capital outlay Rs 1,748 lakhs, gross earnings 224 lakhs, net earnings 104 lakhs; percentage of net earnings on the capital outlay 5·98, gain to the State 28 lakhs Burma extensions have a total mileage of 253·18

Eastern Bengal.

The Eastern Bengal State Railway was promoted under the original form of guarantee and was constructed on the broad gauge The first portion of the line running to Calcutta over the Ganges was opened in 1862 In 1874 sanction was granted for the construction on the metre gauge of the Northern Bengal State Railway, which ran from the north bank of the Ganges to the foot of the Himalayas on the way to Darjeeling These two portions of the line were amalgamated in 1884 into one State Railway. The open mileage is 1669 74, capital total outlay 3,269 lakhs, gross earnings 375 lakhs, net earnings 166 lakhs, percentage of net earnings on capital outlay 5 09. Gain to the State 40 lakhs.

The East Indian.

The East Indian Railway is one of the three railways sanctioned for construction as experimental lines under the old form of guarantee The first section from Howrah to Pandua was opened in 1854 and at the time of the Mutiny ran as far as Raniganj It gives the only direct access to the port of Calcutta from Northern India and is consequently fed by all the large railway systems connected with it. In 1880 the Government purchased the line, paying the shareholders by annuities, but leased it again to the company to work under a contract which is terminable in 1919 The open mileage is 2,717 72 under construction or sanction 87 79, total 2,805 51 Total capital outlay (on 2,424 miles) Rs 6,670 lakhs, gross earnings 1,026 lakhs, net earnings Rs 613 lakhs, percentage of net earnings on capital outlay 9 20, gain to the State 237 lakhs

Great Indian Peninsula.

The Great Indian Peninsula Railway is the earliest line undertaken in India It was promoted by a Company under a guarantee of 5 per cent and the first section from Bombay to Thana was open for traffic in 1853 Sanction was given for the extension of this line *via* Poona to Raichur, where it connects with the Madras Railway, and to Jubbulpore where it meets the East Indian Railway The feature of the line is the passage of the Western Ghats, these sections being 15¼ miles on the Bhore Ghat and 9¼ miles on the Thul Ghat which rise 1,131 and 972 feet In 1900, the contract with the Government terminated and under an arrangement with the Indian Midland Railway that line was amalgamated and leased to a Company to work The open mileage is 3,025 90, under construction or sanction 260 80, total 3,286 76 The total capital outlay on the Company's own system of 2,484 03 miles is 5,949 lakhs, gross earnings, 857 lakhs, net earnings 340 lakhs, percentage of net earnings on capital outlay 5 72, gain to the State 2 95 lakhs

Madras Railway.

The Madras Railway was the third of the original railways constructed as experimental lines under the old form of guarantee It was projected to run in a north-westerly direction in connection with the Great Indian Peninsula Railway and in a south-westerly direction to Calicut. On the expiry of the contract in 1907 the line was amalgamated with the Southern Mahratta Railway Company, a system on the metre gauge built to meet the famine conditions in the Southern Mahratta Country and released to a large Company called the Madras and Southern Mahratta Railway Company The mileage is 3,132 83, under construction, or sanction 58 03, total 3,190·86. The capital outlay on the Company's own system of 2,552·53 miles is 3,204 lakhs, gross earnings 372 lakhs, net earnings 164 lakhs, percentage of net earnings on capital outlay 5·13, loss to the State 36 lakhs. (The annuity payment is Rs 73 lakhs)

The North-Western.

The North-Western State Railway began its existence at the Sind-Punjab-Delhi Railway, which was promoted by a Company under the original form of guarantee and extended to

Delhi, Multan and Lahore and from Karachi to Kotri. The interval between Kotri and Multan was unbridged and the railway traffic was exchanged by a ferry service In 1871-72 sanction was given for the connection of this by the Indus Valley State Railways and at the same time the Punjab Northern State Railway from Lahore towards Peshawar was begun In 1886 the Sind-Punjab-Delhi Railway was acquired by the State and amalgamated with these two railways under the name of the North-Western State Railway. It is the longest railway in India under one administration The opened mileage is 5,177 86, under construction or sanction 273 29, total 5,451 15 The statistical results of the working of the State owned 4,011 62 miles are total outlay Rs 8,324 lakhs, gross earnings 867 lakhs, net earnings 367 lakhs, percentage of earnings on capital outlay 4 41, gain to the State 54 lakhs

Oudh and Rohilkhand

Oudh and Rohilkhand Railway was another of the lines constructed under the original form of guarantee It began from the north bank of the Ganges running through Rohilkhand as far as Saharanpur where it joins the North-Western State Railway It was not until 1887 that the bridge over the Ganges was completed and connected with the East Indian Railway To effect a connection between the metre gauge systems to the North and those to the South of the Ganges, a third rail was laid between Bhurlwal and Cawnpore. The Company's contract expired in 1889 when the Railway was purchased by the State and has since been worked as a State Railway The opened mileage is 1 670 37, under construction and sanction 107 78, total 1,778 15. The total capital outlay on the State system of 1,638 35 miles is 2,164 lakhs, gross earnings 241 lakhs, net earnings 123 lakhs, percentage of net earnings on capital outlay 5 69 Gain to the State was 31 lakhs

The South Indian.

The South Indian Railway was one of the original guaranteed railways It was begun by the Great Southern India Railway Company as a broad gauge line, but was converted after the seventies to the metre gauge This line has been extended and now serves the whole of the Southern India, south of the south-west line of the Madras Railway Between Tuticorin and Ceylon a ferry service was formerly maintained. but a new and more direct route to Ceylon *via* Rameshwaram was opened at the beginning of 1914. As the original contract ended in 1907, a new contract was entered upon with the Company on the 1st of January 1908 The open mileage is 1,752 37, under construction or sanction 94 34, total 1,847 01 The statistical results of the working of the Company's system of 1,453 60 miles gives a capital outlay, 1,826 lakhs, gross earnings 280 lakhs, net earnings 117 lakhs, percentage of net earnings to capital outlay of 6·42, gain to the State 36 lakhs

The Native States.

The principal Native State Railways are The Nizam's, constructed by a company under a guarantee from the Hyderabad State, the Kathiawar system of railways, constructed by subscriptions, among the several Chiefs in Kathiawar, the Jodhpur-Bikaner Railway, constructed by the Jodhpur and Bikaner Chiefs, the system of railways in the Punjab constructed by the Patiala, Jind, Maler Kotla, and Kashmir Chiefs, and the railways in Mysore constructed by the Mysore State

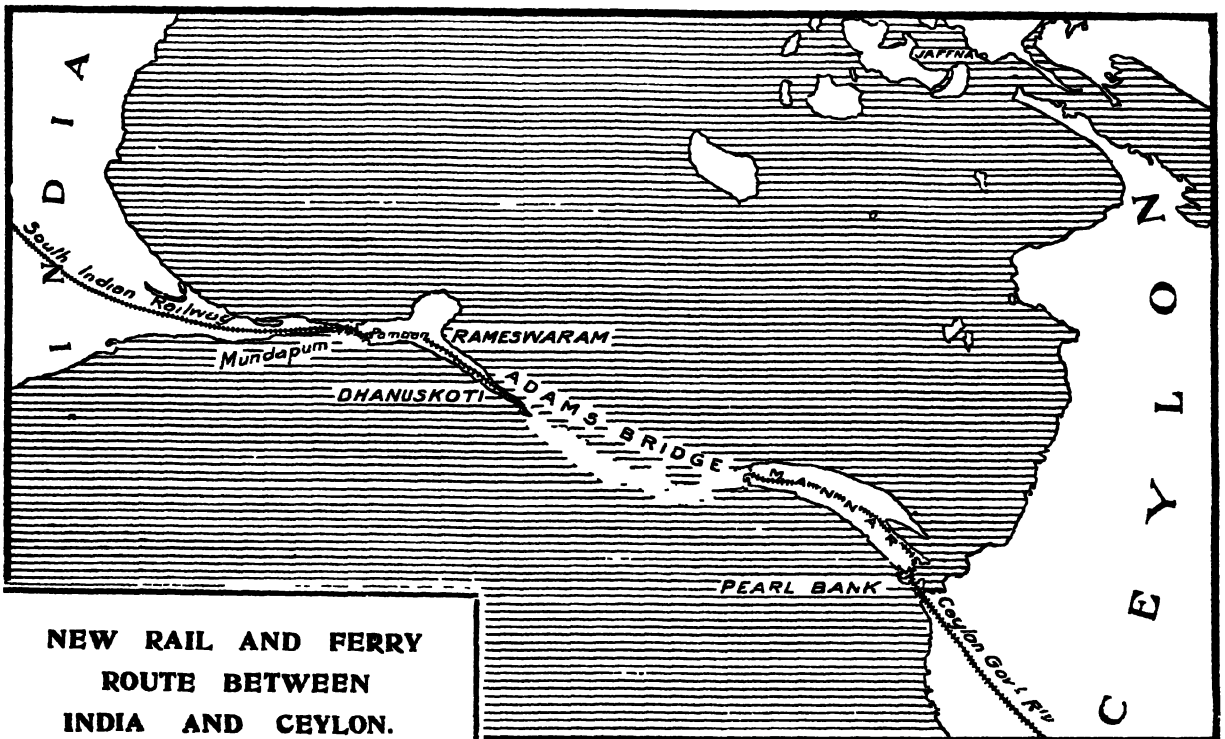
The Sara Bridge.

The construction of a bridge over the Lower Ganges near Sara, which was sanctioned in 1908, is approaching completion. It will provide through rail communication between the jute-growing area to the north-east of the site and Calcutta A very large traffic in wheat and seeds from the area to the north-west is also expected, and the gain in convenience, by obviating the present double transhipment and delay, is expected to lead to a large increase in the passenger traffic between Darjeeling and Shillong and Calcutta Work on the bridge itself was begun in 1911 It consists of 15 spans of 345 feet 1½ inches and six land spans of 75 feet, a total length of 5,900 feet It provides for a double line, and when it is complete the broad-gauge will be extended northward to Santahar, 52 miles from Sara, which will therefore become the changing station for Darjeeling passenger traffic to the metre-gauge system The bridge is to be carried on 16 piers for which well foundations 150 to 160 feet deep and 63 feet long by 37 feet wide have been sunk The great depth of the wells, the deepest in the world, is necessary owing to the scouring action of the river, and has been obtained by direct dredging with plant electrically driven from two power-houses, one on each bank The piers are formed of concrete blocks above the steel caissons, and of steel trestles above high flood level A very noticeable feature of the project is the approach work, which has cost Rs 84 lakhs On the left bank the approach is about 4 miles long and for 2,000 feet of that length is at the height of 50 feet above the surrounding country on the right bank the approach is three miles long The estimated cost of the whole undertaking is Rs 4,76,68,863 At the end of October 1914 all the Training Works except the protection of the Sara Bank had been completed and of the Bridge itself all wells had been sunk, all piers completed and all girders erected except one main span and three land spans and it was expected to open the Bridge for all descriptions of traffic early in 1915 The Engineer-in-Chief of the work is Mr. R R Gales, M Inst C E, M Am. Soc. C. E

INDIA AND CEYLON.

Works of great importance for improving the means of communication between India and Ceylon have been under consideration for many years Part of the programme has just been carried to completion and the formal ceremony of opening a new Indo-Ceylon route took place early in1914.

India and Geylon are separated by a distance of 57 miles and Nature has provided the foundations for a bridge or causeway between them The 57 miles are already partly spanned by the two islands of Rameswaram, close to the Indian coast, and Manaar on the Ceylon side, and between them lies Adam's Bridge, a series of shifting sandbanks with narrow channels between them.



NEW RAIL AND FERRY ROUTE BETWEEN INDIA AND CEYLON.

A careful survey was made of Adam's Bridge in 1838-39 by Lieuts Powell and Ethersley of the Indian Navy, and in 1877 Capt Shaw Stewart, of the Madras establishment, published a note on the question of a railway from India to Ceylon Authentic data for a profitable discussion of a bridge project were worked out in 1894, in which year Mr Waring, for the Government of Ceylon, and Mr Shadbolt, for the Government of Madras, each made an independent survey and published estimates and plans for a railway connection

Many interesting problems and proposals were set out in these last engineers' reports Both experts were agreed that a railway was well within the resources of both capital and science They discovered that since the survey of 1838-39 considerable alterations had taken place in the currents of the Gulf of Manaar and this pointed to the advisability of a bridge scheme rather than a causeway They estimated the cost of bridges along Adam's Bridge between Rameswaram and Manaar at two crores and eighty lakhs rupees

A consideration of great importance in regard to the proposal for a through railway is that the gauges of the approach lines on the Indian and Ceylon shores are different The Indian line is metre-gauge and the Ceylon railways are built to standard gauge

The South Indian Railway, during the years 1906-08, built a metre-gauge line across the island of Rameswaram, which is separated from the mainland by the Pamban Reef, 1½ miles long The South Indian Railway was carried to the farthest point on the mainland of India by the opening of the Madura-Mandapan line towards the end of 1902 Railway development in Ceylon has similarly progressed The Ceylon system now extends to the island of Manaar During the past two years a viaduct has been constructed connecting the South Indian Railway at Mandapan with the Rameswaram Island railway at Pamban, the nearest point on the island to the mainland A steel viaduct with a rolling lift bridge over the Pamban Channel, which occurs in the Pamban Reef, has been provided

The railways, therefore, approach to the northern and southern ends of Adam's Bridge Three turbine ferry steamers specially built in England were brought out in the autumn of 1913 to carry passengers between the respective railway termini The distance is 40 miles During the north-east monsoon the ferry steamers will probably run on the south-west side of the islands of Rameswaram and Manaar and during the south-west monsoon the passage may be made on the north-east side of the islands, so that passengers will always have the advantage of smooth water

Meanwhile, inquiries into the problem of the construction of a railway along Adam's Bridge are being pressed forward Another survey has been made and is stated to show that the cost of the project would be much less than was originally estimated The line would be 22 miles long and it is believed that the total expenditure for construction would not exceed 125 lakhs.

The new route was opened on February 24, 1914, but only for passenger service. It brings people living in the southern half of India, and in eastern India, within comparatively easy reach of Colombo and the several lines of steamers which call there on their voyages between Europe and Australian and Far Eastern ports

INVENTIONS AND DESIGNS.

The Inventions and Designs Act (No V) of 1888 was replaced by the Indian Patents and Designs Act (No II) of 1911, which came into force on the 1st January 1912 The object of the Act was to provide a simpler, more direct, and more effective procedure in regard both to the grant of patent rights and to their subsequent existence and operation The changes made in the law need not here be referred to in detail They gave further protection both to the inventor, by providing that his application should be kept secret until acceptance, and to the public, by increasing the facilities for opposition at an effective period. At the same time a Controller of Patents and Designs was established, with power to dispose of many matters previously referred to the Governor-General in Council, and provision was made for the grant of a sealed "patent" instead of for the mere recognition of an "exclusive privilege." The provisions of the Act follow with the necessary modifications those of the British Inventions and Designs Act of 1907

The records of proceedings under the Act of 1888 show a steady, though not very rapid increase in recent years in the number of applications for leave to file specifications The number of applications received increased from 524 in 1902 to 807 in 1911, and the number of specifications filed (*i e*, of "exclusive privileges" acquired) from 375 to 605 The total number of applications under the Act up to the end of 1911 was 11,679, as the result of which 9,113 specifications were filed. The number of patents in force at the end of 1911 was 2,917 Only a small proportion of the applications—some 60 or 70 a year—came during the decade from Indians. The majority came from persons not resident in India The range of inventions for which protection was sought was very wide, inventions connected with railways, electrical contrivances, and chemical appliances and preparations being most numerous

The number of applications to register copyright in designs is relatively very small. There were 87 in 1911. Applications for patents in 1912 numbered 678, of which 437 were accepted. 333 designs were registered during the year.

Main results of working of all Indian Railways treated as one system.

—	Particulars.		1906.	1907.	1908.	1909.	1910.	1911	1912.	1913-14.
1	Mileage open at close of the calendar year	Miles	29,089	29,957	30,576	31,490	32 099	32,839	33,484	34,652
2	Total Capital outlay, including ferries and suspense, on open lines (in thousands of rupees)	Rs	3,71,27,05	3,91,86,93	4,11,91,71	4,29,83,20	4,39,04,73	4,50,06,80	4,65,15,00	4,95,08,64
3	Gross earnings (in thousands of rupees)	„	44,13,58	47,30,51	44,82,69	47,06,38	51,14,22	55,27,92	61,65,07	63,58,56
4	Gross earnings per mile open	„	15,176	15,794	14,663	14,948	15,936	16,833	18,412	18,350
5	Gross earnings per mile open per week	„	292	304	282	287	306	324	354	353
6	Gross earnings per train-mile	„	3·85	3·79	3 51	3 67	3 85	3 87	4 04	4 07
7	Total working expenses (in thousands of rupees)	„	22,02,22	24,32,21	27,00,25	26,38,48	27,15,72	28,83,92	30,15,92	32,93,04
8	Working expenses per mile open	„	7,572	8,121	8,833	8,380	8,462	8,782	9,007	9,504
9	Working expenses per train-mile	„	1 92	1 95	2 11	06	2 04	2·02	1 98	2 11
10	Percentage of working expenses to gross earnings	Per cent	49 89	51·42	60 24	06	53·10	52 17	48 92	51·79
11	Net earnings (in thousands of rupees)	Rs	22,11,36	22,98,20	17,82,44	20,67,90	23,98,50	26,44,00	31,49,15	30,65,52
12	Net earnings per mile open	„	7,604	7,673	5,830	6.568	7,474	8,051	9,405	8,846
13	Net earnings per train-mile	„	1 93	1 84	1 40	1 61	1·81	1 85	2 06	1·96
14	Percentage of net earnings on total capital outlay (item 2)	Per cent.	5 96	5 86	4 33	4 81	5 46	5 87	6 77	6 19
15	Coaching train-miles (in thousands)	Train-miles	37,155	43,258	47,885	48,191	48,598	50,833	52,093	55,972

Main results of working of all Indian Railways treated as one system.

	Particulars		1906	1907	1908	1909	1910.	1911	1912	1913-14
16	Goods train-miles (in thousands)	Train-Miles	41,693	46,869	44,875	44,065	47,690	53,219	59,992	57,933
17	Mixed train-miles (in thousands) .	„	31,014	30,142	29,944	30,859	31,986	33,746	34,940	34,581
18	Total, including miscellaneous train-miles (in thousands) ..	„	114,489	124,786	127,881	128,260	132,823	142,944	152,761	156,276
19	Unit-mileage of passengers (in thousands) . .	Unit-miles	10,688,095	11,840,649	12,102,929	12,364,579	13,432,477	14,372,943	15,318,872	16,614,088
20	Freight ton-mileage of goods (in thousands)	Ton-miles	9,770,574	10,840,885	9,925,830	9,340,441	12,092,916	13,358,364	15,628,595	15,623,235
21	Average miles a ton of goods was carried	Miles	165·97	174·58	159 07	153 37	184 33	187·44	199 15	182·11
22	Average rate charged for carrying a ton of goods one mile .	Pies	5 42	5 18	5 09	5 78	4 83	4 73	4 66	4 64
	Average miles a passenger was carried									
23	1st class	Miles	100 71	100·89	100 76	103 35	99 72	111 60	106·54	112 46
24	2nd class	„	74 47	70 91	71 26	69 24	75 07	76·33	74 77	74 58
25	Intermediate class . ..	„	64·12	59 29	58 82	54 89	52 41	57·27	51 90	51 13
26	3rd class	„	40 36	39 65	38 65	38 74	37 12	37·72	37 81	37 40
27	Season and Vendors' tickets .	„	9·57	9 31	8 94	8 89	8 79	8·78	8 64	8·71
28	Total	„	39 43	38 71	37 68	37 54	36 15	36 87	36 72	36·30
	Average rate charged per passenger per mile.									
29	1st class	Pies	13·16	13·06	12 95	12·89	14 55	14·29	14 25	14 48
30	2nd class	„	5 74	5·76	5 76	5 94	6 67	6 73	6 64	6·60
31	Intermediate class	„	3·06	3 05	3 04	3 06	3 15	3·10	3·12	3·14
32	3rd class	„	2·29	2·28	2·28	2·28	2·28	2·30	2·30	2·29
33	Season and Vendors' tickets ..	„	1 38	1·40	1·39	1·42	1·42	1 43	1 45	1·42
34	Total	„	2·46	2·44	2·44	2·43	2·45	2·47	2·45	2·45

Mileage of Railway Lines in India open for Traffic at end of Year.

Railways.	1903.	1904	1905	1906.	1907	1908.	1909.	1910	1911.	1912.
STATE LINES.										
Agra Delhi Chord* ..	..	120	120	126	126	126	126	126	126	126
Assam-Bengal*	775	775	775	775	775	775	771	790	790	805
Baran-Kotah*	..	..	..	..	..	14	40	40	40	40
Bengal Central . .	125	128	†	†	†	†	†	†	†	†
Bengal-Nagpur*	1,682	1,696	1,690	1,695	1,734	1,774	1,791	1,808	1,852	1,852
Bezwada Extension*	21	21	21	21	21	21	21	21	21	21
Bhopal-Itarsi*	13	13	13	13	13	13	13	13	12	12
Bombay, Baroda & Central India*	504	504	504	504	504	504	504	504	504	2,762
Burma*	1,337	1,340	1,340	1,340	1,475	1,527	1,527	1,527	1,527	1,529
Cawnpore-Burhwal	80	80	80	80	80	80	80	80	80	80
Dhone-Kurnool* ..	..	..	..	..	..	..	32	32	32	32
East Indian* .. .	1,935	1,933	1,972	2,165	2,208	2,213	2 212	2,213	2,266	2,331
Eastern Bengal . .	977	971	1,235	1,272	1,274	1,274	1,503	1,508	1,510	1,570
Gondia-Chanda*	..	..	..	..	..	148	153	183	181	181
Great Indian Peninsula*	1,562	1,562	1,562	1,562	1,562	1,599	1,599	1,606	2,420	2,419
Indian Midland* .	805	805	808	810	810	813	813	813	‡	‡
Jodhpur-Hyderabad* . .	124	124	124	124	124	124	124	124	124	124
Jorhat Provincial State .	30	30	30	32	32	32	32	30	32	32
Jubbulpore-Gondia* . ..	77	214	229	245	250	250	275	275	275	276
Kalka-Simla	59	59	59	59	59	59	60	60	60	60
Kohat-Thal	92	92	92	92	92	62	62	62	62	62
Lucknow-Bareilly* .	237	237	237	237	237	237	237	237	258	296
Madras and Southern Mahratta* .	2,559	2,563	2,639	2,644	2,647	2,543	2,546	2,553	2,553	2,553
Morappur-Dharmapuri*	..	..	..	19	19	19	19	19	19	19
Mysore* .. .	296	296	296	296	296	296	296	296	296	296
Nagda-Muttra* .	..	..	..	..	101	137	339	339	339	..
Nagpur Chhindwara* .	..	..	..	..	..	..	..	..	51	51
Nilgiri* .	17	17	17	17	17	29	29	29	29	29
North-Western .	3,130	3,192	3,275	3,378	3,430	3,463	3,568	3,570	3,656	3,650
Nowshera-Durgai	40	40	40	40	40	40	40	40	40	40
Oudh and Rohilkhand .	1,101	1,158	1,165	1,213	1,223	1,223	1,231	1,327	1,434	1,524
Palanpur-Deesa* . .	17	17	17	17	17	17	17	17	17	17
Purulia-Ranchi*	..	..	..	..	72	72	73	73	73	73
Raipur-Dhamtari*	56	56	56	57	57	57	57	57	57	57
Rajputana-Malwa*	1,649	1,682	1,782	1,774	1,778	1,778	1,778	1,778	1,778	‖
South Indian*	1,123	1,123	1,123	1,186	1,207	1,323	1,323	1,323	1,323	1,323
Southern Shan States .	..	..	..	..	..	..	..	..	..	16
Tinnivelly-Quilon*	50	50	50	50	50	50	50	50	50	50
Tirhoot* ..	517	535	565	614	764	775	775	776	769	792
Tir ⁼ pattur-Krishnagiri* ..	..	..	25	25	25	25	25	25	25	25
Total	21,131	21,574	22,082	22,623	23,260	23,633	24,282	24,465	24,822	25,125

* Worked by a Company. † Amalgamated with Eastern Bengal Railway. ‡ Now worked by Great Indian Peninsula Railway.
‖ Amalgamated with Bombay, Baroda and Central India Railway.

Mileage of Railway Lines in India open for Traffic at end of Year.—*contd.*

Railways.	1903.	1904.	1905	1906.	1907	1908	1909	1910	1911	1912
ASSISTED COMPANIES.										
Ahmedabad-Dholka ..	33	33	33	33	33	33	33	33	33	33
Ahmedabad-Parantij ..	55	55	55	55	55	55	55	55	89	89
Amritsar-Patti ..				28	28	28	28	54	54	54
Arrah-Sasaram Light									61	61
Bakhtiarpur-Behar Light	18	18	18	18	18	18	28	28	33	33
Baraset-Basirhat Light			26	26	26	26	35	51	51	51
Barsi Light	22	22	28	79	79	79	79	79	116	116
Bengal and North Western	831	871	901	932	1,015	1,017	1,092	1,117	1,176	1,177
Bengal Dooars ..	153	153	153	153	153	153	153	153	153	153
Bezwada-Masulipatam						49	52	52	52	52
Champaner-Shivrajpur Light									20	20
Darjeeling-Himalayan	51	51	51	51	51	51	51	51	51	51
Delhi-Umballa-Kalka	162	162	162	162	162	162	162	192	192	192
Deoghur	5	5	5	5	5	5	5	5	†	†
Dibru-Sadiya	78	78	78	78	78	78	78	86	86	86
Hardwar-Dehra	32	32	32	32	32	32	32	32	32	32
Howrah-Amta	29	37	37	37	37	44	44	44	44	44
Howrah-Sheakhala	20	20	20	20	20	20	20	20	20	20
Jullundar Doab				..	.		.			28
Matheran					13	13	13	13	13	13
Mirpur Khas-Jhudo						.	50	50	50	50
Mirpur Khas-Khadro							.			50
Mymensingh-Jamulpur-Jagannathganj	53	51	51	53	54	54	54	55	55	55
Powayen Light ..	40	40	40	40	40	40	40	40	40	40
Rohilkhand and Kumaon	54	54	54	118	171	203	202	202	225	256
Shahdara (Delhi) Saharanpur Light					93	93	93	93	93	93
South Behar ..	79	79	79	79	79	79	79	79	79	79
Southern Punjab	425	425	502	580	575	575	575	576	576	576
Sutlej Valley		..						209	209	209
Tanjore District Board*	99	99	99	103	103	103	103	103	103	103
Tapti Valley ..	155	155	155	155	155	155	155	155	155	155
Tarkessur	22	22	22	22	22	22	22	22	22	22
Tezpur-Balipara	20	20	20	20	20	20	20	20	20	20
Thaton-Duyinzaik Light ..	8	8	8	8	.	.		..	.	..
Total ..	2,444	2,490	2,629	2,887	3,117	3,207	3,353	3,669	3,903	4,013

* Worked by a Company.

† Amalgamated with East Indian Railway.

Mileage of Railway Lines in India open for Traffic—*contd.*

Railways.	1903	1904	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.
UNASSISTED COMPANIES.										
Dehri-Rohtas Light				..	..	..	..	..	24	24
Jagadhri Light		..		..	.	..		.	3	3
Ledo and Tikak Margherita Colliery	11	9	9	9	9	9	6	6	6	6
Madaya Light				..			..	.		8
Tarakeshwar-Magra Light	31	33	33	33	33	33	33	33	33	33
Total	42	42	42	42	42	42	39	39	66	72
NATIVE STATE LINES										
Bhavnagar-Gondal-Junagad-Porbandar	334	334	334	334	334	338	338	374	..	..
Bhavnagar		..	.	..	..	.		.	158†	173
Bhopal-Itarsi*	44	44	44	44	44	44	44	44	44	44
Bhopal-Ujjain*	113	113	113	113	113	113	113	113	113	113
Bina-Goona-Baran*	146	146	146	146	146	146	146	146	146	146
Birur-Shimoga*	38	38	38	38	38	38	38	38	38	38
Cooch-Behar	34	34	33	34	34	34	34	33	33	33
Cutch		..	12	12	12	36	36	37	37	37
Dholpur-Bari		..	..	..	.	20	20	20	20	20
Dhrangadra	21	21	21	21	21	21	21	21	21	21
Gaekwar's Dabhoi*	90	95	94	94	94	94	94	94	94	118
Gaekwar's Mehsana*	93	93	93	93	93	130	138	138	138	138
Gondal-Porbandar		.	.	.			.		148†	148
Gwalior Light*	127	184	184	184	184	203	250	250	250	250
Hindupur*	51	51	51	51	51	51	51	51	51	51
Hingoli Branch*		.	.	..	..				.	50
Hyderabad-Godavari Valley*	391	391	391	391	391	391	391	391	391	391
Jaipur*	..	..	32	32	73	73	73	73	73	73
Jammu and Kashmir	16	16	16	16	16	16	16	16	16	16
Jamnagar	54	54	54	54	54	54	54	54	54	54
Jetalsar-Rajkot	46	46	46	46	46	46	46	46	46	46
Jodhpur-Bikaner	700	700	709	709	709	709	776	831	910	996

* Worked by a Company.

Mileage of Railway Lines in India open for Traffic at end of Year.—*concluded*

Railways.	1903	1904	1905	1906	1907.	1908	1909.	1910	1911.	1912
NATIVE STATE LINES.—*contd.*										
Junagad	.	.		.	.	..		.	89†	101
Khanpur-Chachran*	.	.		.					22	22
Kolar Gold Fields*	10	10	10	10	10	10	10	10	10	10
Kolahpur*	29	29	29	29	29	29	29	29	29	29
Kosamba-Zankhvav	.	..	.	..		.		..	..	26
Ludhiana-Dhuri-Jakhal	79	79	79	79	79	79	79	79	79	79
Morvi	94	94	94	94	94	93	93	93	93	93
Mourbhanj*	..	..	32	32	32	32	32	32	32	32
Mysore-Nanjangud*	16	16	16	16	16	16	16	16	16	16
Nagda-Ujjain*	34	34	34	34	34	34	34	34	34	34
Nizam's*	330	330	330	330	330	330	330	330	330	330
Parlakimedi Light*	25	25	25	25	25	25	25	25	25	25
Petlad-Cambay*	32	32	32	34	34	34	34	34	34	34
Pipar Road-Bahvi Light	.		..					19	19	25
Rajpipla*	37	37	37	37	37	37	37	37	37	37
Rajpura-Bhatinda	107	107	107	107	107	107	107	107	107	108
Sangli*	..	..	..		5	5	5	5	5	5
Shoranur-Cochin*	65	65	65	65	65	65	65	65	65	65
Tinnevelly-Quilon*	.	58	58	58	58	58	58	58	58	58
Udaipur-Chitorgarh	67	67	67	67	67	67	67	67	67	67
Vijapur-Kalol-Kadi*	42	42	42	42	42	42	42	42	42	46
Total	3,265	3,385	3,468	3,471	3,517	3,620	3,742	3,852	3,974	4,198
FOREIGN LINES.										
Karaikkal-Peralam*	15	15	15	15	15	15	15	15	15	15
Pondicherry*	8	8	8	8	8	8	8	8	8	8
West of India Portuguese*	51	51	51	51	51	51	51	51	51	51
Total	74	74	74	74	74	74	74	74	74	74
Grand Total	26,956	27,565	28,295	29,097	30,010	30,576	31,490	32,099	32,839	33,484

* Worked by a Company.

† Formerly worked as part of the Bhavnagar-Gondal-Junagad-Porbandar Railway.

Irrigation.

In the West irrigation is a rare luxury, designed where it exists to increase the productivity of a soil sure of a certain crop under a copious and well distributed rainfall In great parts of the East, and especially in India, it is a necessity to existence For in India there are large tracts, such as the deserts of Sind and the South-West Punjab, which are practically rainless, there are others, such as the Deccan plateau, where cultivation is exceedingly precarious, owing to the irregularity of the rainfall and the long intervals when the crops may be exposed to a blazing sun and a desiccating wind, there are some crops, like rice and sugar-cane, which, except in a few highly favoured districts, can only be matured by the aid of irrigation There are great areas where a single crop, which is called the *kharif*, or rain crop, can in normal years be raised by the unassisted rainfall, but where the second crop, the *rabi* or cold weather crop, is largely dependent on irrigation Inasmuch as in India sixty-five per cent of the population is still dependent upon agriculture for the means of livelihood, this brief summary indicates the enormous importance of irrigation to the community

Its Early History

It is natural, in such conditions, that irrigation in India should have been practiced from time immemorial In the history and imagery of the East,there is no figure more familiar than the well, with primitive means for raising the water, followed to-day much as they were in Bible days. In the early records of the peoples of India, dating back to many years before the Christian era, there are frequent references to the practice of irrigation Wells have been in use from time immemorial, most of the innumerable tanks in Southern India have been in use for many generations, the practice of drawing off the flood waters of the Indus and its tributaries by means of small inundation canals has been followed from a very early date, and in the submontane districts of Northern India are still to be found the remains of ancient irrigation channels, which have been buried for centuries in the undergrowth of the forests But in the direction of constructing large and scientific works for the utilisation of the surplus waters of the great river little was done before the advent of British rule, and they are comparatively of recent date.

The State Intervenes.

Irrigation works in India may be divided into three main heads—wells, tanks and canals The greatest and the most impressive are the canals, and these may arrest attention first, because they constitute one of the most enduring monuments to British rule They have in British India been constructed by direct State agency In the early days of modern irrigation certain works in the Madras Presidency were carried out by a guaranteed company, and the Orissa canal project was commenced through the same agency. Both Companies fell into difficulties, and the system into disfavour; during the Viceroyalty of Lord Lawrence it was decided that all irrigation works which promised a reasonable return on the capital expenditure should be constructed through direct agency, and should be constructed by the State from loan funds as productive public works.

The British Inheritance.

The British Government in India inherited a few major irrigation works One of these was the Grand Anicut—the local term for barrage—stretching across the width of the Cauvery River in Madras In the Punjab there were a few canals, chiefly inundation—that is above the normal bed of the river and fed from the flood current—constructed by the Muhammedan and Sikh rulers, and owing to its proximity to Delhi the waters of the Jumna were brought to the neighbourhood of the city by the Mughals It is doubtful if these works ever irrigated any considerable areas or conferred much benefit on the people, but they suggested the model on which the British engineers worked In Southern India Sir Arthur Cotton constructed the upper Anicut across the Coleroon River, so as to secure the full level required for the utilisation of the Grand Anicut across the Cauvery. He also designed the works which, constructed and improved at an outlay of three crores, irrigate more than two million acres in the Godaveri and Kistna deltas In Northern India Sir Probyn Cautley constructed the great Ganges Canal, which takes off from the river near Hardwar, and which in magnitude and boldness of design has not been surpassed by any irrigation work in India or elsewhere In this way were laid the foundations of the irrigation system in India The work was gradually pushed forward In Northern India a great system of canals was constructed, chiefly in the Punjab and the United Provinces Some of these, like the great Chenab Canal, ought to be classed amongst the wonders of the world It irrigates nearly two million acres, or about two-fifths of the cultivable area in Egypt, with an ordinary discharge of eleven thousand cubic feet per second, or about six times that of the Thames at Teddington The Chenab and the Jhelum Canals brought under irrigation great areas of Government waste, and thereby allowed the system of State colonisation, which relieved the congestion on the older villages of the Punjab, and established colonies of over one million of people on what had been the desolate abode of a handful of nomads In the Bombay Deccan a few protective works were constructed, like Lake Fife and Lake Whiting, drawing their supplies from the Ghats and spilling them over the arid tracts of the Deccan In Madras there was completed the boldest and most imaginative irrigation work in the world; by the device of constructing a reservoir at Periyar, on the outer slopes of the ghats, and carrying the water by means of a tunnel through the intervening hill the Madras Government turned the river back on its watershed and poured its waters over fertile lands starved by want of moisture But these Deccan works did not pay The cultivators would not use the water in years of good rainfall, and there was not enough to go far in seasons of drought; the inevitable result of such conditions was to concentrate attention upon the remunerative works on the rivers of the Punjab, and to leave protective irrigation to wilt for want of funds.

The Irrigation Commission.

In order to substitute policy for spasmodic effort, the Irrigation commission was appointed by Lord Curzon's Government in 1901 It made a detailed survey of the conditions of the country, and produced the report which is the foundation of Indian Irrigation policy to-day The figures compiled by the Commission illustrate the progress which had been made up to that period They showed that out of an area of 226 million acres annually under crop in the irrigating provinces of British India, in round numbers 44 millions acres, or 19½ per cent were ordinarily irrigated Of the total area irrigated 18½ million acres or 42 per cent was watered by State works (canals and tanks), and 25½ million acres, or 58 per cent from private works, of which rather more than one half was from wells During the previous quarter of a century the area irrigated by Government works had been increased by 8 million acres, or by eighty per cent and the Commission estimated that during the same period the area under private irrigation had increased by at least three million acres or a total addition to the irrigated area in British India of 11 million acres or 33 per cent Including the Native States the area under irrigation annually within the British Empire was placed at 53 million acres (19 million from canals, 16 million from wells, 10 million from tanks, and 8 million from other sources) The financial results for works of all classes are shown in the following table —

Class of Work	Capital Outlay to End of 1900-01 Lakhs of Rupees	Interest charges at 4 per cent on Capital Outlay Lakhs of Rupees	Net Revenue in 1900-01 Lakhs of Rupees	Net Revenue less charges for Interest. Lakhs of Rupees
Major Works	36,63 72	146 55	259 70	113.15
Minor Works for which capital accounts have been kept	320 04	12 80	19 18	6.38
Other Minor Works			87 87	87.87
Total	39,83 76	159 35	366 75	207.40

In round numbers the State irrigation works then yielded a net revenue after meeting all charges, including interest, of about two crores of rupees and irrigated annually over nineteen million acres

The Commission's Programme.

The Commission reported that the field for the construction of new works of any magnitude on which the net revenue would exceed the interest charges was limited, being restricted to the Punjab, Sind and parts of Madras—tracts for the most part not liable to famine They recommended that works of this class should be constructed as fast as possible, not only because they would be profitable investments but also because they would increase the food supply of the country Then addressing themselves to the question of famine protection, they worked out a very interesting equation Taking the district of Sholapur, in the Bombay Deccan, perhaps the most famine susceptible district in India, they calculated that the cost of famine relief in it was 5 lakhs of rupees a year From this deduction, and making allowance for the advantage of famine avoidance as compared with famine relief, they said that the State was justified in protecting the land in such a district at a cost of 221 rupees per acre For the general protection of the Bombay Deccan they recommended canals fed from storage lakes in the Ghats, where the rainfall has never been known to fail even in the driest years For Madras they recommended the investigation of the old Tungabhadra project, and of a scheme for storage work on the Kistna They proposed that Government should undertake the construction of protective works for the rice-growing districts of the Central Provinces and the Ken Canal project in Bundelkhand The Commission further sketched out a rough programme of new major works to be constructed in different parts of India, which would cost not less than 44 crores of rupees and would result in an increase of 6,500,000 acres to the irrigated area They estimated that the construction of these works would impose a permanent yearly burden of nearly 74 lakhs on the State, through the excess of interest charges on capital cost over the net revenue produced from the works. Against this would have to be set the reduction in the cost of future famines resulting from the construction of the works, which the Commission put at 31 lakhs per annum The balance of 43 lakhs would represent the net annual cost of the works to the State, or the price to be paid for the protection from famine which the works would afford, and for all other indirect advantages which might be attributed to them.

The New Policy.

The principal effect of the Irrigation Commission's report was to substitute policy for spasmodic effort, and the progress since made has been remarkable On the North-West Frontier there was completed the Upper Swat Canal, which taking out of the Swat River at Amandara passes the Malakand mountains through a tunnel, rushes down the steep torrent bed of the Dargai Valley, and now irrigates the fertile land at the foot of the hills. The estimated cost was Rs 182 lakhs (£1 216 millions) the annual irrigation 381,562 acres, and the return on capital cost 8 per cent The value of this canal is not to be measured in figures The region where the drill and the hammer pounded the rocks was ablaze with tribal warfare so recently as 1897, and the canal and the locomotive have proved far more effective means of taming the

fractious tribesmen than shrapnel and bullets Other works are designed in the North-West and in Baluchistan, but until recently the whole labour force was absorbed by the Upper Swat Canal.

The New Works.

The most dramatic irrigation work in the country is now approaching completion in the Punjab It is commonly called the Triple Project. The problem which faced the engineers was one of unusual complexity The whole cold weather flow of the Chenab and the Ravi is absorbed by existing works But in the north is the Jhelum, whose cold weather flow was running largely to waste The question was how to bring the surplus waters of the Jhelum to the desolate area of Crown waste called the Lower Bari Doab The first suggestion was to carry the water direct, but this was financially impracticable. The waters of the Jhelum are now taken off and after enough has been utilised to irrigate a new acreage of 345,000 on the Upper Jhelum, the surplus is carried to the Chenab and discharged into that river above the existing weir at Khanki, near Wazirabad This allows the use of an equivalent amount of the cold weather flow of the Chenab for other purposes It is drawn off at Merala, and part of it used to water the 648,000 acres commanded by the new Upper Chenab Canal The surplus is takem off by another canal, it crosses the Ravi River by what is termed a "level crossing" at Bulloki, and is then poured over the Lower Bari Doab, where it will irrigate a further 878,000 acres The effect of this great work, which is now approaching completion, will be to irrigate an area of 1,871,235 acres a year, at a capital cost of £6,912,132, to produce a net revenue of £518,550 and to return 7 5 per cent on the capital outlay

United Provinces and Bombay.

In the United Provinces the last decade has been one of unparalled activity, though there is no single work to challenge the Triple Project, a great system of productive works south of the Jumna and Ganges will thoroughly protect a very large part of the area which is subject to famine and scarcity. In the Bombay Deccan a beginning has been made with the chain of works, fed from reservoirs in the Ghats, which will break the back of any future drought. The Godavari Canals, costing Rs. 95 lakhs, and irrigating 69,919 acres are nearly finished; the Pravara Canal and the Nira Right Bank Canal, costing respectively Rs 86 lakhs, and Rs 257 lakhs, and irrigating 49,440, and 190,000 acres, are under construction. These works are situated in parts of the Deccan which are liable to scarcity and famine and are the most important protective works in India. In the Central Provinces productive and protective works, chiefly comprising large canals with storage from the Mahanadi, Wainganga and Tandula rivers, with various tank projects,have been sanctioned, estimated to cost Rs 395 lakhs In Madras the work has been chiefly investigation and preparation The projects will add 20 per cent to the present irrigated area in the Presidency In Bengal the Tribeni Canal in Behar costing Rs 75 lakhs, will protect, though at heavy cost, an area very liable to famine In Burma the scope for irrigation works is small Protective embankments have however proved of great value

Results of the New Policy.

We can now turn to the results of this activity. The following table shows the developments effected on works now in operation in the twenty-four years ending with the triennium 1908-11. The percentages of the advancements in this triennium over the figures of 1887-90 are .—Capital outlay 55 irrigated area 68 net revenue 123 return on capital outlay 43 and on net profit 200

The average capital outlay for the triennium 1908-11 was £31,491,253 After meeting all the charges for maintaining and operating the works, and also all interest charges, the net profit which accrued to Government during the twenty-four years ending with 1910-11 was £35,087,835, and this more than repaid the entire capital outlay on the works in operation from the commencement of British rule up to the end of the period mentioned. In the following table the areas are in millions of acres and the amounts in millions of pounds sterling

Triennium.	Capital Outlay	Area.	Value of Crops	Direct Profit to Government.	Percentage of Net Revenue on Capital Outlay.
1908–11	31 49	22 10	51 74	2 28	10.76
1905–08	30 32	21 88	48 25	2 03	10.44
1902–05	28.78	20 09	43.66	1.68	9.71
1899–02	26.66	19.06	39.67	1 55	9.68
1896–99	25.01	17.55	37 40	1.53	10.09
1893–96	22.94	14.49	29 88	1.03	8.25
1890–93	21.62	13.85	26.87	0 83	7.60
1887–90	20 42	13.16	24.33	0.76	7.51

These figures take no account of the indirect advantages of irrigation. They are .—The produce of the country is greatly increased, the railway receipts are enhanced, famine expenditure is diminished and misery and economic disturbances reduced. Nor do they take account of the progress made in Native States, some of which, like Gwalior and Mysore, have shown conspicuous liberality.

Future of Irrigation.

It is sometimes asserted, by those who take only a superficial view of Indian irrigation that we are approaching the end of the programme of productive works. There could be no greater fallacy. The scheme of great works is still vast. There is now before the Secretary of State a project for the improvement of irrigation in Sind, by the construction of a weir at Sukker

and the digging of a series of main canals,the substitution of perennial for inundation canals, and flow instead of lift irrigation The cost of this is estimated at Rs 781 lakhs (£5.211 millions) This scheme is estimated to confer the benefits of assured irrigation on 1,347,347 acres, which now receive a precarious supply, and to add 588,703 acres of new irrigation The return on capital expenditure estimated at 5.10 per cent, with an enhanced land revenue, and 4 17 per cent if the land revenue is not enhanced. The Lower Sutlej Canal, in the Punjab, which will use the Beas water,now under investigation, will irrigate a million and a half acres The great Sarda-Ganges-Jamna feeder, in the Punjab and the United Provinces, now under investigation, would cost £4,500,000, return 7 per cent on the capital, and benefit twenty-five districts and three Native States If, after the construction of the Sukker Barrage there are found to be surplus waters in the Indus, the Titanic Sind-Sagar scheme may become practicable The scope for irrigation in India is apparent from the fact that in addition to works under construction or sanctioned, there are under consideration or investigation estimated to cost £27½ millions

Economic Changes.

Nor does this estimate represent anything like the full possibilities of irrigation in India The country is undergoing a great economic revolution. The rise in the prices of produce, the increased economic strength of the people, are making profitable works which a decade ago were economically impracticable This process will continue The indirect benefits of irrigation are more fully realised In no case is this more marked than in the railway receipts The Chenab and the Jhelum canals have been the principal factors in converting the North-Western Railway from a drain on the Exchequer into a source of profit The accumulation of capital, the spread of the co-operative credit movement, the increasing use of power, such as oil engines working pumps and cheap electricity from hydro-electric projects, will bring under cultivation millions of acres of fallow and waste It may be said with confidence that for a generation at least the demands for irrigation in India will more than absorb the money-producing power of the Government.

Irrigation Dues.

The charges for irrigation, whether taken in the form of enhanced land revenue or of occupiers' and owners' rates, vary very much, depending on the kind of crop, the quantity of water required for it and the time when it is required, the quality of the soil, the intensity or constancy of the demand, and the value of irrigation in increasing the outturn. In the immediate vicinity of Poona a rate of Rs. 50 an acre is paid for sugarcane This is quite an exceptional rate, it obtains over only a limited area, and is made practicable only because the cultivators, by high manuring, can raise a crop valued at nearly eight-hundred rupees an acre On other parts of the Mutha canal the rate varies from Rs 40 to Rs 12, and on other canals in the Bombay Deccan from Rs 25 to Rs 10 per acre In Madras the maximum rate for sugarcane is Rs 10, and in the Punjab it does not exceed Rs 8-8 The rate charged for rice varies in Madras from Rs 5 to 2, and in Bengal from Rs 2-8 to Rs 1-8 per acre In both these provinces irrigation is practically confined to rice, in the Punjab, where this crop is not extensively grown, the rate varies from Rs 7 to Rs 3-4 per acre The ordinary rate in the Punjab for wheat, which is the principal crop, varies from Rs 4-4 to Rs. 3-12, and for fodder crops from Rs 3 to 2-8 per acre The average rate realised from major works for irrigation of all kinds is about Rs 3-8 per acre, the provincial averages being Rs 1-9 in Sind and Bengal, Rs 3-4 in the Punjab, Rs 4-8 in Madras, the United Provinces and the Bombay Deccan The charges for irrigation may be taken as varying from 10 to 12 per cent of the value of the crop, except in Bengal and the Bombay Deccan, where the average is little more than six per cent

Canals and Navigation.

Twenty years ago a great deal was heard about the desirability of constructing navigation canals, either in conjunction with irrigation, or for transport, pure and simple The idea is now exploded It received a certain stimulus from the unprofitable character of Indian railways, and the handsome earnings of the irrigation works, it received its quietus when the railways turned the corner Broadly speaking it may be said that navigation and irrigation rights clash, navigation is not only costly, but it cannot be maintained during the season of short supply, except to the detriment of irrigation Outside the deltaic tracts of Bengal, Orissa, Madras and Sind, navigable canals will never be of much use for the purpose of inland navigation. There is however considerable scope for connecting canals to improve the facilities for navigation on the great river system of Eastern Bengal. This is a question which is now engaging the attention of the Government.

WELLS AND TANKS.

So far we have dealt only with the great irrigation schemes. They are essentially exotic, the products of British rule, the real eastern instrument is the well. The most recent figures give thirty per cent of the irrigated area in India as being under wells. Moreover the well is an extremely efficient instrument of irrigation When the cultivator has to raise every drop of water which he uses from a varying depth, he is more careful in the use of it; well water exerts at least three times as much duty as canal water. Again, owing to the cost of lifting, it is generally used for high grade crops It is estimated that well-irrigated lands produce at least one-third more than canal-watered lands Although the huge areas brought under cultivation by a single canal scheme tend to reduce the disproportion between the two systems, it must be remembered that the spread of canals increases the possibilities of well irrigation by adding, through seepage, to the store of subsoil water and raising the level.

Varieties of Wells.

Wells in India are of every possible description. They may be just holes in the ground, sunk to subsoil level, used for a year or two and then allowed to fall into decay. These are

temporary or kacha wells or they may be lined with timber, or with brick or stone They vary from the kacha well costing a few rupees, to the masonry well, which will run into thousands, or in the sandy wastes of Bikanir, where the water level is three hundred feet below the surface, to still more The means of raising the water vary in equal degree. There is the *picottah*, or weighted lever, raising a bucket at the end of a pivoted pole, just as is done on the banks of the Nile This is rarely used for lifts beyond fifteen feet For greater lifts bullock power is invariably used This is generally harnessed to the *mot*, or leather bag, which is passed over a pulley overhanging the well, then raised by bullocks who walk down a ramp of a length approximating to the depth of the well Sometimes the *mot* is just a leather bag, more often it is a self-acting arrangement, which discharges the water into a sump automatically on reaching the surface By this means from thirty to forty gallons of water are raised at a time, and in its simplicity, and the ease with which the apparatus can be constructed and repaired by village labour, the *mot* is unsurpassed in efficiency There is also the Persian wheel, an endless chain of earthenware pots running round a wheel Recently attempts have been made, particularly in Madras, to substitute mechanical power, furnished by oil engines, for the bullock This has been found economical where the water supply is sufficiently large, especially where two or there wells can be linked Government have systematically encouraged well irrigation by advancing funds for the purpose and exempting wellwatered lands from extra assessment due to improvement These advances, termed *takavi*, are freely made to approved applicants, the general rate of interest being 6¼ per cent In Madras and Bombay ryots who construct wells, or other works of agricultural improvement, are exempt from enhanced assessment on that account. In other provinces the exemption lasts for specific periods, the term generally being long enough to recoup the owner the capital sunk

Tanks.

Next to the well, the indigenous instrument of irrigation is the tank The village or the roadside tank is one of the most conspicuous features in the Indian scene The Indian tank may be any size. It may vary from a great work like Lakes Fife and Whiting in the Bombay Presidency or the Periyar Lake in Travancore, holding up from four to seven billion cubic feet of water, and spreading their waters through great chains of canal, to the little village tank irrigating ten acres They date back to a very early stage in Indian civilisation Some of these works in Madrss are of great size, holding from three to four billion cubic feet, with water spreads of nine miles. The inscriptions of two large tanks in the Chingleput district of Madras, which still irrigate from two to four thousand acres are said to be over 1,100 years old Tank irrigation is practically unknown in the Punjab and in Sind, but it is found in some form or other in all other provinces, including Burma, and finds its highest development in Madras In the ryotwari tracts of Bombay and Madras all but the smallest tanks are controlled by Government In the zemindari tracts only the large tanks are State works According to the latest figures the area irrigated from tanks is about eight million acres, but in many cases the supply is extremely precarious So far from tanks being a refuge in famine they are often quite useless inasmuch as the rainfall does not suffice to fill them and they remain dry throughout the season The value of the crops raised on irrigated lands in India in 1911-12 was Rs 68⅛ crores

CANAL COLONIES.

The canal colonies represent the extreme case of improvement in agricultural conditions effected by irrigation In the Punjab uplands now watered by the Lower Chenab and Lower Jhelum Canals, irrigation has completely altered the face of the country, so that it supports in unparalleled prosperity a population numbering a hundred to every one of its former poverty-stricken denizens, while land once refused as a gift sells with ease at £15 an acre The largest of the canal colonies, the Chenab Colony, on the Lower Chenab Canal, lies in the Rechna Doab, between the Chenab and Ravi Rivers, and has a total area of some 3,900 square miles This area was until 1892 sparsely inhabited by nomad pastoral tribes, whose total numbers were estimated at less than 70,000 Cultivation was rendered possible only by the construction of the Chenab Canal As fast as the canal and its distributaries were constructed, the land (which was waste and owned by Government) was allotted to various classes of grantees, the bulk of the grants being made to immigrant peasants, including men from the best agricultural districts in the Province Since its foundation the colony has enjoyed remarkable prosperity The nomads to whom a large portion of the land was allotted, though without any previous knowledge of agriculture, assimilated the practices of their new neighbours with extraordinary success, and the whole colony is now as well cultivated as almost any part of India The work of colonisation began in 1892, by 1901 the population had increased to over 791,000 and at the end of 1901-02 some 2,470 square miles out of a total allottable area of about 2,660 square miles had been allotted. In September 1912 the allottable area was returned at 3,040 square miles, and the area actually allotted at 2,870 square miles, while the total population had risen to over 1,111,000. The export of wheat from the Lyallpur district in the last year of the decade reached the total of 150,000 tons

The Jhelum Canal Colony, on the Lower Jhelum Canal, occupies some 900 square miles of State land in the Shahpur District, and is a more recent development Colonisation began in 1902, and was conducted on lines similar to those adopted in the Chenab Colony, but a large proportion of the grants were made on the condition that a suitable mare should be maintained for breeding purposes. Between 1906, when an informal census was taken, and 1911 the population of the colony proper increased from 73,734 to 161,806. Up to September 1912 some 630 square miles had

been allotted out of an allottable area of about 780 square miles

The Chunian Colony, a much smaller colony on the Bari Doab Canal in the Lahore District, dating from 1897, was returned in 1912 as having a total allottable area of less than 130 square miles, of which practically the whole had been allotted. The population was 16,458 in 1901 and 43,494 in 1911

Other old canal Colonies in the Punjab such as the Sohag-Para Colony in the Montgomery district, and the Sidhnai Colony in the Mooltan district, had by the beginning of the period under review reached their full development and become merged in the surrounding districts Before the end of the decade colonisation in the newer colonies also had been practically completed, and then administration had been almost completely assimilated to that of ordinary districts

Colonisation has also been carried out on a considerable scale since 1901 on the Jamrao, Nasrat, and Dad canals in Sind.

Schemes for colonisation on the canals included in the Punjab Triple Canal Project are being prepared

A concession of some importance was made to peasant colonists in the Punjab in 1910, when it was decided to allow them to purchase proprietary rights, on very favourable terms, in all colonies except the Jhelum Colony The concession was made possible by the passing of the Alienation of Land Act, which secures in another way the result that the former restriction of the peasant's right to an inalienable right of occupancy was intended to achieve

PRESENT POSITION OF IRRIGATION.

During the year 1912-13 the total area irrigated by all the productive public works including branches in Native States of the Punjab, amounted to 16,147,799 acres Towards this total the Punjab canals contributed nearly 7¼ million acres, Madras 3½, the United Provinces 2½ and Sind 1 million acres In Bihar and Orissa an area of 930,000 acres was attained The return on capital is highest in the Punjab, where the canals yielded 16 48 per cent The next province in this respect is Madras, where a return of 14 05 per cent was realised In the United Provinces and Sind the returns realised were 6 83 per cent and 4 50 per cent respectively The return on productive works as a whole was 9 53 per cent on the capital outlay

The importance of productive works may be gauged roughly by the value of the crops which are produced by their agency In the year under review the estimated value of the crops irrigated by works of this class amounted to 67 crores of rupees, or about 20 crores more than the capital expenditure incurred on them

Protective Works.—There were in operation in the year 30 protective works which together irrigated a total of 403,200 acres The most important works are the Ramtek reservoir in the Central Provinces, the Betwa and Ken canals in the United Provinces, the Rushikulya in Madras, and the Nira and Godavari systems in the Bombay Presidency A number of small but interesting tank works are to be found in the Central Provinces They were sanctioned as experimental works in accordance with the recommendations of the Irrigation Commission, in order to test how far the people were willing to resort to irrigation for the maturing of their crops and what water rates they were prepared to pay The results obtained are gratifying and show that the people are beginning to realise the great advantages of irrigation

Minor Works.—There were 109 works so classed in 1912-13, the majority of which are in Bombay and Madras Ten are purely navigation works The net revenue paid by works of this category amounted to Rs 30,01,539 (excluding navigation canals) or a return of 7·61 per cent on the capital outlay against 7·71 per cent. in the previous year Nearly all the minor works in Sind return exceptionally high percentages, but as some large projects with which it is intended to amalgamate many existing works are under consideration, their transfer to the major works class has been postponed for the present

Excluding the area shown under Burma, *viz*, 4 80,923 acres which is not under actual irrigation, but represents the area of cultivation on lands reclaimed by river flood embankments, the area irrigated by minor irrigation works during 1912-13 was 1,521,029 acres against 1,344,675 acres in the previous year.

There are numerous works which maintain only revenue accounts They are credited with a share of the land revenue depending on their maintenance and are debited with all expenditure incurred on construction extension improvements and maintenance During the year reviewed these works irrigated an area of 2½ million acres and returned a net revenue of Rs 34,89,458

Practically all the works of the class which have neither capital nor revenue accounts are situated in the Madras Presidency. They consist of some 37,000 tanks and irrigation channels mainly the former, the improvements and repairs of which are executed by the Public Works Department, or, in the case of the smaller works, by civil officers The areas irrigated by works of this class in 1912-1913 aggregated 3,421 917 acres The area irrigated in 1911-12 was 3,230,191 acres

New Works—The Lower Chenab Canal continues to show a record of remarkable progress It served 2,240,203 acres and earned a gross revenue of Rs 146¾ lakhs The net revenue realised from this canal was equivalent to 39 18 per cent on the capital outlay

There is a noticeable improvement in the return realised from the Lower Jhelum Canal, the net revenue on which system has gone up by almost 90 per cent This is due principally to an enhancement of land revenue and malikhana

During the year excellent progress was made with the triple project The Upper Chenab Canal which was opened at the beginning of the year gave most satisfactory results during the first year of its working, the area irrigated

being 116,162 acres against 40,000 anticipated in the project forecast. The Lower Bari Doab was opened just after the close of the year reviewed and does not therefore appear among the works in operation. Neither the Upper Chenab Canal nor the Lower Bari Doab Canal can work to full advantage until the Upper Jhelum canal has been completed, as they cannot get a cold weather supply until the surplus water of the Jhelum river can be made available to augment the supplies of the Chenab river on which the Upper Chenab and Lower Bari Doab systems are dependent. Every effort is therefore being made to complete the Upper Jhelum canal as soon as possible. It was hoped to open the canal during October 1914, but owing to serious damage from floods suffered by the head works at Mangla in April last, this hope will not be realised, and it is feared that the system will not be in operation before the beginning of 1915. Further surveys in connection with the Sutlej valley project for the utilisation of the surplus water of the Sutlej river were found necessary and were completed during the year.

Good progress was made during the period, reviewed with the Godavari and Pravara canals two large works of the protective class. A good start was also made with the Nira Right Bank canal project, which on completion will be the largest protective irrigation system in India.

Results of irrigation works in operation.

The following table summarises the results of irrigation works for all India during 1912-13 in comparison with those of the two previous years —

Class of work	Capital outlay to end of the year on works in operation	Gross revenue during the year	Net revenue during the year	Percentage of net revenue of capital outlay to end of year	Net profit during the year, *i.e.*, net revenue less interest charges.	Area irrigated
	Rs	Rs	Rs	Per cent	Rs	Acres
I.—Productive	47,03,47,274	6,43,53,975	4,48,33,565	9 53	2,96,85,59	16,147,799
II —Protective	6,04,36,601	12,43,758	4.50,302	0 75	—15,09,876	403,200
III –Minor works for which capital and revenue accounts are kept (including works under construction).	6,48,29,224	52,63,049	28,49,392	4 39	....	2,001,952
IV —Minor works for which only revenue accounts are kept	.. .	68,01,346	34,89,458	..	....	2 540,317
V.—Works for which neither capital nor revenue accounts are kept	....	1,06,81,405	60,75,315	. .	. .	3,421,917
Total 1912-13 .	59,56,13,099	8,83,43,533	5,76,98,032	8 08	..	24,515,185
Total 1911-12 .	55,84,69,511	7,97,09,658	5,05,11,524	7 53	..	23,287,054
Total 1910-11 ..	53,06,04,071	76,71,953	4,68,34,346	7 17	..	22,519,009

The total area irrigated was 24½ million acres, while the value of the crops raised is roughly estimated at Rs 83 crores.

Expenditure by the State.

The subjoined table exhibits the outlay incurred by the State during the year 1912-13 on all classes of irrigation works —

	Capital outlay (direct charges).	Minor additions, maintenance, and working expenses (direct charges).
Works under construction	Rs	Rs
Productive	1,64,60,023	
Protective	24,17,879	
Minor	5,38,088	
Total	1,94,15,990	
Works in operation		
Productive	48,05,923	1,80,13,108
Protective	35,80,960	7,54,911
Minor	3,39,141	23,21,796
Total	87,26,024	2,10,89,815
Works under classes IV and V		79,54,861
Grand Total	2,81,42,014	2,90,44,676

Value of the Crops.

A comparison of the acreage of crops matured by means of the Government irrigation systems, with the total area under cultivation in the several provinces, is given below —

Province.	Net area cropped. Acres.	Area irrigated by Government irrigation works. Acres.	Percentage of irrigated area to total cropped area. Per cent.	Capital cost of Government irrigation works to end of 1912-13 in lakhs of rupees.	Estimated value of crops raised on areas receiving State irrigation, in lakhs of rupees.
Burma	13,856,000	1,275,000	9 2	205	524
Bengal	25,955,000	108,000	0 4	227	59
Bihar and Orissa	8,006,000	971,000	12 1	662	347
United Provinces of Agra and Oudh.	35,460,000	2,698,000	7 6	1,184	1,438
Ajmer-Merwara	356,000	24,000	6 8	35	11
Punjab	22,684,000	8,368,000	34.6	1,625	3,071
North-West Frontier	2,549,000	246,000	9.6	63	84
Sind	3,991,000	3 065,000	76.8	316	821
Bombay Deccan	22,906,000	355,000	1.5	438	123
Central Provinces (excluding Berar).	17,969,000	78,000	0.2	88	14
Madras	39,120,000	7,321,000	18.7	1,081	1,831
Baluchistan	Not known	6,000	...	32	2
Total	192,852,000	24,515,000	12 4	5,056	8,325

Projects under Investigation.

Province	Name and probable classification of work		Estimated or approximate direct cost in lakhs of rupees	Irrigable area in acres	Districts benefited	Principal crops that will be produced.
Madras	Cauvery reservoir project	Productive	370	473,000	Tanjore	Rice
	Kistna reservoir project	Do	800	735,000	Kistna and Guntur	
	Lower Bhavani	Do	109	109 200	Coimbatore	
	Velgode project	Do	28	61,000	Kurnool	
	12 smaller schemes	Mainly protective	344	355,000	Ganjam, Nellore, Kurnool, Coimbatore, Anantapur and Salem	
Bombay	Gokak canal extension project	Protective	183	132,000	Belgaum, Bijapur and the Native States of Kolhapur Mudhol, Jamkhandi, Sangli and Kurundwad	Wheat, bajri, juari and oil seeds
Sind	Rohri canal, Sukkur Barrage and widening Eastern Nara Supply channel	Productive	762	2 324,000	The whole Left Bank Division comprising three Revenue districts, *viz*, Nawabshah, Hyderabad and Thar and Parkar	Cotton, wheat and rice
	Sultanwah, Begari canal	Productive	16	177,700	Sukkur and Upper Sind Frontier	Rice, juari, bajri wheat and oil seeds
Bengal	Damodar canal .	Do	36	150,000	Burdwan	Rice
Bihar and Orissa	Extension of the Tribeni canal	Protective	10	25 000	Champaran	Rice
United Provinces	Belan canal .	Do .	15	30,500	Khairagarh Pargana, Allahabad district.	Rice and wheat

Projects under Investigation.—*contd*

Province	Name and probable classification of work		Estimated or approximate direct cost in lakhs of rupees	Irrigable area in acres	Districts benefited	Principal crops that will be produced
United Provinces and Punjab.	Sarda-Ganges-Jumna feeders projects	Productive	646	1 524,000	*In the United Provinces*— Rampur State, Pilibhit, Shahjahanpur, Hardoi, Bareilly, Moradabad, Budaun, Saharanpur, Muzaffarnagar, Meerut, Bulandshahr, Aligarh, Muthra, Agra, Etah, Mainpuri, Farukhabad, Etawah, Cawnpore, Fatehpore and Allahabad. *In the Punjab*— Gurgaon, Karnal, Delhi, Rohtak, Hissar, Patiala and Jhind States	All the principal rabi and kharif crops grown in the United Provinces
Punjab .	Sutlej Valley project	Do	875	3,000,000	Lahore, Ferozepore, Montgomery, Multan, Bikaneer and Bahawalpur States	Wheat, gram, jowar and cotton
Burma	Remodelling the Kinda canal	Do	15	85,000	Kyaukse ..	Rice.
Central Provinces	Pangoli Nalla tank project	Protective	16	33,000	Bhandara .	Rice
	Deena Nadi Tank project	Do	14 to 25	45,260	Chanda	Rice.
Baluchistan ..	Anamber reservoir project	Productive	38	8,0000	Loralai	Wheat and barley.
	Torwal reservoir project	Do	18	44,000	Loralai	Wheat and barley
	Gamboli reservoir project	Do	60	218,000	Sibi	Wheat and barley.
	Zhob project ..	Do	65	202,000	Zhob	Wheat and barley
	Barshore reservoir project	Minor .	17	24,000	Quetta Peshin .	Wheat
		Total	4,437 to 4,448	9,827,660		

Buildings and Roads.

The Buildings and Roads branch of the Public Works Department embraces all the operations of the Department which are not classed under the special heads of Railways and Irrigation It includes the extension and maintenance of the road system, the construction and repair of all the buildings required for the proper discharge of the functions of government in all its branches and a large miscellaneous class of works of public improvement, including lighthouses, harbours, embankments, boat bridges, and ferries and the water supply and sanitation of towns

The operations of this branch of the Department are classed primarily under the head of Civil Works, the expenditure on which is chiefly met from provincial resources The classification of this expenditure for 1912-13 under the various heads is shown in the following table —

	Central Provinces and Berar	Burma	Assam	Bengal	Bihar and Orissa	United Provinces of Agra and Oudh	Punjab	North-West Frontier Province	Madras	Bombay	India General	Total
	£	£	£	£	£	£	£	£	£	£	£	£
Imperial	62,786	23,329	4 046	111,096	9,590	58,448	26,702	169,236	44,913	28,698	449,982	988,826
Provincial*	451,112	550,474	287,748	600 143	398,796	492 293	458,369		1,044,260	652,343		4,935,538
Total	513,898	573,803	291,794	711,239	408,386	550,741	485,071	169 236	1,089,173	681,041	449,982	5,924,364

* Includes expenditure by the Civil Department in addition to that by the Public Works Department

Expenditure by Civil Officers from Imperial Funds	44,474
Expenditure in England	90,665
Grand Total .	6,059,503

The extension of local Government in India has thrown a large portion of the smaller class of public works into the hands of the local Boards Speaking generally, the boards maintain their own establishments but in the case of any works of unusual difficulty they have recourse to the professional skill of the Public Works Officers

Posts and Telegraphs.

POST OFFICE.

The control of the Posts and Telegraphs of India is vested in an officer designated Director-General of Posts and Telegraphs who works in subordination to the Government of India in the Department of Commerce and Industry The superior staff of the Direction, in addition to the Director-General himself consists on the postal side of two Deputy Directors-General (who are officers of the rank of Post-master-General), four Assistant Directors-General (whose status is similar to that of Deputy Postmasters-General), and two Personal Assistants (who are selected from the staff of Superintendents)

For postal purposes, the Indian Empire is divided into eight circles as shown below, each in charge of a Postmaster-General —Bengal and Assam, Bihar and Orissa, Bombay, Burma, Central, Madras, Punjab and North-West Frontier and United Provinces The Central Circle comprises roughly the Central Provinces and the Central India and Rajputana Agencies

The Postmasters-General are responsible to the Director-General for the whole of the postal arrangements in their respective circles, with the exception of those connected with the conveyance of mails by railways and inland steamers which are entrusted to four officers bearing the designation of Inspector-General of Railway Mail Service and Sorting All the Postmasters-General are provided with Personal Assistants, while those in charge of the largest circles are also assisted by Deputy Postmasters-General The eight Postal Circles and the jurisdictions of the four Inspectors-General are divided into Divisions each in charge of a Superintendent, and each Superintendent is assisted by a certain number of officials styled Inspectors or Assistant Superintendents

Generally there is a head Post Office at the head-quarters of each revenue district and other post offices in the same district, are usually subordinate to the head office for purposes of accounts The Postmasters of the Calcutta, Bombay, and Madras General Post Offices and of the larger of the other head post offices are directly under the Postmaster-General and the least of them exercises the same powers as a Superintendent of Post Offices in respect of inspections, appointments, leave and punishments The Presidency Postmasters, indeed, have one or more Superintendents subordinate to them When the duties of the Postmaster of a head office become so onerous that he is unable to perform them fully himself, a Deputy Postmaster is appointed to relieve him of some of them, and if still further relief is required, one or more Assistant Postmasters are employed. The more important of the offices subordinate to the head office are designated sub-offices and are usually established only in towns of some importance. Sub-offices transact all classes of postal business with the public, submit accounts to the head offices to which they are subordinate incorporating therein the accounts of their branch offices, and frequently have direct dealings with Government local sub-treasuries The officer in charge of such an office works it either single-handed or with the assistance of one or more clerks according to the amount of business

Branch offices are small offices with limited functions ordinarily intended for villages, and are placed in charge either of departmental officers on small pay or of extraneous agents, such as school-masters, shopkeepers, landholders or cultivators who perform their postal duties in return for a small remuneration

The audit work of the Post Office is entrusted to the Accountant-General, Post Office and Telegraphs, who is an officer of the Finance Department of the Government of India and is not subordinate to the Director-General. The Accountant-General is assisted by Deputy Accountants-General, all but one of whom, with the necessary staff of clerks, perform at separate headquarters the actual audit work of a certain number of postal circles

In accordance with an arrangement which has been in force since 1883, a large number of sub-post offices and a few head offices perform telegraph work in addition to their postal work and are known by the name of combined offices. The policy is to increase telegraph facilities everywhere and especially in towns by opening a number of cheap telegraph offices working under the control of the Post Office The telegraph expenditure on account of these combined offices is borne by the Telegraph Department to which the whole of their telegraph revenue is also credited.

Inland Tariff is as follows —

Letters.	When the postage is prepaid.	When the postage is wholly unpaid	When the postage is insufficiently prepaid.
	Anna		
Not exceeding 1 tola	½	Double the prepaid rate (chargeable on delivery.)	Double the deficiency (chargeable on delivery)
Exceeding 1 tola but not exceeding 10 tolas	1		
Every additional 10 tolas or part of that weight	1		
Book and pattern packets. Every 10 tolas or part of that weight..	½		

Postcards

Single	¼ anna
Reply	½ „

(The postage on cards of private manufacture must be prepaid in full)

Parcels (prepayment compulsory)

	Rs	a.
Every 40 tolas or part of that weight up to 440 tolas	0	2
Registration compulsory — Exceeding 440 tolas but not exceeding 480 tolas	3	0
Registration compulsory — Every additional 40 tolas or part of that weight up to 800 tolas	0	4

Registration fee

For each letter, postcard, book or pattern packet, or parcel to be registered	0	2

Ordinary Money Order fees

On any sum not exceeding Rs 5	0	1
On any sum exceeding Rs 5 but not exceeding Rs 10	0	2
On any sum exceeding Rs 10 but not exceeding Rs 15	0	3
On any sum exceeding Rs 15 but not exceeding Rs 25	0	4
On any sum exceeding Rs 25 up to Rs 600	0	4

for each complete sum of Rs 25, and 4 annas for the remainder, provided that, if the remainder does not exceed Rs 5, the charge for it shall be only 1 anna, if it does not exceed Rs 10, the charge for it shall be only 2 annas and if it does not exceed Rs 15, the charge for it shall be only 3 annas

Telegraphic money order fees—The same as the fees for ordinary money orders *plus* a telegraph charge calculated at the rates for inland telegrams for the actual number of words used in the telegram advising the remittance, according as the telegram is to be sent as an "Express" or as an "Ordinary" message.

Value-payable fees—These are calculated on the amount specified for remittance to the sender and are the same as the fees for ordinary money orders

Insurance fees—For every Rs 50 of insured value 1 anna

Acknowledgment fee—For each registered article 1 anna

Ceylon and Portuguese India are regarded as "Inland" for the purpose of the tariff given above, *except with regard to insurance fees*

The Foreign Tariff (which as noted above is not applicable to Ceylon and Portuguese India, except as regards insurance fees) is as follows.—

Letters

To the United Kingdom, other British Possessions and Egypt, including the Soudan.	One anna for each ounce or part of that weight.
To other countries, colonies or places	2½ annas for the first ounce and 1½ annas for every additional ounce or part of that weight
Postcards Single	1 anna
„ Reply	2 annas

Printed Papers—½ anna for every 2 ounces or part of that weight

Business Papers—½ anna for every 2 ounces or part of that weight, subject to a minimum charge of 2½ annas for each packet

Samples—½ anna for every 2 ounces or part of that weight, subject to a minimum charge of 1 anna for each packet

(The rates shown above are those chargeable when the postage is prepaid)

Parcels—(Prepayment compulsory) The rates vary with the countries to which they are addressed The rates to the United Kingdom are—

	Via Gibraltar			Overland		
	Rs	a	p	Rs	a	p
Not over 3 lbs	0	12	0	1	8	0
„ „ 7 „	1	8	0	2	4	0
„ „ 11 „	2	4	0	3	0	0

Registration fee—2 annas for each letter postcard, or packet

Money Orders.—To countries on which money orders have to be drawn in rupee currency, the rates of Commission are the same as in the case of inland money orders

To countries on which money orders have to be drawn in sterling, the rates are as follows—

	Annas
Not exceeding £1	3
Exceeding £1 but not exceeding £2	5
„ £2 „ „ „ £3	8
„ £3 „ „ „ £4	10
„ £4 „ „ „ £5	12
„ £5	12

for each complete sum of £5 and 12 annas for the remainder, provided that if the remainder does not exceed £1, the charge for it shall be 3 annas, if it does not exceed £2, the charge for it shall be 5 annas, if it does not exceed £3 the charge for it shall be 8 annas, and if it does not exceed £4, the charge for it shall be 10 annas

Insurance fees—

To countries other than those named below	3 annas for every £5.
To Ceylon and Portuguese India	2 annas per every Rs 100.
To Mauritius, the Seychelles, Zanzibar, and the British East Africa, Uganda, and Somaliland Protectorates	4 annas per every Rs. 100

Acknowledgment fee.—2 annas for each registered article.

Growth of the Post Office—At the end of 1893-94 the total number of Post Offices was 10,387 and the total length of mail lines 116,607 miles. For the 31st March 1914 the corresponding figures were 18,946 and 155,806 During the year 1893-94 the total number of letters, postcards, newspapers and packets given out for delivery was about 368 millions, while for the year 1913-14 the total number of unregistered articles of the same classes given out for delivery *plus* the issue number of registered letters and packets posted amounted to over 1,037 millions The number of parcel mail articles given out for delivery in the former year was about 2 millions, as compared with over 12½ millions of such articles posted during the latter year The total number of articles of all the above named classes exchanged with the outer world rose from about 18 millions in 1893-94 to nearly 70 millions in 1913-14 The total number and value of money orders issued increased from 8,853,225 and Rs 18,80,21,454 in 1893-94 to 30,986,373 and Rs 56,47,14,676 respectively in 1913-14 During the former year the number of articles insured for transmission by post was 285,038 with an aggregate declared value of Rs 8,00,89,402 and the corresponding figures for 1910-11 were 1,169,428 and Rs. 26,88,78,925, As the result, however, mainly of the introduction in 1911-12 of the rule under which inland articles containing currency notes or portions thereof must be insured, the figures for 1913-14 stand at 2,941,204 and Rs 73,05,64,393 The number of accounts open on the books of the Post Office Savings Bank grew from 574,050 on the 31st March 1894 to 1,638,725 at the end of 1913-14 with an increase from Rs 8,26,57,319 to Rs 23,16,75,467 in the total amount standing at the credit of depositors The total staff of the department on the 31st March 1914 numbered 93,955 The net financial result of the working of the Post Office for the year 1913-14 was a surplus of Rs 41,25,042

This account of the activities of the Post Office would not be complete if it were not mentioned that on the 31st March 1914 there were 24,574 active Postal Life Insurance Policies with an aggregate assurance of Rs 3,37,54,455 and that during the year 1913-14 it disbursed a sum of Rs 30,37,129 to Native Military Pensioners, collected, at its own expense, a sum of Rs 10,34,218 on account of customs duty on parcels and letters from abroad, and sold 12,059 lb of quinine to the public

TELEGRAPH DEPARTMENT.

Telegraphs—Up to 1912 the telegraph system in India was administered as a separate Department by an officer designated Director General of Telegraphs who worked directly under the Government of India in the Department of Commerce and Industry In that year it was decided to vest the control of Posts and Telegraphs in a single officer as an experimental measure with a view to the eventual amalgamation of the two Departments

In pursuance of this policy an experimental amalgamation of the two services was introduced in the Bombay and Central Circles from the 1st July 1912 The fundamental principle of this scheme which follows closely the system in force in the United Kingdom and several other European countries are that the traffic and engineering work of the Telegraph Department should be separated, the former branch of work in each Circle being transferred to the Postmaster General who is assisted by a Deputy Postmaster-General and a suitable number of attached officers while the engineering branch is controlled by a Director of Telegraphs in charge of the two Circles Subordinate to this officer there are several Divisional Superintendents who are assisted by a number of attached officers

In 1914 the complete amalgamation of the two Departments was sanctioned by the Secretary of State and introduced from 1st April The superior staff of the direction in addition to the Director-General himself consist on the Engineering side of a Chief Engineer, Telegraphs, with an Assistant and a Personal Assistant to the Director-General For traffic work there is a Deputy Director-General with an Assistant and an Assistant Director-General In the Circles the scheme which has been introduced follows closely on the lines of the experimental one referred to above For telegraph engineering purposes India is divided up into three Circles each in charge of a Director of Telegraphs. For Burma special arrangements were considered necessary and the engineering work is in charge of the Postmaster-General, Burma Circle, who is a Telegraph officer specially selected for the purpose These four Circles are divided into twenty divisions each of which is in charge of a Superintendent of Telegraph Engineering

The telegraph traffic work is now under the control of the Postmaster-General each of whom is assisted by a Deputy Postmaster-General with a suitable staff of attached officers

The audit work of the Telegraph Department is, like that of the Post Office, entrusted to the Accountant-General, Post Office and Telegraphs, assisted by a staff of Deputy and Assistant Accountants-General

Inland Tariff.—The tariff for inland telegrams is as follows —

	Private and Express Rs a	*State* Ordinary Rs a	
Minimum charge	1 0	0 6	Address charged for
Each additional word over 12	0 2	0 ½	Address charged for

Additional charges

Minimum for reply-paid telegram	6 annas
Acknowledgment of receipt	6 ,,
Multiple telegrams, each 100 words or less	..4 ,,
Collation	One quarter of charge for telegrams.

For acceptance of an Express telegram during the hours when an office is closed.	Rs.
If both the offices of origin and destination are closed .	2
If only one of the offices is closed	1

Signalling by flag or semaphore to or from ships—per telegram . . 8 annas.

Boat hire . . . . Amount actually necessary

Copies of telegrams, each 100 words or less . 4 annas

	Press				
	Ex-press		Ordinary		
	Rs	a	Rs	a	
Minimum charge	1	0	0	8	Address free
Each additional 6 words over 48	0	2	0	1	Address free

(Ceylon is *not* regarded as "Inland" but Portuguese India is)

Foreign Tariff.—The charges for foreign telegrams vary with the countries to which they are addressed The rates per word for private and State telegrams to all countries in Europe except Russia and Turkey are as follow —

	Private		State	
	Rs	a	Rs	a
Via Turkey .	1	6	.	
,, Indo	1	4	0	12
,, Eastern	1	4	0	10

Telegraph Traffic.—At the end of 1894-95 there were 44,648 miles of line and 138,526 miles of wire and cable, as compared with 81,593 and 321,801 miles, respectively, on the 31st March 1914 The number of departmental telegraph offices was respectively 253 and 249 while the number of telegraph offices worked by the Post Office rose from 1,109 to 3,147 The increase in the number of paid telegrams dealt with is shown by the following figures .—

		1894-95	1913-14
Inland ..	Private ..	3,205,353	13,485,126
	State ..	585,571	1,276,738
	Press .	26,202	176,537
Foreign .	Private ..	564,202	1,620,102
	State .	6,804	13,593
	Press	3,094	24,601
	Total ..	4,391,226	16,596,697

Wireless.—The total number of wireless telegraph stations open for traffic at the end of 1913-14 was seventeen, *viz*, Port Blair, Bassein, Diamond Island, Table Island, Victoria Point, Mergui, Bombay, Sandheads, Calcutta, Karachi, Delhi, Simla, Allahabad, Lahore, Nagpur, Peshawar and Quetta, and the total number of messages of all kinds disposed by the ten coast stations during the year was 76,526

Telephone—On the 31st December 1913 the number of telephone exchanges established by the department was 180, the total number of connections being 5,193 and there were also 740 non-exchange circuits with 1,530 offices The number of telephone exchanges established by Telephone Companies was 13 with 9,046 connections The outturn from the workshop during 1913-14 represented a total value of Rs 14,48,000 At the end of the year the total staff of the department numbered 11,982 The total capital expenditure of the Department up to the close of 1913-14 amounted to Rs 12,16,90,789 The net revenue for the year was Rs 18,97,826, representing 1 56 per cent of the total capital expenditure

The Trade of India.

The trade conditions of India are necessarily determined by the economic condition of the country The dominant industry in India is agriculture Although a few great industries, like the jute industry of Bengal and the cotton industry of Bombay, have been built up, sixty-five per cent of the people still derive their means of livelihood from the soil Consequently the principal articles of export are in the form of raw produce like cotton and jute, rice and wheat and oilseeds On the other hand, the articles of import are manufactured From this premiss follows another conclusion The trade history of the year is governed by the character of the rains, the nature of the harvest determines both the power of the people to sell produce and to import manufactured goods One other factor needs to be noted India is a debtor country She has to discharge, for the most part in London, the interest on the debt contracted for railway, irrigation and other purposes She has also to pay in London what are called the "home charges," the payments for pensions, salaries of officers on leave, and similar services These amount in round figures to about £ 17 millions a year The total of the payments to be made in London annually on both heads and for capital works on railways and other stores is £ 18 millions Consequently, there must be a balance of trade in favour of India This, when it exceeds the Home charges, which is almost invariably the case, is liquidated by the importation of treasure—gold and silver, gold in the form of sovereigns and bars, silver invariably as bullion

The trade statistics of India are for the official year, April 1913 to March 1914 The official report, therefore,does not embrace the months subsequent to the war, some of these are indicated from the later figures but they are necessarily incomplete The following particulars for 1913-14 are drawn from the Review of the trade of India, published by the Department of Statistics, and written by Mr G. Findlay Shirras, Director of Statistics

Features of the Year.—The chief characteristics of the year 1913-14 were (1) a failure of the rainfall in some parts of India, (2) Bank failures which were confined chiefly to the Punjab and Bombay, (3) a glut in the piecegoods trade, (4) some difficulty in railway transport With the possible exception of Australia, India possesses the most precarious rainfall in the world, and the year under review was no exception to this rule The monsoon of 1913 after the middle of July was irregular, and the rains in the United Provinces and Central India ceased in early September In parts of Bengal, Bihar and Orissa, and also in Madras, excessive rain resulted in heavy floods The United Provinces, Central India, and Rajputana failed to obtain that amount of seasonal and total rainfall which is required in the cold weather season Famine conditions were accordingly established in part of these localities. Actual famine conditions, however, were confined to Jalaun, Banda, Hamirpur and Etawah These abnormal seasonal conditions are reflected in the harvests The outturn of wheat and oilseeds was somewhat in defect, and the rice crop in Northern India also suffered. The outturn of sugarcane in the United Provinces was seriously affected by the unfavourable seasonal conditions The excessive rainfall of July and August resulted in the curtailment of the jute crop of Bengal Cotton, however, fared well, and the outturn was good

Banking –The Banking and commercial crisis in Northern and Western India began in September with the failure of the People's Bank in the Punjab, which had at the time of its failure deposits of Rs 1¼ crores and a net work of 72 branches The Credit Bank of India failed in the first week of October, and this was the first real sign of the spread of the Bank failures to Bombay The Indian Specie Bank and some 13 more banks failed

Overstocking —A glut in the piecegoods trade also took place, specially from October 1913 to January 1914 Stocks of both imported goods and local made cloth in Bombay were much heavier than they had ever previously been, and owing to the financial troubles and the breakdown of credit, goods went into consumption very slowly during the latter half of the year Shipments were far in excess of requirements, and the docks were so full that there was great difficulty in storing piecegoods On the whole, notwithstanding the exceptional conditions above mentioned, the year may be regarded as one of fairly prosperous trade

Gross Figures.—The total imports (*i.e.*, including private merchandise and Government stores but excluding treasure) in 1913-14 were Rs 191 crores or £ 127 millions The total exports of Indian produce were Rs 244 crores or £ 163 millions The re-exports of foreign goods were nearly Rs 5 crores or £ 3 millions The total treasure imported was Rs. 43 crores or £ 29 millions–a decrease as against the previous two years For the five years 1909-10 to 1913-14 there has been a continuous rise in the imports of private merchandise and in the exports of Indian produce, and as regards these, the year 1913-14 may be considered a record one

Variations.—The predominance of unmanufactured articles among the exports is quite as noticeable as their subordinate position among the imports The principal increases and decreases of the exports of 1913-14, as against 1912-13, are shown below —

	Rs Lakhs
Grain, pulse and flour ..	— 15,13
Tea .	+ 1,68
Seeds	+ 2 96
Cotton, raw	+ 12,71
Jute ,, , .	+ 3,78
Opium ,,	— 7,80
Jute manufactures . .	+ 5,40
Hides and Skins	— 42

THE EXPORT TRADE OF THE YEAR.

Exports.—The articles of export are grouped under four main heads—(I) Articles of Food Drink and Tobacco, (II) Raw Materials and Produce and Articles mainly unmanufacture (III) Articles wholly or mainly manufactured, (IV) Miscellaneous and Unclassified It will

seen from the table that the only class in which the value (in lakhs of rupees) of the trade increased last year was Class II (Raw Materials and produce and articles mainly unmanufactured) and that the other classes had appreciable decreases

		1912-13	1913-14	Increase (+) or Decrease. (—)	Per cent	Relative share of each class
I	Food, Drink and Tobacco	78,08	64,77	— 13,31	— 17	26 5
II	Raw Materials	103,48	122,46	+ 18,98	+ 18 3	50 1
III	Articles manufactured	57,33	54,59	— 2,74	— 4 8	22 4
IV	Miscellaneous	2,46	2,41	— 5	— 2 2	1
	TOTAL	241,35	244,23	2,88	+ 1 2	+ 100

The decrease under Class I with regard to food grains was marked Shipments of tea, however, showed a satisfactory increase of over Rs 1½ crores The general result was that in the class Food, Drink and Tobacco, there was a decrease of Rs 13 crores as compared with the previous year In Class II (Raw materials and produce and articles mainly unmanufactured) decreases were shown under coal, lac, hides and skins and timber But the chief features of this class was the further large increase in the sale of textile materials, namely, an increase of nearly 12¾ crores in the exports of raw cotton and of nearly Rs 4 crores in the value of raw jute Raw cotton showed a steady upwards tendency and the figures are given on page 13 In the case of raw jute there was an actual decline in quantity Of the seeds exported almost all are oilseeds, which are exported to Europe for utilisation in soap and candle factories It is interesting to note the advance in quantity of linseed and cotton seed and the recovery of groundnuts In Class III (Articles wholly or mainly manufactured) there has been a decline under Chemicals, Drugs, and Medicines (in which head opium is registered) of nearly Rs 8 crores as compared with 1912-13, and class III as a whole has shown a decrease of nearly Rs 3 crores as against the previous year but an increase of Rs 5 crores compared with 1911-12 Yarns and textile fabrics have assumed, and are continuing to assume, by far the chief position in this class, the total for yarns and textile fabrics for 1913-14 being Rs 41 crores (mainly composed of jute manufactures, Rs 28 crores and cotton manufactures Rs 12 crores) as against Rs 35 crores in 1912-13 and Rs 26 Crores in 1911-12

Re-Exports —The re-export trade which is comparatively unimportant tends to diminish as the development of direct communications between various parts of the world increases Excluding the year 1911-12, when there was an abnormal export of imported sugar to the United Kingdom, the Indian re-export trade has not shown the decrease in recent years which might have been expected, but at the same time no great tendency is indicated in the other direction. The re-export trade in the year under review was valued at Rs 4,68 lakhs and was mostly in manufactured goods, imported from Western countries, the most important class being cotton goods, valued at Rs 1,56 lakhs, which go chiefly to East Africa, Persia, Arabia, Bahrein Islands and Aden The re-exports to Western countries are comparatively small, raw wool imported over the land frontiers being the chief commodity In 1913-14 the total amount of raw wool re-exported to the United Kingdom was Rs. 44 lakhs

THE IMPORT TRADE OF THE YEAR.

Imports —There has been a conspicuous increase in the aggregate value of imports in recent years It averaged annually in the five years ending 1909-10 almost Rs 116 crores, in the following three years Rs 143 crores, rising to over Rs 183 crores in the year under review By far the largest proportion of the increase occurred in the class of Manufactured Articles, which constitute nearly 80 per cent of the total imports There was also a small increase in the class of Food, Drink and Tobacco, which was counterbalanced by a decrease under raw materials and articles mainly unmanufactured The relative dimensions of each of these large groups, and the change in the aggregate value of each during the year will be seen from the following figures (in lakhs of rupees)

	1912-13	1913-14	Increase + or Decrease(–)	Per cent	Relative share of each class.
Food, Drink and Tobacco ..	23,41	24,66	+ 1,25	+ 5	13 4
Raw Materials, etc. . .	12,40	10,56	— 1,84	— 15	5 8
Articles manufactured .. .	1,22,93	1,45,16	+ 22,23	+ 18	79.2
Miscellaneous	2,26	2,87	+ 61	+ 27	1.6
TOTAL ..	1,61,00	1,83,25	+ 22,25	+ 14	100

When the items comprised in these groups are examined in detail it appears that in only three of the important articles there was a decline They are coal, silk raw and piece-goods (in both of which a comparatively small decline followed the much inflated trade of the preceding year and raw cotton The principal increases and decreases of the imports of 1913-14 as against 1912-13 are shown below —

	Rs (Lakhs)
Apparel and boots and shoes	+ 23
Carriages and carts, etc	+ 23
Chemicals, drugs, etc.	+ 21
Coal	— 14
Cotton raw	— 1,95
Cotton manufactures	+ 5 48
Cutlery, hardware, instruments, etc	+ 96
Glassware, etc	+ 28
Grain and pulse	+ 15
Iron and steel manufactures	+ 4,52
Machinery	+ 2,40
Oils	+ 41
Metals other than iron and steel	+ 2,03
Paper, pasteboard, etc	+ 21
Railway Plant, etc	+ 3,63
Silk, raw	+ 45
Sugar	+ 68
Wood and timber	+ 18
Woollens	+ 79

Increased Purchasing Power —The imports show a general increase in all directions, and indicate the growing purchasing power of the people The imports of sugar and molasses, kerosene oil, cotton piece-goods, silk and woollen goods, apparel, boots and shoes, soaps, copper and yellow metals, matches, betelnuts and galvanised iron sheets, reduced to index numbers are in the last six years successively 86, 87, 99, 103, 125, and 144 taking the average for 1908-13 as the base (100) Imports of goods consumed generally by Indians indicate perhaps the surest criterion of the purchasing power of the people, and it will be seen that many of these imports are to be classed as conventional necessities or luxuries rather than articles of primary necessity The increase in the imports over the last quinquennium shows the improved economic situation and a general diffusion of well-being It is sufficient to point out that the progress experienced in the year 1912-13 continued in 1913-14, and there has been a further advance of over Rs 22 crores The special feature of the import trade continues to be the great demand for cotton manufactures **Cotton goods** have advanced until their values approximate to a third of the total import trade The actual increase of imports has not been so great as the figures by value suggest Taking cotton manufactures as a whole, the United Kingdom in 1913-14 supplied over 90 per cent of the total and the percentages were higher in the case of piecegoods. Of other countries Japan has made a most marked advance, sending goods to the value of Rs 120 lakhs in 1913-14 as against Rs 81 lakhs in 1912-13, and Rs 76 lakhs in 1911-12 and as against Rs 13 lakhs ten years ago, the imports consisting chiefly of hosiery. **Cotton yarns** show no very marked increase, and come mostly from the United Kingdom In the year under review both sides of India suffered from congestion of cotton piece-goods, which was due to a large extent to the contraction of purchasing power owing to famine or quasi-famine conditions in certain areas, especially in the United Provinces Substantial increases are also noticed in **railway plant** and rolling stock and **machinery** The bulk of the trade is with the United Kingdom The figures for railway plant and rolling stock (which do not include stores on Government account) were Rs 10 crores in 1913-14 In 1913-14 all classes of machinery increased more or less, but the increase of nearly Rs 2½ crores was due mainly to the heavy imports of textile and electrical machinery and primemovers In 1913-14 there was also an increase under all heads of instruments and apparatus except scientific Under articles of Food and Drink **Sugar** retains a position of supreme importance The imports of sugar are of special interest by reason of their bearing on the question of sugar cultivation in India It is a striking fact that the production in India is estimated to be some 3 million tons of cane sugar a year and India is thus the largest single producer of sugar in the world At the same time India imports increasing quantities amounting in 1913-14 to nearly 10 per cent of the total supply of cane sugar outside India Cane sugar, which is imported from Java, Mauritius, the Straits Settlements, and China, was 90 per cent. of the total sugar imported Beet sugar is imported from Austria, Germany, Belgium and the United Kingdom Imports of hides, gums and resins, cotton yarn, matches, cement and mineral dyes showed decreases

Bullion —The movements of gold and silver bullion are of special interest at the present time, especially in view of their connection with currency The imports of **gold** on private account were Rs 28 crores, there being none on Government account The exports on private account were about Rs 5 crores, and there were no exports on Government account The net imports of gold were 23¼ crores in 1913-14, Rs 34 crores in 1912-13, Rs 38 crores in 1911-12, and Rs 24 crores in 1910-11 Imports of **silver** on Government account were Rs 7 crores and on private account Rs 8 crores The exports on private account were Rs 2 crores, and on Government account Rs 3 lakhs In short, the net imports of silver were Rs 13 crores as compared with Rs 17 crores in 1912-13 and Rs 5 crores in 1911-12 The stream of the precious metals to India is still continuing The **absorption of Gold** in India rose from Rs 7½ crores in 1890-91 to Rs 12 crores in 1903-04, and to Rs 21 crores in 1907-08, to Rs. 25½ crores in 1911-12, in 1912-13 to Rs 31½ crores and in 1913-14 to Rs 34½ crores

Sovereigns —Nearly one-half of the total amount of gold imported, speaking generally is in the shape of coin—practically all in sovereigns The exports consist of bullion from the Kolar and other gold fields to the extent of over Rs 3 crores in 1913-14 or two-thirds of the total exports of gold Silver, which is not produced locally in any appreciable quantity, is imported mostly as bullion, and in the year under review about Rs 7 crores of bullion was imported on Government account for coinage purposes as against Rs 9 crores the previous year Silver exported is mainly in the form of rupees which circulate exclusively in Ceylon, Mauritius, Arabia, East Africa and the Persian Gulf.

Balance of Trade —The excess of export over imports including merchandise and treasure in 1913-14 was Rs 21,37 lakhs including Government transactions, and Rs 36,08 lakhs excluding Government transactions, the average for the last three years being Rs 30,20 lakhs and Rs 41,08 lakhs, respectively

Prices —In reviewing the course of foreign trade during the year it is necessary to take into account the movement in prices, and the part played by them in producing the changes recorded in the trade returns It will be sufficient to show here how the 1913-14 figures appear if calculated at prices current in 1912-13 The calculated figures given below in lakhs of rupees, when compared with the 1912-13 returns show the change in the volume of trade, while the comparison with the recorded values in 1913-14 shows what change has occurred in average import and export prices The table shows that of the recorded increase of Rs 25,07 lakhs, Rs 16,56 lakhs was due to the larger volume of trade and Rs 8,51 lakhs to higher prices That is to say, prices were about 2 per cent higher than in 1912-13 and the actual volume of our foreign trade increased by about 4 per cent —

	Value recorded in 1913-14	Calculated value of 1913-14 trade at prices of 1912-13	Value recorded in 1912-13
IMPORTS —	Rs	Rs	Rs
Food, Drink and Tobacco	24,66	26,45	23,40
Raw Materials	10,56	9,97	12,40
Manufactures	1,45,16	1,43 25	1,22,93
Total Impotrs (including miscellaneous)	1,83,25	1,82,48	1,61,00
EXPORTS —			
Food, Drink and Tobacco	64,77	65,44	78,08
Raw Materials	1,22,46	1,16 08	1,03,48
Manufactures	54,59	51,99	57,33
Total exports (including miscellaneous)	2,44,23	2,36,46	2,41,35
RE-EXPORTS —			
Food, Drink and Tobacco	58	58	55
Raw Materials	84	87	97
Manufactures	3,10	3,09	3,08
Total re-exports (including miscellaneous)	4,68	4,71	4,74
TOTAL TURNOVER	4,32,16	4,23,65	4,07,09

The analysis of prices shows the rise was chiefly under food, grain, pulses, textiles, jute and building materials, the prices of which rose by 13, 17, and 11 per cent respectively There was also an increase, though not marked, in tea and coffee (5 per cent), textiles-cotton (3 per cent) and silk and wool (5 per cent) hides and skins (5 per cent) and metals and manufactures thereof (2 per cent) The prices of food grain cereals and sugar fell by 3 and 6 per cent. respectively Those of other articles of food and drink, oilseeds and other raw and manufactured articles remained at about the level of 1912-13 On the whole, i e taking all articles together the general average increase was 2 per cent Prices of all articles over the last two decades stand at a higher level than at any previous period with the exception of tea, coffee and silk The largest increase during the period has occured in the price of hides and skins and jute. The classes of commodities that have increased most besides these are oilseeds, pulses, cereals and building materials

Labour —It is necessary to refer to the rise in the price of labour (wages) which has had, especially in Bombay, an important effect in the year's industry From an examination of returns supplied by leading industries, cotton (Bombay), woollen (Cawnpore), jute (Bengal), paper (Bengal), rice (Rangoon), mining (Bengal), and brewing (Punjab), it has been found that there has been a general rise in wages in these industries of 3 per cent in 1913-14 The greatest rise is a rise of 9 per cent in the cotton industry in Bombay and in the woollen mills in Upper India The insufficiency of operatives in the cotton factories in Bombay has been of serious hindrance to the industry, and is due to the great demand for unskilled labour elsewhere, chiefly in the Public Works Department and at the docks, and also to such root factors over long periods as plague, etc , which arrest the natural growth of the population at a time of considerable industrial expansion The jute industry shows a rise of 2 per cent There was no material change in tea gardens, where labour conditions remained on the whole the same as in the previous year The importance of the figures may be gauged from the statistics of the last census (1911) which show that on the date of the census there were 704,000 employed on tea gardens, 308,000 in cotton mills, 222,000 in other textile industries, and 143,000 in collieries. But the rise in the wages of industrial labour has not been so great as in the case of agricultural labourers and village artisans Money wages have over long periods increased in all industries and the rise has generally been greater than or equal to the rise in retail prices except in the tea, sugar and brewing industries. An examination of Indian wage statistics during the last decade shows that this is certainly the labourer's day.

Trade according to countries.

The value of the total trade in private merchandise and treasure of British India with the United Kingdom, British possessions and Foreign countries during 1913-14 is given below in lakhs of rupees .—

	Exports including re-exports	Imports	TOTAL
United Kingdom	61,80	1,40,58	2,02,38
Other British Possessions	39,24	15,18	54,42
Foreign Countries	1,54,92	64,11	2,19,03
TOTAL	2,55,96	2,19,87	4,75,83

The bulk of the foreign trade of India has always been conducted with the UNITED KINGDOM, which is a market for most of the articles shipped from India, and is also, to a diminishing extent, a centre for the storage and distribution to other countries of certain articles, not required for home consumption Her aggregate share in the total trade is 41 per cent The trade with BRITISH POSSESSIONS other than the United Kingdom forms 11 per cent of the total trade The trade with FOREIGN COUNTRIES represents 48 per cent, of the total

Europe and Asia —As regards the trade in private merchandise only, no less than 80 per cent of the import trade of India is carried on with European countries Imports from Africa and America are comparatively trifling, and those from Australasia do not seem at present likely to attain to large dimensions But while the import trade is so largely derived from Europe, the exports are far more widely distributed over the world Not more than 57 per cent, is sent to European countries and the greater part of the remainder, namely, 26 per cent is destined for Asiatic ports To the Continents of Australasia, America and Africa, 2, 12 and 3 per cent are exported respectively—

	Imports Rs (Lakhs)	Exports including re-exports Rs (Lakhs).	TOTAL Rs (Lakhs)	Per cent.
Europe	1,47,13	1 42,96	2,90,09	67
Asia	26,71	64,57	91,28	21
America	4,80	28,90	33,70	8
Africa	3,69	7,49	11,18	3
Australasia	92	4,99	5,91	1

Owing to change in the method of compiling the seaborne trade statistics, namely, according to countries of consignment and final destination there has been a considerable decline in the recorded imports from Belgium and a corresponding increase in imports from Germany There have been also a diminution in the imports from Russia, and an increase in those from Austria Hungary, Java, the United States and Japan In the first four cases, the results are due mainly to the changes in the sugar and oil trades, and in the case of Japan the development of the import trade has been marked under the heads of silk manufactures and cotton hosiery. Japan has succeeded to a large extent by paying attention to a great factor in the Indian bazar, the element of cheapness

The imports from the **United Kingdom** have increased, but in the case of exports there has been an appreciable decline during the year 1913-14 compared with 1912-13 The imports from the United Kingdom are of an extremely varied nature, and record an increase of Rs 16·14 lakhs Over 79 per cent of the total value is taken up by a very small number of articles, noted below In these seven categories, which are typical of the requirements of India from abroad, the position of the United Kingdom is unrivalled, except perhaps in the matter of metals, a demand for cheap and inferior iron and steel having arisen in India, which is now met by Belgium and Germany. Certain other articles, as for instance, glassware, musical instruments, stationery, books, boots and shoes, soap have an increase sale in India Exports have declined by Rs 3 48 lakhs owing to decreases under wheat, barley and hides and skins. These decreases, however, are partly set off by increased shipments of cotton seed, raw cotton, jute raw and manufactured, tea and lac.

Imports	Rs (Lakhs).
Cotton yarn	3 57
,, grey goods	25 03
,, white ,,	13 93
,, coloured ,,	15 33
Metals and Ores	14 05
Railway Plant, etc.	9 33
Machinery, etc.	6·96
Hardware	2 26
Woollens	2 22
Apparel	72

India imports but little from **British Colonies** The market in India for such articles as Australia can send, is not large, and the continental goods are available at rates with which she cannot compete There was a large consignment of wooden railway sleepers from there and a marked increase in the exports of gunny bags, and cloth which were required chiefly for bags to hold Australian produce In the trade with Hongkong, opium accounts for a fall from Rs 3 61 lakhs to Rs 1 63 lakhs, which was partly made good by increased shipments of cotton twist and yarn Imports from the **Straits Settlements** increased by Rs 34 lakhs, block tin and betelnuts being chiefly responsible for the improvement, while exports declined owing to restricted shipments of opium and rice, partly set off by larger shipment of coloured piecegoods and jute manufactures The import trade of **Ceylon** improved, due to increased receipts from spices while exports of rice, coal, coloured piece-goods, especially lungis and saris, and tea declined Imports from **Mauritius** declined by Rs 71 lakhs owing to a fall in the value of sugar Imports from **Cape Colony** declined by Rs 75,000 Noticeable fluctuations were principally a contraction in the value of rice exported to Mauritius and of gunny bags to the Cape Trade with **Natal** has not advanced, the total value being Rs 105 lakhs, as in 1912-13 The import trade is practically confined to coal (Rs 21 lakhs) and the principal export are rice (Rs 31 lakhs) and gunny bags (Rs 25 lakhs) Exports of tea to **Canada** improved but those of gunny cloth declined Rice exported to **Aden** and salt imported therefrom fell in value in the year under review.

Continental Trade —The value of the Indian trade with **Germany** has increased Cotton manufactures, dyes, copper, iron and steel, machinery, and woollens bulk in the import trade The substantial improvemnt in exports is chiefly due to increased shipments of raw jute and cotton and seeds Heavier imports of iron and steel and cotton goods swelled the total imports from **Belgium**, while there was a decline under exports due to smaller shipments of grain and pulse and linseed, which were partly compensated for by larger shipments of raw cotton and copra Imports of sugar and glassware from **Austria-Hungary** advanced in value, as also exports of raw jute and cotton, and hides and skins **France** sends articles of a more or less special character, such as millinery, silk, brandy and wine, although the demand for the last two has been reduced by the substitution of whisky There was a large number of motor cars to the value of Rs 5 lakhs received from France Shipments of groundnuts, linseed, copra, raw jute and cotton were large, but those of poppy seeds and hides and skins fell off The trade with **Holland** has increased with larger shipments of grain and pulse, coir manufacture, and copra Cotton goods imported from **Italy** advanced, also exports of raw cotton and pepper Exports of hides and skins declined in value. **Russia** no longer holds the market for kerosine, the import of which was valued at nearly Rs 4 lakhs as against Rs 48 lakhs in 1912-13 Russia took tea worth Rs 168 lakhs and copra Rs 15 lakhs, both showing increases. Imports from the **United States** of America are not advancing The demand for petroleum has been affected by the competition of the Burma oil wells Last year imports of kerosine rose from Rs 130 lakhs to Rs 183 lakhs and the marked advance in the export trade was due to larger shipments of raw jute (+ Rs 85 lakhs) and jute manufactures (+ Rs 2,98 lakhs) Exports of hides and skins and lac fell by Rs 58 lakhs and Rs 6 lakhs respectively **Chile's** imports of jute manufactures rose by Rs 17 lakhs but the demand from the **Argentine** fell by a corresponding amount to the Rs 2,95 lakhs Formerly **China** did a larger business with India than any other country, next to the United Kingdom, but the trade has been much affected by Japan's direct trade with India, the extinction of the opium trade, and the diminution in the trade in cotton yarn, which is now partly supplied by Japan Shipments of opium to China during the year dwindled to Rs 4 lakhs from Rs 4,86 lakhs in 1912-13 She received more tea but less cotton raw and twist and yarn than in 1912-13, and her share of the trade was reduced by Rs 5,30 lakhs to Rs 5,72 lakhs The trade with **Japan** has increased very largely and rapidly from Rs 10,92 lakhs ten years ago to Rs 15,16 lakhs in 1909-10, and Rs 27,47 lakhs last year Increased imports are partly attributed to the establishment of commercial agencies, the ability to supply cheap articles exactly what is required by the Indian Market, the establishment of a direct line of steamers with Bombay, and of a branch of a Japanese bank there She has recognised the importance of the market for cotton hosiery silk fabrics, matches, umbrella fittings, and copper The export trade shows an appreciable improvement of Rs 3,96 lakhs owing to the increased shipments of raw cotton Of the total exports to Japan (Rs 22,67 lakhs) in 1913-14 raw cotton (Rs 19,40 lakhs) was by far the most important The other exports in order of importance were husked rice (Rs 1,62 lakhs), iron or steel pig (Rs 33 lakhs), oilcakes (Rs 30 lakhs), opium (Rs 18 lakhs), raw jute (Rs 16 lakhs), jute manufactures (Rs 15 lakhs), hides and skins (Rs 13 lakhs) and manures (Rs 10 lakhs) The chief imports were silk piece-goods (Rs 1,18 lakhs), hosiery (Rs 83 lakhs), copper (Rs 41 lakhs), matches (Rs 39 lakhs), glass (Rs 16 lakhs), and coal (Rs 13 lakhs) Japan now occupies the predominant position in the trade with foreign countries in Asia, her share amounting to nearly 3 per cent of the import and 9 per cent of the export trade The increase under imports from **Java** is accounted for by larger receipts of sugar. Exports of opium to Java also increased Ten years ago the trade with Java was valued at Rs 2,47 lakhs In 1913-14 this had risen to Rs. 12,69 lakhs, as against Rs 12,79 lakhs in 1912-13 The trade has increased very considerably as compared with a decade ago, due chiefly to the growth in the imports of sugar and exports of jute goods and opium The chief exports in 1913-14 were jute goods (Rs 71 lakhs), husked rice (Rs 39 lakhs), opium (Rs 71 lakhs) and tea seed (Rs 5 lakhs) and the chief imports, sugar (Rs 10,64 lakhs) and timber (Rs. 5 lakhs) Imports of teakwood from **Siam** declined from Rs 25 lakhs to Rs 21 lakhs, while export of gunny bags rose from 20 lakhs to Rs. 46 lakhs The principal articles of exports to Indo China are opium and jute

manufactures, both of which showed considerable improvement The progress of the trade with Borneo is chiefly due to increased imports of kerosine oil, which rose from Rs 46 lakhs to Rs 78 lakhs

Trade by Provinces—Of the trade with Europe, much the largest part is carried on by Bengal, while Bombay does a much more extensive Asiatic trade than Bengal Bombay again has very minor trade relations with America and Australasia, the trade with those regions centring largely in Calcutta

The import and export trade in merchandise only of each maritime province with foreign countries during last year is stated in lakhs of rupee below—

	Import	Export.	Total.
	Rs	Rs	Rs
Bengal	72,08	1,02,75	1,74,83
Bihar and Orissa	..	33	33
Bomaby	62,53	69,47	1,32,00
Sind	16,28	26,54	42,82
Madras	16,36	25,91	42,27
Burma	16 00	23,91	39,91
Total	1,83,25	2,48,91	4,32,16

Trade by Ports.—India possesses a very long seaboard but very few natural harbours, and hence about 95 per cent of her foreign trade passes through the principal ports, two of which are actually situated at some distance from the sea The proportion of the total trade in private merchandise passing through them in 1913-14 as compared with a decade ago (1904-05) is given below in lakhs of rupees –

	1904-05	Per cent	1913-14	Per cent
Calcutta	99,68	39	1,68,59	39
Bombay	77,11	30	1,31,99	31
Karachi	25,67	10	42,82	10
Rangoon	21,57	8	33 02	8
Madras	10,08	5	20,89	5
Tuticorin	3,19	1	6,97	1
Chittagong	2,98	1	6,24	1
TOTAL	2,42,28	95	4,10,52	95

There has been no material change in the ratios for different ports, which is in the case of Calcutta 39 per cent, of Bombay 30 per cent, of Karachi 10 per cent, of Rangoon 8 per cent, of Madras 5 per cent, and of Tuticorin and Chittagong 1 per cent each

Frontier Trade.

This trade is carried on with the adjoining foreign countries across the vast land frontier of India. The value, though comparatively small, being less than 5 per cent of the sea-borne trade, has increased in a very satisfactory way during recent years and has now attained substantial dimensions, amounting to Rs 21,44 lakhs in 1913-14

(In lakhs of rupees)

	1912-13			1913-14		
	Exports	Imports.	Total	Exports	Imports.	Total.
N W. Frontier—						
Afghanistan	2,49	1,27	376,	1.52	1,29	2,81
Dir, Swat and Bajaur	92	86	1,78	87	78	1,65
Central Asia ..	3	4	7	18	12	30
Persia ..	19	4	23	22	3	25
N and N.-E. Frontier—						
Nepal ..	2,17	4 54	6,71	2,05	4,33	6,38
Tibet .. .	13	25	38	20	33	53
Sikkim .. .	13	15	28	16	31	47
Bhutan .. .	11	15	26	18	21	39
Eastern Frontier—						
Shan States ..	2,03	1,91	3,94	1,83	2,02	3,85
W. China ..	63	22	85	56	29	85
Siam	20	35	55	17	44	61
Karennee (North Tennasserim)	5	26	31	6	35	41

The principal imports across the land frontier are rice, oilseeds, provisions (chiefly in the form of ghi, and pickled tea), cattle, sheep and goats all coming largely from Nepal, horses, ponies, and mules, chiefly from the Shan States, teak from Siam and Karennee, other timber from the North West frontier, raw wool mainly from Afghanistan and Tibet, and fruits and vegetables, especially from Afghanistan The principal exports are cotton manufactures, and yarn, mostly of foreign origin, the other exports, among which spices, metals, sugar, tea and salt are the most important, are on a much smaller scale.

About 27 per cent of the total frontier trade crossed the North West frontier last year The trade with **Persia** continues very small, in spite of the efforts made to develop the route from Quetta by way of Nushki and Seistan The Quetta-Nushki Railway was opened in 1905, and rebates of freight have been granted by some Indian railways on goods for Persia, but the trade has been subject to various drawbacks, and is yet small From Rs 12 lakhs in 1909-10, it increased to Rs 25 lakhs in 1913-14, the largest items in the exports from India being cotton piece-goods, leather and tea Formerly the trade with **Afghanistan** was subject to many restrictions in the way of heavy duties, monopolies, etc, but with the removal of some of them, the trade has expanded of late years, but not to such an extent as seems possible Last year, however, the total value (Rs 2,81 lakhs) was much less than in 1912-13 (Rs 3,77 lakhs). Under imports raw wool increased in value to Rs 74 lakhs, representing 57 per cent of the total, due to favourable rains and good quality, while fruits and nuts declined to Rs 26 lakhs Cotton piecegoods and tea mainly accounted for the decrease under exports from India These decreases are attributed to the tightness of the money market owing to failures of Indian banks.

General Summary.

In the following table the more important statistics relating to trade are summarised for the year under review (1913-14), the previous year (1912-13) and a decade ago (1904-05).

	1904-05 Rs (lakhs)	1912-13 Rs (lakhs).	1913-14 Rs (lakhs)
Total Foreign Seaborne trade (merchandise)	262,13	412,85	440,35
Exports including re-exports	157,72	246,22	249,04
Imports . .	104,41	166,63	191,31
Net imports of treasure .	22,97	51,20	36,36
Net imports of gold .	9,70	34,00	23,33
Total inland trade (merchandise)	558,36	901,35	873,30
„ Coasting trade (merchandise)	76,53	113,66	118,72
„ Frontier trade (merchandise)	13,19	19,88	19,25
Gross Railway earnings .. .	3,967	61,36	62,56
Railroad mileage . miles	27,727	33,599	34,699
Total area (1,000 acres)	555,974	618,927	618,927
Cultivated acres „	207,721	224,166	224,166
Wheat raised (1,000 tons)	7,582	9,853	8,427
Rice „ „	22,423	28,484	28,167
Cotton „ .(1,000 bales) .	3,791	4,610	5,201
Jute „ „	7,400	9,843	8,752
Coal „ (1,000 tons)	8,217	14,706	16,208
Shipping tonnage . „	13,881	17,484	17,386
Customs Revenue (Rs lakhs)	6,20	10,10	1,064
Paper Currency „ (gross circulation)	39,18	68,98	6,612
Population, last census (1911)	. .	.	315,083,772
„ preceding census (1901) . .	.	.	294,292,433

From this table two points are manifest—(1) the record trade figures for 1913-14, and (2) the general progress and increase of prosperity which has been made within the decade. Despite the fact that 1913-14 had several disadvantages, for example, a partial failure of the monsoon in Upper India, abnormally heavy rains in Bengal and Madras, the banking crisis in Northern and Western India, the glut in the piece goods markets in Bombay and in Calcutta, and some difficulty of Railway transport, the total foreign sea-borne trade advanced to Rs. 440 crores. This increased

volume of trade however is still low compared with the United Kingdom and other leading countries as will be seen in the table below—

Trade per head of Population in selected Countries.

—— –	Population in millions	1900	1905.	1910	1911.	1912	1913
		Rs a	Rs a	Rs a	Rs a	Rs a	Rs a
India	315	6 4	8 8	10 11	11 6	12 8	13 3
Russia	164	16 0	18 6	24 7	24 3	23 4	24 10
United Kingdom	45	273 12	285 2	335 10	341 10	367 15	386 2
France	40	135 14	147 10	202 8	214 8	226 0	232 3
Germany	65	135 12	156 6	186 6	200 13	219 12	230 11
Italy	35	56 6	68 4	91 15	95 11	105 10	106 5
United States	92	90 6	95 14	110 9	119 9	136 10	136 3
Japan	50	17 7	26 9	28 8	28 8	33 9	39 7
China	400	2 2	3 13	4 4	4 4	4 13	5 8

The share per head of population in India is 3 per cent of that of the United Kingdom, 6 per cent. of France and Germany, and 9 per cent of the United States

INLAND TRADE.

The rail and river-borne trade gives some idea of the extent to which the different parts of the country are respectively concerned in the movements of the chief articles of trade It is a supplement to the sea-borne trade of the country, and shows where the commodities after importation at the ports go for consumption, and whence the ports get the supply for exports outside the country

The total trade (railed and river-borne) for the twelve months ending **March**, 1914, as regards quantity, amounted to 1,350,052,000 cwts as compared with 1,375,916,000 cwts in 1913 and 1,080,411,617 cwts on the average of the previous 3 years The inland trade of the British Provinces (excluding that of the seaports) was 60 84 per cent and that of the seaport 33 25 per cent The rail and river-borne trade of Calcutta was by far the largest, and represented 18 39 per cent of the total inland trade of British India, or nearly three times that of Bombay port, the imports alone accounting for 14 per cent of the total inland trade registered Bengal (excluding Calcutta) follows with a trade of 204,966,000 cwts or 15 18 per cent of the total inland trade The total trade of Bengal including Calcutta amounted to 33 57 per cent The trade of the Bombay port was 7 per cent and that of the Bombay Presidency, excluding the port, 5 46 per cent The total inland trade of Bombay Presidency including Bombay port amounted to 12 46 per cent or a little above one-third of the trade of Bengal with Calcutta

Navigable Rivers—Besides the State irrigation works, which are also navigable canals, Madras and Bengal possess other canals which have been constructed solely for purposes of navigation But the bulk of the water-borne trade passes on certain rivers

The Indus, the Ganges, and the Brahmaputra are navigable by steamers all the year round, or for the greater part of the year, for hundreds of miles above their mouths, or above the heads of the navigable canals traversing their deltas The **Indus** is thus constantly navigable as high as Dera Ismail Khan in the North-West Frontier Province, 800 miles inland and 250 miles beyond the Sind border Its tributaries, the Chenab and the Sutlej, are open to small craft all the year round, but there is little traffic above Chiniot on the former and Ferozepore on the latter The Fulel Canal and the Eastern Nara may be regarded as navigable branches of the Indus The **Ganges** is navigable as high as Cawnpore, and steamers also pass up the Gogra as far as Fyzabad Steam navigation on the Indus and the upper Ganges has, however, been greatly reduced by the development of rail traffic, though on the Bengal portion of the Ganges it is still active The **Brahmaputra** is navigable by steamers as high as Dibrugarh, and there is steam navigation on its tributary the Surma as far inland as Sylhet and Cachar The Hooghly is navigable all the year round up to Nadia, and steamers can pass up the Nadia rivers above this point from July to October The great rivers on the east coast of the Peninsula—the Mahanadi, the Godavari, and the Kistna—are all navigable for some distance above the heads of their deltas, but the traffic on them is not very considerable Many tributaries or branches of these rivers are also navigable during the monsoon months, and several are open to small craft all the year round There are, in effect, all round the coast innumerable small rivers, creeks and backwaters affording facilities for water transport which are fully utilised by small native craft, but outside the zone of such operations inland navigation is practically confined to the deltas and to the valleys of the great rivers which form the natural waterways of the country

As to **Burma**, there is no Province in which the natural waterways afford greater facilities for inland navigation, or in which it is more extensively practised In the Arakan Division the Mayu and Kaladan rivers are navigable by steamers during a great part of the year for distances of 50 and 90 miles respectively above Akyab Many of the other rivers which fall into the Bay of Bengal are similarly navigable for some miles above the seaboard, and native crafts can, of course, proceed

much farther inland. Farther east the great **Irrawaddy** river, which traverses nearly the whole length of Upper and Lower Burma (excluding Tenasserim) is navigable by steamers at all seasons of the year as high as Bhamo, or more than 500 miles from its mouth, and steam launches and country boats can proceed much higher, or for some distance to the north of Myitkyina. The numerous deltaic channels which fall into the Bay of Bengal from the Irrawaddy form waterways connected with the main river and with the sea, which are for the most part navigable throughout the year while higher up many of the tributaries of this river are navigable for some distance above their confluences. Of these the two most important are the Chindwin and Myitnge rivers, the former of which is navigable by steamers during the monsoon as high as Homalin in the twenty-fifth parallel of latitude and by smaller craft as far as Kyaukse. Farther east again are the Sittoung and the Salween rivers, both of which discharge into the Gulf of Martaban. The former of these is navigable by small steamers during the monsoon as far as Toungoo, and for small craft as far as Pyinmana in Upper Burma. All these rivers have numerous navigable affluents, and branches or mouths which spread fanlike over their deltas and are in navigable communication with each other. There are also, all round the Burma Coast, innumerable creeks and backwaters open to steamers or smaller craft.

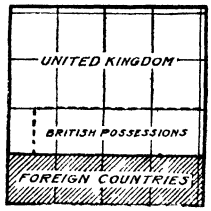
FISCAL POLICY.

The fiscal question in India is assuming greater importance every year in the public discussions. The country is as sharply divided between Tariff Reformers, or to put it more bluntly, Protectionists, and Free Traders, as Great Britain. No attempt will be made here to decide between the two schools of thought, but there are published articles on Indian Tariff Possibilities, and India and Free Trade, in which the pros and cons of the question are set out by strong holders of the two sets of views.

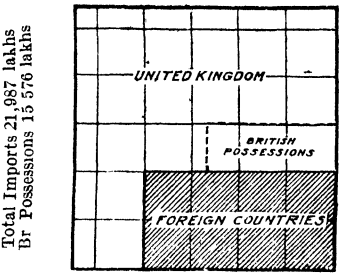
(*For the effect of the war on Indian trade, q. v. India and the War.*)

Distribution of trade of British India between British Possessions and Foreign Countries in 1913-14, as compared with a decade ago (1904-05).

	1904-05	1913-14
1 IMPORTS	13,000 lakhs	22,000 lakhs

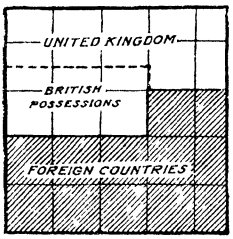


Total Imports 12 971 lakhs
Br Possessions 10,077 lakhs

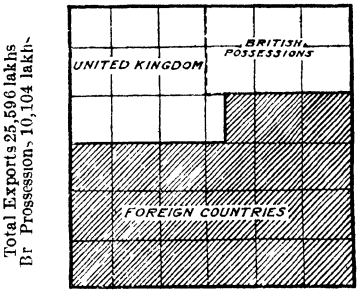


2 EXPORTS — 25 600 lakhs

16,500 lakhs

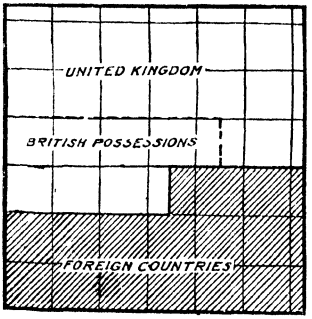


Total Exports 16,560 lakhs
Br. Possessions 8,106 lakhs

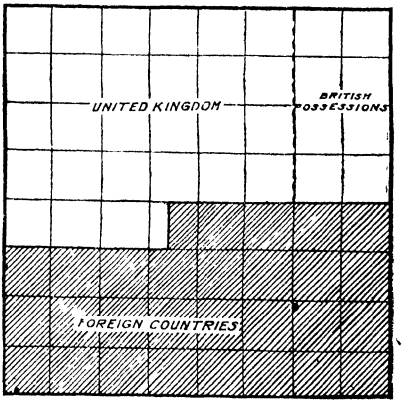


TOTAL TRADE — 47,600 lakhs

29 500 lakhs



Total Trade 29,531 lakhs
Br. Possessions 18,183 lakhs



Total Trade 47,583 lakhs
Br. Possessions 25,680 lakhs

Note.—Total trade includes private merchandise and treasure only.
The dotted lines indicate the share of the United Kingdom

India and Free Trade.

It is not infrequently charged against the British advocates of the maintenance of Free Trade for India that they are guilty of hypocritical selfishness, and that their real object is to retain the Indian market for themselves This allegation can only be advanced by controversialists who shut their eyes to facts, and ignore the opposition which Free Traders offer to attempts to introduce a Protective Tariff at Home in the interests of British manufacturers The position adopted by the Free Trader is that the present and ultimate economic good of every country is most effectually secured by giving the people access to the best markets for the satisfaction of their needs The people of India enjoy this right under Free Trade, as do the people of Great Britain If the day should come when Great Britain resorts to Protection the moral ground for maintaining Free Trade in India will have disappeared, and in the event of the Government of India then proposing to establish a Protective Tariff the British Protectionist Government would have to assent to the proposal or adopt the hypocritical attitude which is now attributed to Free Traders And it may be said here that, if the policy of the Free Trader were to admit British goods into India free of duty, while imposing heavy imposts on merchandise purchased by India from other countries, the epithets now applied to him unjustly would be justifiable and appropriate in his case Coming to the concrete aspect of the question, there is undoubtedly great force in the contention that if the Tariff Reform party at Home secured a majority in Parliament, their real troubles would at once begin It is one thing to indulge in vague platform rhetoric over the desirability of taxing the foreigner's goods, and another to frame a Protective Tariff which would not cause serious dislocation of trade and inflict grave injury on large sections of the community Difficulties would also arise here if the advocates of Protection in this country were given a free hand to deal with import duties Of the imports of foreign merchandise into India in the official year 1912-13, Rs 23 crores consisted of food and drink A further Rs 12¼ crores was made up of "Raw material and produce and articles mainly unmanufactured" Manufactured articles amounted to Rs 123 crores, including large classes of manufactures which India does not produce Considerably more than half consists of cotton piece-goods and other articles of clothing The framer of a Protective Tariff would therefore be confronted with the facts in the first place that a large proportion of the imports comprise goods which are not produced in India, and, in the second, that unless he taxed the clothing and the food of the masses his Protective Tariff would be an exiguous quantity, Among the food imports, sugar is by far the most important, amounting last year to Rs 14¼ crores This commodity, because of its cheapness, is largely consumed by the poorer classes The greater portion of it comes, of course, from Java, where, owing to the modern scientific methods adopted production is less costly and more efficient than in India The most effective means of meeting the competition of the Java product is by improving the methods in vogue in India, and this fact happily is receiving practical recognition But the Protectionist's idea is to shut out foreign sugar by taxation, a device which would enhance the price of a popular food, and at the same time tend to perpetuate inefficiency in the indigenous industry When this subject was fully debated in the Imperial Legislative Council some two years ago, Mr. Malivaya asserted that he would not shrink from imposing a duty of 30 per cent or even more on imported sugar It was pointed out, however, by Mr. Gokhale, that in order to give effective protection to the indigenous industry a duty of 80 per cent would be necessary

A widespread desire no doubt exists among Indian politicians to impose import duties on cotton cloth The effect of such a tax would be to raise the cost of the clothing of a population, the overwhelming majority of whom derive their livelihood from cultivating the soil. They have no voice in deciding the policy of the Government, and no knowledge of the opinions and speeches of Indian public men Their best interests are obviously served by enabling them to exchange their surplus produce on the most favourable terms for the manufactured articles which they require for their comfort or for the purposes of their daily avocations This they can do under Free Trade, and it is the solemn duty of the Government to consider their needs rather than the claims of the wealthy and influential advocates of a Protective Tariff Great industries have sprung up in India without the adventitious aid of Protection, and there is every reason to hope that the field will be greatly extended when wealthy Indians show more willingness to embark their capital in industrial enterprises But if any class of manufacturers succeeded in inducing the Government to subsidise it by means of Protective duties, a deafening and unreasoning clamour would arise from many directions for similar favours. The grave possibilities that lie here will be appreciated by all who have studied the history of Protection in the United States and are acquainted with the conditions that obtain in India.

Indian Tariff Possibilities.

By M. de P. Webb, C.I.E., (*Author of "Advance India," etc*).

The expediency of subordinating every social, economic, political and imperial consideration to the attainment of cheapness in consumption has never been recognised or admitted by Indian thinkers For this reason, the abolition of the general five per cent import duties in 1882 in obedience to the demands of English Free Traders aroused no enthusiasm in India Nor did their re-imposition in 1894 (when the Government of India, owing to financial stress, were compelled to seek additional revenues), lead to any general protest on the part of Indian consumers or others The 1894 Customs Tariff is still in operation Its general design and modifications foreshadow a departure from the rigid formulæ of the extreme Free Trader Thus, although the reduction of the general 5 per cent. duty to 3½ per cent in the case of cotton piece-goods and certain other manufactured cotton, goods,and the imposition of a 3½ per cent Excise Duty on the products of the Indian Cotton Mills, reveal a deplorable sacrifice of Indian interests to the demands of the cotton manufacturers of the English Midlands, the lower rate of duty of one per cent on many iron manufactures, and the admission of Railway material, power machinery, printing presses and ink, coal, manure, works of art, lead sheets for tea chests, and other special articles *free of duty* indicates a desire on the part of Government to utilise the tariff for the encouragement of certain kinds of economic development in India This move in the direction of a scientific tariff is one that is heartily welcomed in India.

A further step towards a Tariff appropriate alike for Indian and Imperial requirements was taken in March, 1913, when the Hon Sir Gangadhur Chitnavis, Member for the Central Provinces, moved the following Resolution in the Imperial Legislative Council —

> 'That this Council recommends to the Governor General in Council the desirability, in view of the loss of the opium revenue, of considering financial measures for strengthening the resources of the Government, with special reference to the possibility of increasing the revenue under a system of Preferential Tariffs with the United Kingdom and the Colonies.'

The mover argued that the benefits to India that would arise from the adoption of the principle here indicated, would be well worth the price that India might have to pay therefor. Sir Guy Fleetwood Wilson on behalf of the Government of India, sympathetically reviewed the general situation at some length, but suggested "further consideration of the intricate and delicate issues" before committing the Imperial Council to the recommendation embodied in Sir Gangadhur Chitnavis' Resolution. The Resolution was accordingly withdrawn Sir Guy Fleetwood Wilson's very able speech will repay careful study.

Tariff Reform League's Views.

Some idea of the direction in which a scheme of inter-Imperial Preferential Trade would tend, so far as India is concerned, may be gathered from the following extract from the official Handbook of the Tariff Reform League —

> "Preference would mean to India that the United Kingdom and the Colonies would give freer entry to Indian tea, coffee, sugar, wheat, and all Indian staple products, and it would mean to us that the Indian import duty on a large number of British manufactures would be either abolished or reduced"

The fact that India produces more wheat than any other part of the Empire, and more tea, coffee, sugar, cotton, jute, indigo and other dye stuffs, oil-seeds, undressed leather and cordage than all the rest of the Empire put together, makes India's position in any Imperial scheme of Preferential Trade one of paramount importance to all who aim at the progressive development of the Empire's Tariff Systems.

Industrial Expansion needed.

One of India's important needs and legitimate ambitions at the present day is industrial expansion (1) to relieve her congested agricultural industries, (2) to provide further occupations for those located in districts liable to rain failure, and (3) to create a variety and multiplicity of swadeshi commercial undertakings and home markets suitable and profitable for Indians of all tastes, capacities, and races. These needs and ambitions can be met by modifications of the Indian Customs Tariff which, whilst not adversely affecting British interests, would materially assist India's foreign and internal trade Thus, the manufacture in India of sugar, shawls, cotton, goods of low qualities, steel, metal work, enamelled ware, carpets, lace, pottery, indigo, glassware, oils vegetable and mineral, toys, perfumes, pencils, lamps, etc, *none of which are supplied in large quantities by the United Kingdom*, could be encouraged by a scientific adjustment of the Indian Tariff. With regard to Indian exports, Great Britain could give encouragement to India's wheat, jute, indigo, tea, coffee, tobacco, etc, whilst Foreign nations could be approached with confidence if India possessed retaliatory powers with regard to her tariff Russia's preference for Chinese tea, for example, might be modified if India's regard for Russian petroleum were restricted So, too, Germany's discrimination with regard to manufactured jute, cleaned rice, etc, might be met by an Indian discrimination with regard to German manufactures. The United States and France might be similarly considered, and all without the slightest risk to Indian or British commercial interests.

Protection must come.

These considerations bring us to the conclusion that India has much to gain economically and politically, and little or nothing to lose by proceeding a step further in the development of her Tariff As the late Sir Edward Law pointed out, "it is the natural desire of the great protectionist countries of the world to keep the peoples of India in the position of hewers of wood and drawers of water for their (*i. e.* foreign nations') manufacturers Ought such a situation to be tolerated when we hold the re-

medy in our own hands? Can we expect the people of India to accept it with equanimity?" Obviously, not. It is sometimes thought by rigid free traders in the United Kingdom that England can continue indefinitely to impose her free-imports policy on India. This is a grave misapprehension. Sooner or later, probably sooner, India's tariff will have to be modified in accordance with the views of India's industrial and political leaders. Those views unanimously favour protection for India's young but growing industries, protection against *all* competition if possible, but in any case, protection against the competition of those foreign countries who handicap or exclude the importation of India's manufactured products.

INDIAN COTTON DUTIES ACT.

The origin of this fiscal measure dates back to 1894 when the embarassment caused to the finances of India by the fall in exchange drove the Government of India to the necessity of adopting measures to increase their sources of revenue. Among these measures was the re-imposition of the Customs Tariff which had been in force prior to 1882 subject, however, to this difference that cotton yarns and fabrics, which had formerly been subjected to an import duty, were in 1894, excluded from the list of dutiable articles. This partial re-imposition of import duties had been recommended by the Herschell Commission which, in reporting in 1893 on the currency question, had favoured this method of adding to the revenue as being the least likely to excite opposition. In point of fact, however, this recommendation which was carried into effect in the Indian Tariff Act of March 1894 gave rise to very marked opposition. In support of their policy the Government appealed to the Resolutions passed in 1877 and reaffirmed in 1879 by the House of Commons, the first of which had condemned the levy of import duties on cotton fabrics imported into India as "being contrary to sound commercial policy," while the latter called upon the Government of India to effect "the complete abolition of these duties as being unjust alike to the Indian consumer and to the English producer." It was, however, an open secret that the decision to exclude from the list of dutiable articles cotton yarns and fabrics was not the decision of the Government of India but that of the Secretary of State. It was pertinently pointed out that the volume of trade in cotton goods and yarns then represented nearly one-half of the total imports from abroad, and that the exemption of these important commodities single other important commodities when practically every single other commodity was being subjected to an import duty could not be justified on its merits as a sound fiscal measure, much less when it was an admitted fact that the Budget would still show a deficit.

Excise Duties Imposed.—The opposition to this measure, though it failed to secure its rejection in the Legislative Council, was strong enough to induce the Secretary of State to reconsider the matter. Yielding to the united representations of the Government of India and of Indian public opinion, His Majesty's Government eventually agreed to the re-imposition of import duties on cotton yarns and fabrics provided that it could be shown that such a measure was necessitated by the position of Indian finances, and that it was combined with an Excise duty which would deprive the import tax of any protective character. Accordingly in December 1894, consequent on the further deterioration in the financial position, two bills were introduced in the Legislative Council. The first of these subjected cotton yarns and fabrics to the general import duty of 5 per cent. ad valorem. The second imposed an Excise duty on all cotton yarns of 20's and above produced by Mills in British India. In introducing this latter Bill the then Finance Minister, Sir James Westland, was careful to explain that the policy underlying its provisions had been imposed on the Government of India by the Secretary of State in pursuance of the Resolution of the House of Commons quoted above. The provisions of this particular Bill are of little interest. From the first it was recognised that they were unpractical. Lancashire and Indian spinners disagreed as to the point at which the line should be drawn exempting Indian yarns from the Excise Duty. Practical difficulties were pointed out by Indian spinners as to the impossibility of spinning precisely to a particular count. From the Lancashire point of view it was contended that the Bill offered facilities for evasion while it was admitted that under the system adopted in the Bill, the taxation of Indian and Lancashire products was not being carried out on a similar basis.

Act of 1896.—The Act was in fact doomed to be short-lived, and in December 1895 the Government of India were compelled to re-consider the whole position and to introduce an entirely new measure which became law in January 1896 as the Indian Cotton Duties Act II of 1896. This measure proceeded from two conclusions, namely, that no attempt should be made to obtain any duty from yarns whether imported or locally manufactured, and that an equal rate of duty should be applied to all woven goods whether imported or of Indian origin. With the object of conciliating the opposition, the rate of duty was fixed at 3½ per cent as opposed to the general rate of Customs duty of 5 per cent. The main provisions of the Act provided that the assessment for the purposes of collecting the Excise duty should be based on returns submitted by the mill-owners, and that provision should be made for a rebate in the case of woven goods exported out of India. No control beyond a requirement that statistical returns should be furnished was attempted in respect of spinning mills. On the other hand certain concessions in the matter of import duty on Mill stores were made by executive order so as to place Indian Mills on a footing more or less equal to their Lancashire competitors.

Criticisms of the Measure.—It is not possible within the limits of the present article to do more than summarise the criticisms with which this measure was received in India. Much of the opposition was based on grounds of a transient character, as for instance that the Indian industry was then in a state of continued depression and that it had been hard hit, particularly in respect of its export trade, by

the currency legislation, and by the uncertainty as to the fiscal policy of Government In some quarters objection was offered to the exemption of yarn, which it was alleged, would place the Indian hand weaving industry at an advantage with the Indian power weaving industry But the hostility to this measure, as also to the earlier measures already described, clearly proceeded from the feeling that the policy of the Government of India and of the Secretary of State had been dictated by Lancashire, and that the action of Lancashire was due not so much to the fact that there was any real competition between Indian and Manchester goods, but to a desire to handicap the Indian industry whose progress was already causing uneasiness to Lancashire interests It was argued that the imports from Lancashire were practically all of the higher counts, which, for climatic and other reasons, Indian mills could not produce, that in any case the advantage to the Indian millowner of the import duty was inconsiderable and was counterbalanced by certain drawbacks, arising from the inferiority of Indian labour, which could not be overcome, and that this advantage, such as it was, could scarcely be said to have a protective character, in view of the higher cost of initial equipment in the case of an Indian mill which has to import its machinery, and of working expenses consequent on the scarcity of skilled labour and on the necessity of importing stores required in the production of cloth Finally, from the standpoint of the consumer, very severe criticism was directed against the reduction, in favour of imported cotton goods, of the general rate of duty from 5 per cent to 3½ per cent on the ground that the effect of the legislation would relieve the richer classes who were consumers of the finer Manchester fabrics and impose new taxation on the poorer classes whose requirements were met by the Indian mills

New Factors in the Situation—Since the passing of this measure into law the policy of the Government of India in this respect has frequently been the subject of attack in the press and in the Legislative Councils while it has also formed the subject of continued representations by the industrial interests affected and political organizations In more recent years the agitation in favour of the abolition of the Excise duties has been revived by the growth in England of a strong body of public opinion in opposition to the policy of Free Trade Advantage has been taken of this new phase in English economic thought to press on behalf of India the acceptance of a policy of Protection and the removal of the Excise duties is now claimed by the opponents to this measure as a necessary corollary of the application to the British Empire of the principles associated with the name of Mr Chamberlain A new factor in the situation which has strengthened the position of those who are in opposition to the Excise duties is to be found in the severe competition which Indian mills have to face in China as well as in India from the Japanese industry The Japanese market was lost to India in the early years of this century. More recently, however, Japan has entered as a competitor with India into the China market, while within the last few years it has pushed its advantage as against the Indian millowner in the Indian market itself Again it is claimed that the recent enhancement of the silver duty has materially affected the position of the Indian spinner who relied on the China market On two occasions within the last five years the question of Excise duties has come prominently to the front as a result of debates in the Viceroy's Council The official attitude is firmly based on the position that the Excise duties stand and fall with the import duties Against such an attitude all arguments based either on the advantages of a Protectionist as opposed to a Free Trade policy or on the handicap to which the present system exposes the Indian millowner can, of course, make no head way. The Government of India are confronted with a heavy recurring loss in their revenues as a result of the abolition of the opium traffic The import duties on cotton piece-goods represent nearly fifteen per cent of the total revenue collected as Customs duty while the Excise duty itself realised no less than 47 lakhs in 1912-13 The strength of the arguments which support the Government position is so patent that the movement in favour of the total abolition of the Excise duty is gradually giving way to a feeling that a solution may be found in maintaining the Excise duty at its present rate while enhancing the import duties to the level of the general rate of Customs duty This policy, which is frankly of a protective character, can to some slight extent be supported by the change in the position of Lancashire in respect of the imports of cotton piece-goods In 1894 when the duties were first imposed the share of Lancashire was no less than 98 per cent of the total import trade in piece-goods Foreign competition, notably from Japan, has reduced its share to 91 per cent and it may be expected that the success of this attack on the position of Lancashire will in the near future loom largely in the arguments of those who favour a modified form of protection within the Empire

Statistics of the Industry—The main statistical features of the industry may briefly be referred to in illustration of the effects of the legislation discussed above The total production of yarn in Indian mills has risen from an average in 1896-1900 of 443 million lbs to 682,703,031 yds of which 198,000,000 were exported In the lower counts the increase has been from 423 to 616,000,000 yds, counts above 25 having increased from 20,000,000 yds to 66,000,000 yds On the other hand, the imports of yarn from the United Kingdom representing about 6 per cent of the total production in British India have varied from 43,000,000 yds to 44,000,000 yds of which 42,000,000 are of counts above 25 The number of spindles has increased from 3½ millions in 1894-95 to just over 6½ millions in 1913-14

The development of weaving has been even more marked, Looms numbered, in 1913-14, 99,360 as against 31,628 in 1894-95 while the production of cloth which averaged just under 92,000,000 yds in 1896-97 has advanced to 274,388,550 yds Grey goods represent about three-fourths of this total. The Excise duty which was estimated on the introduction of the Act of 1896 to yield 14 lakhs, yielded in 1913-14, 54 lakhs

Banking in India.

Of the three Presidency Banks the Bank of Bengal which commenced business in the year 1806 is by far the oldest It was followed by the Bank of Bombay in 1840 and by the Bank of Madras in 1843, but the former was wound up in the year 1867 and the present Bank dates from the year 1868

To commence with and for some considerable time thereafter Government had a very large interest in all three Banks, holding as they did a large proportion of the share capital and having the right to nominate a number of the Directors It was decided however in 1876 that this connection should cease and Government holding of shares was accordingly realised in that year and the right to be represented on the Directorates was given up at the same time Government are still entitled, however, to audit the Banks' accounts at any time if they deem this necessary, to call for any information touching the affairs of the Banks and the production of any documents relative thereto, and may also require the publication of such statements of assets and liabilities at such intervals and in such form and manner as may be thought fit The Banks' Agreements with Government are usually arranged for a period of ten years at a time and now-a-days provide for the most part for the carrying on at the head offices and branches of the ordinary banking business of Government in India and for the management and conduct in the three Presidency towns of the Government loans The management of the Government Savings Bank was at one time entrusted to the Bank, but this was handed over to the Post Office in the year 1896

Paper Currency.

The Banks had the right to issue currency notes until the year 1862, but in that year this privilege was withdrawn and to compensate the Banks for being deprived of this right, Government decided to deposit the whole of their balances at the Presidency towns with the Banks This practice held good until the year 1876, when the Reserve Treasuries were formed; but since that year Government balances, which are all payable at call, have only been maintained at a figure sufficient to meet the demands of Government and sufficient also to compensate the Banks in part for the work of keeping the accounts There is no definite undertaking on the part of Government to keep any balance with the Banks either at the head offices or branches; but there is a stipulation that in the event of the balance at the head office of each Bank falling below a certain stated figure, which varies in the case of each Bank, Government will pay interest on the deficit.

Government Deposits.

The following statement shows the Government deposits with each Bank at various periods during the last 40 years or so.

In Lakhs of rupees.

—	Bank of Bengal	Bank of Bombay	Bank of Madras.	Total.
30 June				
1875	496	91	124	711
1876	409	195	115	719
1881 .	230	61	53	344
1886 .	329	82	39	450
1891	332	97	53	482
1896	225	88	57	370
1901	187	90	63	340
1906	186	93	46	325
1911 .	198	129	77	404
1912	210	155	75	440
1913	247	167	68	482
1914	290	197	93	580

General Banking Business.

This is regulated by the Presidency Banks Act, 1876, under which Act all three Banks are now working The various descriptions of business which the Banks may transact are clearly laid down in Sec 36 of the Act, and it is expressly provided in Sec 37 that the Banks shall not transact any kind of banking business other than those sanctioned in Sec. 36 Briefly stated the main classes of business which the Banks may engage in are as follows.—

(1) Investing of money in any securities of the Government of India or of the United Kingdom of Great Britain and Ireland the stock or debentures of, or shares in Railways bearing a Government guarantee in respect of interest and the debentures and securities of any Municipal body or Port Trust in India or of the Bombay Improvement Trust and the altering, converting and transposing of such investments.

(2) Advancing of money against any of the securities specified above or against bullion or other goods which or the documents of title to which are deposited with or assigned to the Bank as security

(3) Advancing of money against accepted bills of Exchange and promissory notes.

(4) Drawing, discounting, buying and selling of bills of exchange and other negotiable securities payable in India or Ceylon

(5) Receiving deposits.

(6) Receiving securities for safe custody and realisation of interest, &c, from constituents of the Bank

(7) Buying and selling of gold and silver, whether coined or uncoined.

(8) Transacting pecuniary agency business on commission.

The principal restrictions placed on the business of the Banks are as follows —

(1) The drawing, discounting, buying and selling of bills of exchange and other negotiable securities is *confined* to bills and securities payable in India and Ceylon

(2) Borrowing of money is only permitted in India.

(3) Loans or advances upon mortgage or in any other manner upon the security of any immovable property or the documents of title relating thereto is expressly prohibited

(4) The amount which may be advanced to any individual or partnership by way of discount or on personal security is limited to an amount prescribed in the Bye-Laws of the Banks, such Bye-Laws having previously been approved by Government

(5) Loans or advances cannot be granted for a longer period than six months at a time

(6) Discounts cannot be made or advances on personal security be given, unless such discounts or advances carry with them the several responsibilities of at least two persons or firms unconnected with each other in general partnership

Various representations have been made to Government by the Banks to have certain of these restrictions withdrawn, particularly those referred to under Nos 1 and 2, which latter effectually prevent the Banks from doing anything in the nature of exchange business and from having access to the London money market for borrowing purposes. The restrictions in question were imposed at a time when the Government deposits formed a very large proportion of the Banks' total deposit and when also, owing to the instability of exchange, there was some danger of losses being incurred in engaging in that class of business. The Banks have contended however that as Government deposits now form a very small proportion of the total deposits, and as exchange has definitely been fixed at 16 pence there is no further necessity for the restrictions; and have asked that they should now be withdrawn It has further been argued that as the Presidency Banks are the ultimate resort of the money market in India, it is necessary, in the interests of trade, that the Banks should have some means open to them of increasing their resources in India in times of pressure and that the best means of giving them this power is to permit them to borrow in London The Government of India were prepared to meet the Banks' wishes in the above connection to a great extent in the year 1903, but the Secretary of State did not approve of the Government proposals, and they were finally negatived in 1906.

Government Deposits

The proportions which Government deposits have borne from time to time to the total Capital, Reserve and deposit of the three Banks are shown below —

In Lakhs of Rupees.

—	1 Capital	2 Reserve	3 Government deposits	4 Other deposits.	Proportion of Government deposits to 1, 2, 3 & 4
31st December					
1876	350	42	395	456	31·7 per cent
1881	350	61	333	542	25 8 ,,
1886	350	82	352	625	24 9 ,,
1891	350	97	297	1412	13 7 ,,
1896	350	158	299	1292	14 2 ,,
1901	360	213	340	1463	14 3 ,,
1906 .	360	279	307	2745	8 3 ,,
1907	360	294	335	2811	8·8 ,,
1908 .	360	309	325	2861	8·4 ,,
1909 .	360	318	319	3265	7·4 ,,
1910 .	360	331	423	3234	9 7 ,,
1911 .. .	360	340	438	3419	9·6 ,,
1912 .. .	375	361	426	3578	9 0 ,,
1913 .	375	370	587	3644	11·8 ,,

The Banks have also the management of the debt of a number of the Municipalities, Port Trusts and Improvement Trusts throughout India

Government policy in regard to the disposal of their surplus treasury balances in India has been strongly criticised at various times during the last thirty years or so, and it has been argued that the high rates of interest which are so common a feature in India when the crops come to be marketed are to a very large extent due to Government action in withdrawing money from the market when it is most needed and locking it up in the Reserve Treasuries. This question was considered at some length by the Royal Commission on Indian Finance and Currency q v which arrived at the conclusion that the present methods of dealing with the balances were open to criticism The Commission further stated that the most obvious remedy would be to close the Reserve Treasuries and place the whole of the Government balances in the Presidency towns with the Presidency Banks, but their final recommendation in this connection was that Government should make loans from their balances to the Presidency Banks—such loans to be within the absolute discretion of Government and to be granted only on good security and for short periods. It is not known how far the Government of India are prepared to accept the Commission's recommendation in this respect, but it is understood that the matter is presently under consideration.

The question of the establishment of a State Bank was considered at some length by the Commission and a considerable mass of evidence was taken on this point The opinions offered were however very conflicting, and although a draft scheme for such a Bank was drawn up by two of the Members of the Commission, the Commission as a whole finally came to the conclusion that they were not in a position to make recommendations one way or the other on the question of a State Bank It was suggested that a small expert body should be appointed in India to study the whole question and it is understood that the Government of India have the question of appointing such a Committee presently under consideration

Recent Progress.

The following statements shew the progress made by the three Banks within recent years —

In Lakhs of Rupees

BANK OF BENGAL.

—	Capital.	Reserve	Govt deposits	Other deposits	Cash	Investments	Dividend for year
31st December							
1880	200	25	202	502	483	153	8½ per cent
1885	200	41	148	383	312	116	9½ ,,
1890	200	47	226	666	639	206	9½ ,,
1895	200	68	184	677	422	132	10 ,,
1900	200	103	155	582	243	136	11 ,,
1905	200	140	167	1204	396	181	12 ,,
1906	200	150	160	1505	528	149	12 ,,
1907	200	157	187	1573	460	279	12 ,,
1908	200	165	178	1575	507	349	13 ,,
1909	200	170	168	1760	615	411	14 ,,
1910	200	175	198	1609	514	368	14 ,,
1911	200	180	270	1677	729	321	14 ,,
1912	200	185	234	1711	665	310	14 ,,
1913	200	191	301	1824	840	319	14 ,,

BANK OF BOMBAY

1880	100	22	39	265	159	79	7½ per cent.
1885	100	25	53	276	218	33	7½ ,,
1890	100	33	83	619	573	78	10 ,,
1895	100	51	76	358	228	105	11 ,,
1900	100	70	87	432	129	89	11 ,,
1905	100	87	92	676	259	158	12 ,,
1906	100	92	101	832	354	177	12 ,,
1907	100	96	112	821	324	164	13 ,,
1908	100	101	94	832	377	149	13 ,,
1909	100	103	120	1035	415	163	13 ,,
1910	100	105	152	1053	436	149	14 ,,
1911	100	106	107	1104	463	208	14 ,,
1912	100	106	117	1124	315	210	14 ,,
1913	100	106	200	1015	477	232	14 ,,

BANK OF MADRAS.

—	Capital	Reserve	Govt deposits	Other deposits	Cash	Investments	Dividend for year
1885 .	50	8	31	107	76	19	7 per cent.
1890	50	14	47	220	155	45	10½ ,,
1895	50	16	45	278	144	45	10 ,,
1900 ..	60	22	35	260	82	67	8 ,,
1905	60	30	41	344	140	71	10 ,,
1906	60	32	54	355	151	81	10 ,,
1907	60	36	35	416	162	84	10 ,,
1908	60	40	52	447	153	84	11 ,,
1909	60	44	49	500	141	79	12 ,,
1910	60	48	72	567	184	85	12 ,,
1911	60	52	59	625	165	104	12 ,,
1912	75	70	75	743	196	113	12 ,,
1913	75	73	86	805	219	117	12 ,,

Note — (The Banks have power under Sec 36 (*l*) to draw Bills of Exchange payable out of India under certain stated circumstances but this permission is of comparatively little importance)

Branches.

BANK OF BENGAL

Calcutta—

Harrison Road, Clive Street & Park Street

Agra, Akyab, Allahabad, Benares, Cawnpore, Chittagong, Dacca, Delhi, Hyderabad Deccan, Jalpaiguri, Lahore, Lucknow, Moulmein, Nagpore, Narainguage, Patna, Rangoon Secunderabad, Simla

Pay Offices

Chandpore, Serajgunge and Bombay (*Agency*)

BANK OF BOMBAY

Ahmedabad, Akola, Amaoti, Broach, Hyderabad (Sind), Indore, Jalgaon, Karachi, Poona, Rajkot, Sholapur, Sukkur & Surat

BANK OF MADRAS

Alleppy, Bangalore Bimlipatam, Calicut, Coconada, Cochin, Coimbatore, Colombo, Guntur, Mangalore, Masulipatam, Negapatam, Ootacamund, Tellicherry & Tuticorin

THE EXCHANGE BANKS.

The Banks carrying on Exchange business in India are merely branch agencies of Banks having their head offices in London, on the Continent, or in the Far East and the United States Originally their business was confined almost exclusively to the financing of the external trade of India, but in recent years most of them, while continuing to finance this part of India's trade, have also taken an active part in the financing of the internal portion also at the places where their branches are situated

At one time the Banks carried on their operations in India almost entirely with money borrowed elsewhere, principally in London—the home offices of the Banks attracting deposits for use in India by offering rates of interest much higher than the English Banks were able to quote Within recent years however it has been discovered that it is possible to attract deposits in India on quite as favourable terms as can be done in London and a very large proportion of the financing done by the Exchange Banks is now carried through by means of money actually borrowed in India No information is available as to how far *each* Bank has secured deposits in India but the following statement published by the Director-General of Statistics in India shows how rapidly such deposits have grown in the aggregate within recent years

TOTAL DEPOSITS OF ALL EXCHANGE BANKS SECURED IN INDIA

In Lakhs of Rupees

1870	52
1875	106
1880	339
1885	475
1890	753
1895	1030
1900	1050
1901	1183
1902	1370
1903	1614
1904	1632
1905	1704
1906	1808
1907	1917
1908	1951
1909	2027
1910	2479
1911	2816

Exchange Banks' Investments.

Turning now to the question of the investment of the Banks' resources, so far as it concerns India, this to a great extent consists of the purchase of bills drawn against imports and exports to and from India

The financing of the import trade originates and is carried through however for the most

part by Branches outside of India, the Indian Branches' share in the business consisting principally in collecting the amount of the bills at maturity and in furnishing their other branches with information as to the means and standing of the drawees of the bills, and it is as regards the export business that the Indian Branches are more immediately concerned The Exchange Banks have practically a monopoly of the export finance in India and in view of the dimensions of the trade which has to be dealt with the Banks would under ordinary circumstances require to utilise a very large proportion of their resources in carrying through the business They are able however by a system of rediscount in London to limit the employment of their own resources to a comparatively small figure in relation to the business they actually put through No definite information can be secured as to the extent to which rediscounting in London is carried on but the following figures appearing in the balance sheets dated 31st December 1913 of the undernoted Banks will give some idea of this

LIABILITY ON BILLS OF EXCHANGE RE-DISCOUNTED AND STILL CURRENT

	£
Chartered Bank of India	7,364,000
Eastern Bank, Ld	1,918,000
Hongkong and Shanghai Banking Corporation	9,829,000
Mercantile Bank of India, Ld	3,536,000
National Bank of India, Ld	7,999,000
	30,646,000

The above figures do not of course relate to re-discounts of Indian bills alone, as the Banks operate in other parts of the world also, but it may safely be inferred that bills drawn in India form a very large proportion of the whole

The bills against exports are largely drawn at three months' sight and may either be "clean" or be accompanied by the documents relating to the goods in respect of which they are drawn Most of them are drawn on well known firms at home or against credits opened by Banks or financial houses in England and bearing as they do an Exchange Bank endorsement they are readily taken up by the discount houses and Banks in London Any bills purchased in India are sent home by the first possible Mail so that presuming they are rediscounted as soon as they reach London the Exchange Banks are able to secure the return of their money in about 16 or 17 days instead of having to wait for three months which would be the case if they were unable to rediscount. It must not be assumed however that all bills are rediscounted as soon as they reach London as at times it suits the Banks to hold up the bills in anticipation of a fall in the London discount rate while on occasions also the Banks prefer to hold the bills on their own account as an investment until maturity

The Banks place themselves in funds in India for the purpose of purchasing export bills in a variety of ways of which the following are the principal —

(1) Proceeds of import bills as they mature.
(2) Sale of drafts and telegraphic transfers payable in London and elsewhere out of India
(3) Purchase of Council Bills and Telegraphic Transfers payable in India from the Secretary of State
(4) Imports of bar gold and silver bullion.
(5) Imports of sovereigns from London Egypt or Australia

The remaining business transacted by the Banks in India is of the usual nature and need not be given in detail

The following is a statement of the position of the various Exchange Banks carrying on business in India as at 31st December 1913.

In Thousands of £

——	Capital	Reserve	Deposits	Cash and Investment
Chartered Bank of India	1200	1700	17127	6097
Comptoir National D' Escompte de Paris	8000	1636	63097	9518
Delhi and London Bank, Ld	337	17	1696	349
Eastern Bank, Ld	400	15	1675	690
Hongkong & Shanghai Bank	1500	3245	29818	7919
International Banking Corpn	650	650	4486	2435
Mercantile Bank of India	562	465	5303	1760
National Bank of India	1000	1040	14876	4350
Russo Asiatic Bank (1912)	4745	2500	35847	7884
Yokohama Specie Bank	3000	1855	18971	5945

JOINT STOCK BANKS.

Previous to 1906 there were few Banks of this description operating in India, and such as were then in existence were of comparatively small importance and had their business confined to a very restricted area The rapid development of this class of Bank, which has been so marked a feature in Banking within recent years, really had its origin in Bombay and set in with the establishment of the Bank of India and the Indian Specie Bank in 1906. Since that time there has been a perfect stream of new flotations, and although many of the new Companies confine themselves to legitimate banking business, on the other hand a very large number engage in other businesses in addition, and can hardly be properly classed as Banks.

These Banks made very great strides during the first few years of their existence, but it was generally suspected in well informed circles that the business of many of the Banks was

of a very speculative and unsafe character and it was a matter of no great surprise to many people when it became known about a year ago that some of the Banks were in difficulties

The first important failure to take place was that of the People's Bank of India and the loss of confidence caused by the failure of that Bank resulted in a very large number of other failures the principal being that of the Indian Specie Bank

The public have for the time being lost much of their confidence in this class of Bank and deposits to a very large extent have been withdrawn and it is feared that a large portion of the money has gone back into hoards This is very unfortunate as many of the Banks, particularly the older established concerns, have always been recognised as being conducted on safe and prudent lines.

The following shows the position of the better known existing Banks as it appears in the latest available Balance Sheets —

In Lakhs of Rupees

——	Capital.	Reserve	Deposits	Cash and Investments
Allahabad Bank, Ld	25	36	676	175
Alliance Bank of Simla, Ld	30	10	539	227
Bank of Baroda, Ld	10	2	95	24
Bank of India, Ld	50	5	240	64
Bank of Mysore Ld	10		15	10
Bank of Rangoon, Ld	10	4	21	10
Bengal National Bank, Ld	8		22	5
Bombay Merchants Bank, Ld	12	2	19	3
Central Bank of India, Ld	15	1	40	22
Gorakpur Bank, Ld	3	1	22	5
Indian Bank, Ld	10	1	22	7
Karachi Bank, Ld	2		5	½
National Financing and Commission Corporation, Ld	15		8	4
Oudh Commercial Bank, Ld	5	4	24	5
Poona Bank, Ld	6		34	6
Punjab Banking Co , Ld	6	10½	156	66
Punjab National Bank, Ld	11	10	105	48
Standard Bank, Ld	10		4	4

The principal Banks which have gone into liquidation during the last twelve or eighteen months are given below along with a Statement of their Capital Reserve and deposits as at the date of the latest available Balance Sheets —

In Lakhs of Rupees

——	Capital	Reserve	Deposits
Bank of Upper India (1912)	10	9	191
Bombay Banking Co	1	.	15
Credit Bank of India, Ld	10	.	51
Indian Specie Bank, Ld	75	15	270
Kathiawad and Ahmedabad Banking Corporation	7	.	23
Lahore Bank, Ld (1912)	1	..	28
People's Bank of India, Ld	12	2	127
Punjab Co-operative Bank, Ld. (1912)	7	2	60

(For full list of Bank Failures, see pages 248 to 252)

Growth of Joint Stock Banks.

The following figures appearing in the Report of the Director General of Statistics shews the growth of the Capital, Reserve and Deposits of the principal Joint Stock Banks registered in India —

In Lakhs of rupees

	Capital	*Reserve*	*Deposits.*
1870	9	1	13
1875	14	2	27
1880	18	3	63
1885	18	5	94
1890	33	17	270
1895	63	31	566
1900	82	45	807
1905	84	77	1198
1906	133	56	1155
1907	229	63	1400
1908	239	69	1626
1909	266	87	2049
1910	275	100	2565
1911	285	126	2529

No later figures are obtainable, but it is almost certain that the figures for deposits shown for the year 1911 have been very largely reduced of late

NATIVE PRIVATE BANKERS AND SHROFFS.

Native private Bankers and Shroffs flourished in India long before Joint Stock Banks were ever thought of, and it seems likely that they will continue to thrive for some very considerable time to come The use of the word 'Shroff" is usually associated with a person who charges usurious rates of interest to impecunious people, but this is hardly fair to the people known as "shroffs" in banking circles, as there is no doubt that the latter are of very real service to the business community and of very great assistance to Banks in India Under present conditions the Banks in India can never hope to be able to get into sufficiently close touch with the affairs of the vast trading community in India to enable them to grant accommodation to more than a few of these traders direct, and it is in his capacity as middleman that the shroff proves of such great service In this capacity also he brings a very considerable volume of business within the scope of the Presidency Banks Act, and enables the Presidency Banks to give accommodation which, without his assistance, the Banks would not be permitted to give The shroff's position as an intermediary between the trading community and the Banks usually arises in something after the following manner A Shopkeeper in the bazaar, with limited means of his own, finds that, after using all his own money, he still requires say Rs 25,000 to stock his shop suitably He thereupon approaches the shroff, and the latter after very careful inquiries as to the shopkeeper's position grants the accommodation, if he is satisfied that the business is safe The business, as a rule, is arranged through a hoondee broker, and in the case referred to the latter may probably approach about ten shroffs and secure accommodation from them to the extent of Rs 2,500 each A hoondee usually drawn at a currency of about 2 months is almost invariably taken by the shroffs in respect of such advances

A stage is reached however when the demands on the shroffs are greater than they are able to meet out of their own money, and it is at this point that the assistance of the Banks is called into requisition The shroffs do this by taking a number of the bills they already hold to the Banks for discount under their endorsement and the Banks accept such bills freely to an extent determined in each case by the standing of the shroff and the strength of the drawers The extent to which any one shroff may grant accommodation in the bazaar is therefore dependent on two factors, *viz*, (1) the limit which he himself may think it advisable to place on his transactions and (2) the extent to which the Banks are prepared to discount bills bearing his endorsement The shroffs keep in very close touch with all the traders to whom they grant accommodation and past experience has shewn that the class of business above referred to is one of the safest the Banks can engage in

The rates charged by the shroffs are usually based on the rates at which they in turn can discount the bills with the Banks and necessarily vary according to the standing of the borrower and with the season of the year Generally speaking, however, a charge of two annas per cent per mensem above the Bank's rate of discount, or 1½ % is a fair average rate charged in Bombay to a first class borrower Rates in Calcutta and Madras are on a slightly higher scale due in a great measure to the fact that the competition among the shroffs for business is not so keen in these places as it is in Bombay

The shroffs who engage in the class of business above described are principally Marwaries and Multanis having their head Offices for the most part in Bikanir and Shikarpur, respectively, the business elsewhere than at the Head Offices being carried on by "Moonims" who have very wide powers

It is not known to what extent native bankers and shroffs receive deposits and engage in exchange business throughout India, but there is no doubt that this is done to a very considerable extent

THE BANK RATE.

Each Presidency Bank fixes its own Bank rate, and the current rate of each Bank determines to a great extent the rates for all important classes of business within the Bank's sphere of influence The rates in the three Presidencies are not always uniform, but it seldom happens that a difference of more than 1% exists, more particularly as regards Bombay and Bengal, which seem to be in closer touch with each other than appears to be the case with Madras

The rate fixed represents the rate charged by the Banks on demand loans against Government securities only and advances on other securities or discounts are granted as a rule at a slightly higher rate. Ordinarily such advances or discounts are granted at from one-half to one per cent over the official rate, but this does not always apply and in the monsoon months, when the Bank rate is sometimes nominal, it often happens that such accommodation is granted at the official rate or even less.

The following statement shews the average Bank rate of each Bank since 1880 —

Year	Bank of Bombay			Bank of Bengal			Bank of Madras		
	1st Half year	2nd Half-year	Yearly average.	1st Half-year	2nd Half-year	Yearly average	1st Half-year	2nd Half-year.	Yearly average
1880	5.72	4 3	5 01	5 385	3 913	4 649			
1881	5 40	5 98	5 69	4 862	5 717	5 289			
1882	8 08	4 13	6 10	8 177	5 022	6 599			
1883	7 00	6 2	6 6	6 994	6 560	6 777			
1884	9 03	4 17	6.60	8 813	3 946	6 379			
1885	5 90	1 00	4 95	6 757	4 005	5 381			
1886	6 35	6.50	6 42	5 923	6 152	6 037			
1887	7 78	3 73	5 75	7 475	3 804	5 639			
1888	5 90	5.51	5 70	5 736	5 185	5 460			5.60
1889	9 46	4 00	6 73	9 309	4 674	6.991			6.86
1890	9 21	3 28	6 24	8 265	3 315	5 790			5.74
1891	3 88	2 23	3 05	3 502	2 622	3 062			2.92
1892	3 97	3 04	3 50	3 884	3 114	3 499			3.54
1893	5 97	3 84	4 90	5 685	4 076	1 880			5 27
1894	7 55	3 46	5 50	7 425	3 364	5 394			5.00
1895	4 30	3 60	3 95	5 066	3 592	4 329			4 25
1896	5 85	5 10	5 47	5 774	5 608	5 691			5 62
1897	10 11	5 64	7 87	9 884	5 967	7 925			7.97
1898	12 03	4 55	8 29	11 016	5 114	8 065			7 78
1899	6 34	5 42	5 88	6 237	5 494	5 915			6.05
1900	6 9	3 79	5 34	6 414	4 272	5 343			5.87
1901	7 07	3 83	5 45	6 895	4 070	5 482	7 57	4 09	5.83
1902	6 25	3 43	4 84	6 176	3 549	4 862	7	4 02	5.51
1903	6 7	3 48	5 09	6 265	3 494	4 879	7 13	4 27	5 70
1904	5 15	3 82	4.48	5 560	4 190	4 875	6 42	4 07	5 24
1905	5 77	4 42	5.09	5 558	4 630	5 094	6 01	4.19	5 11
1906	7 24	5 28	6 26	6 950	5 885	6 417	7 15	5 04	6.09
1907	7 81	4 11	5 96	7 635	4 576	6 105	8 24	4 54	6 39
1908	7 84	4 02	5 93	7 417	4 244	5 830	8 38	4.38	6 38
1909	6 47	3 82	5 14	6 580	3 907	5 243	7 55	4.41	5 98
1910	6 19	4 14	5 16	6 143	4 510	5.326	7 17	4 65	5.91
1911	6 55	3 52	5 03	6 657	4.358	5 507	7 59	4 35	5.97
1912	6 01	4 10	5 05	6 242	4 592	5.417	7 51	4 59	6.05
1913	7.23	4 62	5 92	6 569	5 331	5 950	7 76	5 54	6 65
1914	5.52			5.939			6 63		

Bank of Bombay.			Bank of Bengal			Bank of Madras		
Date		Rate	Date		Rate	Date		Rate
1904		Per cent	1905		Per cent	1902		Per cent
February	11	7	February	23	7	January	14	6
,,	25	6	March	9	8	,,	20	7
March	10	5	,,	30	7	February	6	8
May	19	4	April	6	6	May	1	7
						,,	29	6
June	16	3	,,	11	5	June	12	5
October	13	4	,,	27	4	,,	30	4
						December	23	
,,	20	5	July	20	3	1903		
1905						January	12	6
February	2	6	August	17	4	February	3	7
,,	16	7	September	29	5	,,	10	8
March	9	8	November	30	6	April	20	7
,,	30	7	December	14	7	July	2	6
			1906			,,	13	5
April	6	6	January	4	8			
,,	14	5	February	1	9	,,	23	4
July	6	4	March	15	8	December	21	5
,,	27	3	,,	22	7	1904		
August	10	4	April	5	6	January	7	6
						,,	21	7
November	23	5	,,	12	5	May	16	6
,,	30	6	May	3	6			
December	14	7	,,	17	7	,,	30	5
1906						July	5	4
January	4	8		24	6	December	22	5
February	1	9	June	7	5	1905		
March	15	8	,,	28	4	January	23	6
						February	27	7
,,	22	7	July	19	3	March	13	8
,,	29	6	August	9	4			
April	26	7	,,	23	5	April	3	7
May	24	6	September	13	6	,,	14	6
June	21	5	,,	20	7	May	8	5
July	12	4	October	11	6	,,	29	6
,,	9	3	November	15	7	June	15	5
August	9	4	,,	29	8	July	10	4
September	12	5	December	6	9			
			1907			December	18	6
November	15	6	April	18	8	1906		
						January	8	7
,,	22	7	,,	25	7	,,	16	8
,,	29	8	May	2	6	April	4	7
December	13	9	,,	16	5	May	28	6
1907						June	21	5
March	7	8	July	4	4			
May	2	7	,,	25	3	July	12	4
,,	9	6	September	12	4			
June	6	7	,,	26	5			
,,	20	6	November	7	6			
			1908			September	17	5
,,	27	5	January	4	7	November	29	6
July	4	4	,,	9	8	December	6	7
August	1	3	,,	16	9			
September	26	4	March	5	8	,,	10	8
November	7	5	,,	26	7	1907		
December	12	6	May	21	6	January	16	9
1908						April	29	8
January	3	7	June	25	5	May	6	7
,,	9	8	July	2	4	June	24	6
February	6	9	,,	16	3	July	1	5

Bank of Bombay.		Bank of Bengal.		Bank of Madras.	
Date.	Rate.	Date.	Rate	Date	Rate
	Per cent		Per cent		Per cent
1908		1908		1907	
March . 19	8	September 3	4	July 8	4
,, . 26	7	November 5	5	November 4	5
April . 16	8	,, 26	6	December 5	6
		1909		,, 23	7
May 28	7	January 14	7	1908	
June 25	6	,, 28	8	January 9	8
July 2	5	March 18	7	February 10	9
,, 16	4	April 29	6	May 18	8
,, 23	3	May 27	5		
October .. 22	4	June 17	4	June 15	7
November 5	5	July 1	3	,, 25	6
December . 10	6	September 30	4	July 7	5
				,, 14	4
1909				November 30	5
January 14	7	November 13	5	December 10	6
May . 13	6	December 9	6	1909	
				January 12	7
June 3	5	1910		,, 28	8
,, 24	4	March 3	7	June 1	7
July 15	3	May 12	6	,, 17	6
November 4	4	June 2	5	,, 28	5
,, 18	5	,, 16	4	July 19	4
,, 25	6	,, 30	3		
1910		September 22	4		
March 3	7			November 16	5
May 12	6	October 6	5	December 20	6
June 2	5	November 3	6	1910	
		December 1	7	January 4	7
,, 23	4				
July 7	3	1911		March 7	8
October 6	4	February 23	8	May 13	7
November 3	5	March 30	7	June 7	6
,, 17	6	May 11	6	,, 20	5
December . 15	7	June 1	5		
1911		,, 15	4	July 4	4
May 18	6	August 3	3	November 8	5
June 1	5			,, 18	6
		,, 31	4	December 20	7
,, 21	4	September 28	5	,, 22	8
July 13	3			1911	
October . 19	4	1912		May 23	7
December . 21	5	January 11	6	June 7	6
1912		,, 18	7	,, 19	5
January . 11	6	,, 26	8		
,, . 18	7	March 7	7	July 7	4
February 1	8			November 14	5
,, 22	7	,, 21	6	December 21	6
March . 20	6	May 23	5	1912	
May 9	5	June 20	4	January 9	7
June . 13	4	July 11	3	,, 29	8
July . 11	3	September 13	4	May .. 29	7
		October . 3	5	June 17	6
October . 3	4	November 14	6	,, 24	5
November . 14	5	,, 28	7	July 8	4
,, . 28	6			November . 12	5
December . 12	7	1913		December 2	6
,, . 27	8	January . 9	8	,, 9	7
1913		February . 13	7		
April . 3	7	April . 17	6	,, 30	8
May . 29	6	June . 5	5	1913	
June . 12	5	,, .. 19	4	June .. 4	7
July .. 3	4			,, . 16	6
,, .. 17	3	July .. 3	3	July . 8	5

Bank of Bombay		Bank of Bengal.		Bank of Madras.	
Date.	Rate.	Date	Rate	Date.	Rate.
August 7	4	August 7	4	October 1	6
September 10	5	,, 28	5	1914	
October 10	6	September 18	6	January 2	7
,, 31	5	November 13	7	May 25	6
1914		1914		June 8	5
January 15	6	March 19	6	,, 23	4
May 21	5	May 1	5	August 21	5
June 4	4	June 4	4	October 12	6
,, 25	3	July 9	3		
August 6	4	August 6	5		
,, 13	5				
,, 20	6				

BANKERS' CLEARING HOUSES.

The principal Clearing Houses in India are those of Calcutta, Bombay, Madras, and Karachi, and of these the first two are by far the most important The members at these places consist of the Presidency Banks, most of the Exchange Banks and English Banking Agency firms, and a few of the better known of the local Joint Stock Banks No Bank is entitled to claim to be a member as of right and any application for admission to a Clearing must be proposed and seconded by two members and be subject thereafter to ballot by the existing members

The duties of settling Bank are undertaken by the Presidency Bank at each of the places mentioned and a representative of each member attends at the office of that Bank on each business day at the time fixed to deliver all cheques he may have negotiated on other members and to receive in exchange all cheques drawn on him negotiated by the latter After all the cheques have been received and delivered the representative of each Bank advises the settling Bank of the difference between his total receipts and deliveries and the settling Bank thereafter strikes a final balance to satisfy itself that the totals of the debtor balances agrees with the total of the creditor balances The debtor Banks thereafter arrange to pay the amounts due by them to the settling Bank during the course of the day and the latter in turn arranges to pay on receipt of those amount the balances due to the creditor Banks. In practice however all the members keep Bank accounts with the settling Bank so that the final balances are settled by cheques and book entries thus doing away with the necessity for cash in any form

The Clearing House figures can usually be taken as giving some indication as to the condition of trade and to some extent also as to how far the banking facilities available are being taken advantage of but in the latter respect at all events the statistics for India do not form as useful a guide as those in most other countries This is due to the fact that hardly any of the numerous Joint Stock Banks which have been formed within recent years have so far been admitted as members of the various Clearing Houses and as few if any of these Banks have obtained the assistance of the members in having their cheques cleared, the Clearing House returns merely represent the transactions of the members and do not include in any way the totals of the cheques drawn on or negotiated by Banks not represented on the Clearing

The figures for the Clearing Houses in India above referred to are given below —

Total amount of Cheques Cleared Annually.

In lakhs of Rupees.

——	Calcutta	Bombay	Madras	Karachi	Total.
1901 ..	Not available	6,511	1,338	178	8,027
1902 .	. .	7,013	1,295	268	8,576
1903 .	. .	8,762	1,464	340	10,566
1904 .	.	9,492	1,536	365	11,393
1905		10,927	1,560	324	12,811
1906		10,912	1,583	400	12,895
1907	22,444	12,645	1,548	530	37,167
1908	21,281	12,585	1,754	643	36,263
1909	19,776	14,375	1,948	702	36,801
1910 .	22,238	16,652	2,117	755	41,762
1911 .	25,763	17,605	2,083	762	46,213
1912 ..	28,831	20,831	1,152	1,159	52,835
1913	33,133	21,890	2,340	1,219	58,582

Government of India Rupee Loans

The following are the Loans in the hands of the public still extant, all the others having been extinguished either by conversion or by discharge —

(1) Three & a half per cent loan of		1842–43
(2	Ditto	1854–55
(3)	Ditto	1865
(4)	Ditto	1879
(5) Three per cent loan of		1896–97
(6) Three & a half per cent loan of		1900–01

The first four of these loans were made repayable at the option of Government on or after 31st July 1904 on three months' notice being given so that the position now as regards these loans is that Government are at liberty to discharge them at any time on giving three months' notice In view however of the necessity of fresh borrowings by Government this power is not likely to be exercised for some considerable time to come

The 3½ per cent Loan of 1900–01 is repayable, also at the option of Government, on or after 31st December 1920 on three months' notice being given and all loans issued since the year 1900 have been included in and form part of the 1900–01 loan

In 1896 Government resolved in view of the easy condition of the money market to try the experiment of borrowing at 3 per cent and the loan of Rs 4 crores raised in that year was accordingly issued bearing that rate of interest The opportunity was also taken to advertise for discharge the two 3½ per cent loans of 1853-54 and 1893–94 but proprietors of these loans were given the option of transferring their holdings to the new 3 per cent loan The Rs 4 crores loan was successfully floated and appeared to be a great success but it was soon seen that the public had no use for a 3 per cent security and Government have never repeated the attempt to borrow at 3 per cent The successful tenderers for the loan of 1896–97 experienced great difficulty in disposing of any part of their holdings and as through course of time the notes became practically unmarketable it was generally felt that Government must do something to improve the market for the notes Various proposals were submitted to Government with this end in view but the latter delayed taking any action in the matter until the year 1908 Such action took the form of giving holders the option of converting their 3 per cent notes into 3½ per cent notes of the 1900–01 loan on the following terms —

(1) If the face value of the 3 per cent notes tendered for conversion is an exact multiple of Rs 700 the tenderer will receive in exchange 3½ per cent notes for 6-7ths of such face value

(2) If the face value of the 3 per cent notes tendered for conversion does not form an exact multiple of Rs 700 the tenderer has the option of receiving—

(*a*) 3½ per cent notes equivalent to the nearest lower multiple of Rs 700 calculated as in Clause 1 together with the difference in 3 per cent notes, or

(*b*) 3½ per cent. notes of the nearest higher equivalent face value in hundreds calculated as in Clause 1 on payment in cash of the difference between (i) 6-7ths of the face value of the 3 per cent notes tendered and (ii) the face value of the 3½ per cent notes received in exchange.

The above offer is still in force but Government have reserved the right to withdraw it at any time on giving 6 months' notice The balance of the 3 per cent loan stood at Rs 10,95 lacs on 31st March 1897, at Rs 11,07 lacs on 30th September 1908 and at Rs 8,42 lacs on 31st March 1913 The work connected with the payment of interest, &c , on Government loans is entrusted to the Presidency Banks in the 3 Presidency towns, to the District Treasuries elsewhere in India, and to the Bank of England in London

Government debt may be held in the form of promissory notes or Stock Certificates but Notes or Certificates can only be issued in even hundreds of rupees Promissory notes are transferable by endorsement and as such transfers do not require to be registered it follows that Government do not keep any record of the holders of such notes from time to time A holder of a Stock Certificate is a registered holder however and transfers can only be made by transfer deed which must be submitted to and approved of by the authorities conducting the loan business on behalf of Government

Interest is payable half-yearly on each loan on the dates noted below

Loan of 1842–43	1st Febry & 1st August
Loan of 1854–55	30th June & 31st Dec
Loan of 1865	1st May & 1st Novr
Loan of 1879	16th Jany & 16th July
Loan of 1896–97	30th June & 31st Dec
Loan of 1900–01	30th June & 31st Dec

Interest may be made payable at the option of the holder at the Public Debt Office Banks of Bengal, Bombay or Madras, at any Government Treasury, or at the Bank of England, London In the case of Promissory Notes, presentation of the notes at the office where interest is payable is necessary before interest can be drawn but this does not apply as regards Stock Certificates and interest warrants in respect of these are sent out to the registered holder as soon as interest falls due The interest on notes enfaced to London is paid by rupee drafts on India

Renewal, Conversion, Consolidation and Sub-Division of Promissory Notes.

RENEWAL

When all the spaces reserved for endorsements on the reverse of a note have been filled up or when the spaces utilised for recording payments of interest have been exhausted the note requires to be renewed before any further transfers can be allowed or interest drawn The fee for such renewal is at the rate of ¼ per cent on the face value of the note subject to a maximum of Re 1 for each note but no renewal fee is charged in the case of a note on which no endorsements appear when the interest charges are expended

CONVERSION.

Promissory Notes of the 3½ per cent loans of 1842–43, 1854–55, 1865, 1879 and 1900–01 may be transferred to any other of those loans except that no transfer to the loan of 1900–01 from any of the other loans is admissible

It is made a condition however before any such transfer is permitted that a full half-year's interest is due on the Promissory Note at the time it is presented for transfer

The fees charged are the same as those applicable to renewals

CONSOLIDATION AND SUB-DIVISION

Notes of the same loan, on which interest has been paid up to the same date, may be consolidated or notes may be sub-divided into others of smaller denominations, but of the same loan, at the option of the proprietors, notes only being issued for Rs 100 or multiples of Rs 100

The fee charged is at the rate of ¼ per cent. on the face value of the new notes received, subject to a maximum of Re 1 for each note

The management of the debt in England is entrusted to the Bank of England who are paid commission at the rate of £300 per million pounds in respect of the sterling debt and £400 per crore of rupees in respect of the rupee debt The charge for the latter is however subject to a minimum of £8,000

Quotations for 3½ per cent. Government of India Loans.

	Rupee Loan.	*Sterling Loan.*
Jany.	Rs.	£
1895	103 6 per cent.	112¾ per cent.
1896	105 7 ,,	117 ,,
1897	98 ,,	118½ ,,
1898	95 13 ,,	117 ,,
1899	94 ,,	116½ ,,
1900	95.10 ,,	110 ,,
1901	96 ,,	108 ,,
1902	95 14 ,,	108 ,,
1903	97 9 ,,	107 ,,
1904	95 2 ,,	103 ,,
1905	98.1 ,,	106¼ ,,
1906	97 14 ,,	105¼ ,,
1907	95 7 ,,	104 ,,
1908	96 3 ,,	102½ ,,
1909	94 11 ,,	99 ,,
1910	93 7 ,,	98¼ ,,
1911	95 1 ,,	95¼ ,,
1912	96 2 ,,	94 ,,
1913	94 9 ,,	91.7–16 ,,
1914	95.10 ,,	85¼ ,,

Failures of Indian Banks.

The latter part of 1913 witnessed the failure of a large number of Indian Banks conducted by Indian management The affairs of these institutions have still to be wound up so that it is not yet possible to estimate the full extent of the losses incurred, nor is it possible yet accurately to determine in each case what was the cause of failure The first of the series of failures occurred in September, in the Punjab, which had been in recent years a peculiarly fertile field for the promoters of Swadeshi Banks, and the crisis rapidly spread to Bombay where also a large number of banks has been started since 1907

The Peoples' Bank of India.—On September 20, the Peoples' Bank of India, which had its headquarters in Lahore and 72 branches in various parts of India, suspended payment

The Bank had a paid-up capital of Rs 12,46,375 and had a reserve or other funds of Rs 3,00,000. The full value of the share was Rs 50 each; out of which only Rs 30 per share had been called. It has paid dividends at the rate of 9 per cent. during the last three years.

Mr. Harkishen Lal had been Managing Director of the Bank since its beginning until he retired in August 1913, owing to severe criticisms of his various financial and industrial concerns in the press He subsequently presented a scheme for the reconstruction of the Bank, but a provisional order for liquidation was given, the final order being postponed until January 1914

The Credit Bank of India.—On Oct. 3, this bank suspended payment. It was established in Bombay in 1909 The authorised capital was Rs 1,00,00,000 while the subscribed capital was Rs 50,00,000 The capital called up was Rs 10,00,000 and reserve fund Rs 32,000 The petition for its liquidation was heard on November 1, when the report on the affairs of the Bank, by Messrs Ferguson and Co, to the Provisional Official Liquidator was presented The Advocate-General, who appeared for the petitioner, said that the liabilities of the Bank were 41 lakhs or thereabouts and the anticipated assets were certainly not more than nine lakhs Sir Dinsha Davar said in reference to the report that if half the allegations made in it were correct the Company was from its inception an organised attempt to swindle the public.

The manager of the Bank, Mr. Jaffer Joosab, was arrested on December 18, on a charge of criminal breach of trust in respect of sums aggregating nearly Rs 1 lakh.

The Lahore Bank, Ltd.—This Bank suspended payment on November 18. It was the third of the indigenous Banks in point of age, having been started in 1906 by Haridas Kapur, formerly an employee of a local European Bank who joined Harkishen Lal in starting the Peoples' Bank and was its first manager. Subsequently he started his own bank and became its managing director. The authorised capital of the Bank was five lakhs and the subscribed capital four lakhs ninety thousand. It had fifteen branches in the Punjab and one at Karachi.

The Indian Specie Bank, Ltd.—On November 21, a petition was presented for winding up this Bank, but was withdrawn. Sir Dinsha

Davar, the Judge who heard the petition, said.—"I should like to say that it struck me as a most remarkable circumstance that shareholders representing a capital of three quarters of a crore of rupees and creditors to the extent of a crore of rupees should come forward together to support the directors and the managing director in the manful fight they have made for the existence of the Bank In spite of allegations of very hazardous trading not one single shareholder or contributory or creditor has come forward to support the petition That seems to me to be a very remarkable circumstance in the history of the Bombay banking and trade The petition will stand dismissed"

The Manager of the Bank, Mr. Chunilal Saraiya, died suddenly on November 29 and a petition was immediately made by four of the directors for the winding-up of the Bank on the ground that the Bank had not sufficient cash to pay the liabilities due on that day The cash in hand was Rs 60,000 and the liabilities to be met that day amounted to Rs 1,50,000. The report of the provisional liquidators, published December 19, showed that the bullion account was debited with Rs 23 7 lakhs, against which there were about 4,550 oz of Silver; that the firm of M. Nanabhai & Co was debited with Rs 84 lakhs, that there was a loss of Rs 30 lakhs on open silver contracts, that Rs. 64.7 lakhs had been advanced on pearls; and that Rs 27.2 lakhs had been advanced on share *badla* business, the market value of those securities being, when the report was published, under Rs 12 lakhs The story unfolded in this report was, according to the Liquidators, 'a miserable tale of the lowest form of fraud the creation of fictitious debtors, and the preparation of Demand Promissory Notes in support of these" They also stated that "the accounts submitted each half-year were rendered falsely to the shareholders and the means of manipulation were usually applied through M. Nanabhoy's account False entries were carried through the Books to and from the account of this dummy silver king, by which silver operations were disguised as debtors for loans in whose hands were placed bogus Demand Promissory Notes for presentation to the Auditors When the Audit was safely over the disguised figures disappear and the mysterious Mr Nanabhoy resumed his manipulations of the Silver Market"

After the presentation of this report, Sir Dinsha Davar, in spite of a request that the shareholders and others might be given time more fully to consider the situation, passed an order for winding up the Bank.

The Pioneer Bank.—On November 29, a petition was presented in the Bombay High Court for the winding up of this Bank The grounds of the petition, which was accepted, were that the company was a bogus one and that the substratum had already been lost through doubtful transactions. The petitioner expressed the belief that hardly a lakh of the capital of the Bank had been subscribed by *bona fide* shareholders, and that against this more than two lakhs had been advanced as loans on the shares of the company. The Bank was registered with Rs 50 lakhs capital, divided into shares of Rs 25

Criminal Proceedings.—In the case of the Credit Bank, Jafter Joosab, the Manager, was sentenced for criminal breach of trust to seven years' rigorous imprisonment In the same sessions he was jointly tried with N. R. Mistri auditor of the Bank, on another charge of breach of trust and for falsification of accounts On this charge he was sentenced to a further term of three years Mistri was adjudged "not guilty" by the jury and was discharged

In the **Specie Bank** case the liquidator has filed claims for several lakhs of rupees against the directors and auditors, but no criminal prosecution has been instituted Prosecutions are pending in sessions in the **Bombay Banking Co.** Case

The results of the failures are statistically set out in the following tables

Statement showing the names of Banks failed or liquidated since September 1913

No.	Date of Registration	Name of Company.	CAPITAL			Amount of Deposits	Date of going into liquidation	Remarks
			Nominal	Issued				
				Nominal	Paid-up			
		Bombay	Rs	Rs	Rs	Rs		
1	24-11-1898	Bombay Banking Co	5,00,000	2,11,800	1 25,229		11-11-1913	
2	23-5-1899	Gujerat Bank	5,00,000	1 75,100	84,025		24-3-1914	
3	17-11-1906	Indian Specie Bank	2 00,00 000	1 50 00,000	74 88,850		4-3-1914	
4	16-10-1909	Ahmednagar Bank	5,00,000	1,38 000	39,110		12-10-1914	
5	15-12-1909	Credit Bank of India	1,00,00 000	50,00,000	10,00,000		1-11-1913	
6	10-6-1910	Kathiawar and Ahmedabad Banking Corporation	1,00 00,000	75,72,700	7 44,567		23-12-1913	
7	28-11-1910	* Sind Bank	25 00,000	3 26,700	82,295		—	* Passed resolution for winding up
8	16-8-1911	Indian Finance Corporation	5,00,000	18,410	18,410	No information	8-5-1914	
9	16-1-1912	Crown Bank of India	5,00,000				7-11-1913	
10	3-5-1913	All India Commerce Bank	10,00,000				7-10-1914	
11	13-10-1913	Union Bank of Commerce	50 00,000				3-6-1914	
		Madras						
1	14-8-1869	Madras Deposit and Benefit Society	50 000	50,000	50,000		16-3-1914	
2	28-5-1909	Sri Krishna Bank	5 00 000	5 00 000	2,125		31-3-1914	
		United Provinces						
1	9-11-1909	United Provinces Co-operative Bank, Allahabad	10,00,000	45 740	27 105	1 62,930	17-6-1914	Voluntary liquidation
2	17-1-1913	Commercial Bank of India, Ghazipur	10,00,000	5 775	4 250	18,655	2-7-1914	Do
3	25-1-1911	Shri Kashi Vishwanath Bank, Benares	1,00,000	3,892	3,782	4,299	3-8-1914	Do
4	18-4-1911	British India Bank, Allahabad	2,50,000	6 238	6,238			Has become defunct for over two years and action is being taken to strike it off the registers

Statement showing the names of Banks failed or liquidated since September 1913

No.	Date of Registration.	Name of Company	CAPITAL			Amount of Deposits	Date of going into liquidation	Remarks
			Nominal	Issued				
				Nominal	Paid-up			
5	3-5-1911	United India Bank, Allahabad	5 00,000	39,104	26,733			Has stopped operations for about a year without being formally wound up Its affairs are being investigated
6	13-4-1908	People's Industrial Bank, Allahabad	5,00,000	68,570	35,015			Resolution for winding up passed at the beginning of the year after which it ceased working
7	7-6-1912	Asiatic Engineering and Banking Corporation	20,000	1,410	1,410	217		Resolution for winding up passed on 20th May 1914 but the proceedings have not yet been investigated.
8	26-5-1913	Central Reciprocal Bank, Allahabad	2.00,000					Resolution for winding up passed on 31st July 1914 which is being registered
9	27-1-1863	Bank of Upper India, Meerut	10 00,000	10 00,000	10,00 000	1,83,53,245		Has just suspended payment
		Punjab						
1	6-2-1901	People's Bank of India, Lahore	35,00 000	22,00,000	12,52,950	1,25,79 742	17-11-1913	
2	8-2-1904	Amritsar Bank, Lahore	5,00,000	5,00,000	1,61,313	28,21,930	5-12-1913	
3	31-5-1906	Lahore Bank, Lahore	5,00,000	4,81,300	1,04,935	28,50,282	30-11-1913	
4	21-7-1906	Hindustan Bank, Multan	10,00,000	2,43,975	1,20,814	10,53,999	19-1-1914	
5	10-10-1906	Industrial Bank of India, Ludhiana	5,00,000	1,80,000	54,208	3,97,317	7-2-1914	
6	11-4-1908	Doaba Bank, Amritsar	5,00,000	3,62,600	65,845	9,23,954	22-11-1913	
7	20-9-1909	Public Banking and Assurance Co, Multan.	10,00,000	17,300	1,964		2-3-1914	
8	5-8-1911	Bank of Peshawar, Multan	5,00,000	4,50,900	1,04,271	2,22,864	14-2-1914	
9	29-8-1911	Coronation Banking and Assurance Co, Lahore	1,00,000	..	..		3-2-1914	
10	15-9-1911	Indian Exchange Bank, Amritsar	5,00,000	17,310	13,410	2,06,161	22-12-1913	

Statement showing the names of Banks failed or liquidated since September 1913.

No.	Date of Registration.	Name of Company.	CAPITAL.			Amount of Deposits	Date of going into liquidation	Remarks
			Nominal	Issued				
				Nominal	Paid-up			
11	31-7-1906	Marwar Bank, Lahore	10,00,000	4,94,100	1,51,891	8,39,466	14-6-1914	
12	14-4-1910	Popular Bank, Rawalpindi	50,00,000	20,00,000	3,24,596	18 62,641	8-7-1914	
13	11-8-1911	Bank of Rajputana and Punjab, Ambala	5,00,000	2,45,475	70,501	8,25,095	3-8-1914	
14	9-2-1912	Bank of Empire, Lahore	5,00,000	1,15,425	23,875	96 144	6-7-1914	
15	20-9-1912	Derajat Sindh Bank, Multan	5,00,000	84,300	11,110	8,972	22-4-1914	
16	.	Golden Bank of India, Amritsar	5,00,000	16,775	3,042		21-4-1914	
17		Solar Bank, Lahore	1,00,00,000	1,55,000	8,500		29-3-1914	
18	.	Indian States Bank, Amritsar	10,00,000	26,000	2,335		27-3-1914	
19	18-5-1907	Orient Bank of India, Lahore	25,00,000	10,00,000	71 354	4,94,968	4-9-1914	
20	31-10-1904	Punjab Co-operative Bank, Amritsar	25,00,000	10,00,000	8,18,519	45,75,641	Spt 1914	Suspended business in September, 1914 but no resolution regarding winding up has yet been filed
21	.	Capital Bank of India, Lahore	10,00,000	50,065	5,950	7,849	28-9-1914	
22	23-4-1912	George Bank, Lahore .	2,50,000	1,30,700	48,365	1,04,316	19-6-1914	Applied for liquidation
23	31-10-1912	Commercial and Zamindari Bank, Multan	2,50,000	31,950	2,000		21-7-1914	Do
24	. . .	Durbar Bank, Lahore	2,00,000				14-12-1913	Business stopped, but regular liquidation has not commenced
25	....	East India Banking Co , Jagraon	25,00,000				1-1-1914	Do
26	5-1-1909	Punjab Mercantile Bank, Lahore	5,00,000	66,400	7,030	10,040	1-9-1913	Do
		N. W F. Province.						
1	28-10-1912	The Bank of Hazara, Abbottabad	2,00,000	16,000	3,175		26-12-1913	Voluntary liquidation.
2	10-8-1912	The Punjab Trader's Bank, Peshawar.	2,50,000	1,84,200	51,962	10,297	5-4-1914	Do

Agriculture.

As crops depend on the existence of plant food and moisture in the soil so the character of the agriculture of a country depends largely on its soil and climate It is true that geographical situation, the character of the people and other considerations have their influence which is not inconsiderable, but the limitations imposed by the nature of the soil and above all by the climate tend to the production of a certain class of agriculture under a certain given set of conditions.

The climate of India, while varying to some extent in degree, in most respects is remarkably similar in character throughout the country. The main factors in common are the monsoon, the dry winter and early summer months, and the intense heat from March till October. These have the effect of dividing the year into two agricultural seasons, the *Kharif* or Monsoon and the *Rabi* or Winter Season each bearing its own distinctive crops From early June till October abundant rains fall over the greater part of the continent while the winter months are generally dry although North-Western India benefits from showers in December and January The distribution of the rainfall throughout the year, which is of considerable importance to agriculture, is none too favourable, but is not quite so bad as is often represented. The rainfall is greatest at what would otherwise be the hottest time of the year *viz*, mid-summer and when it is most needed It should be remembered that in a hot country intermittent showers are practically valueless as evaporation is very rapid. The distribution of rainfall such as is common in England, for example, would be of little use to Indian soils.

Soil.—For the purpose of soil classification, India may be conveniently divided into two main areas in (1) The Indo-Gangetic plains, (2) Central and Southern India. The physical features of these two divisions are essentially different The Indo-Gangetic plains (including the Punjab, Sind, the United Provinces, Bengal, Bihar and Assam) form large level stretches of alluvium of great depth The top soil varies in texture from sand to clay, the greater part being a light loam, porous in texture, easily worked, and naturally fertile. The great depth of the alluvium tends to keep down the soil temperature. Central and Southern India on the other hand consists of hills and valleys The higher uplands are too hot and too near the rock to be suitable for agriculture which is mainly practised in the valleys where the soil is deeper and cooler and moisture more plentiful. The main difference between the soils of the two tracts is in texture and while the greater part of the land in Northern India is porous and easily cultivated, and moist near to the surface, large stretches in Southern and Central India consist of an intractable soil called the Deccan trap, sticky in the rains, hard and crumbly in the dry weather and holding its moisture at lower levels.

Agricultural Capital and Equipment.—India is a country of small holdings and the vast majority of the people cultivate patches varying in size from one to eight acres. Large holdings are practically unknown. and are mainly confined to European planters. Farming is carried on with a minimum of capital, there being practically no outlay on fencing, buildings, or implements. The accumulation of capital is prohibited by the occurrence of famine and the high rate of interest, and extravagance of expenditure in marriage celebrations. The organization of co-operative credit which has been taken in hand by Government and which has already proved successful in many provinces will undoubtedly lead to an increase in Agricultural capital

Equipment.—For power the ryat depends chiefly on cattle which, as a rule, are light and active but possess little hauling power The necessary tilth for crops is brought about by frequency of ploughings, the result being that the soil is seldom tilled as it should be. This is not due in any way to want of knowledge on the part of the people but through want of proper equipment The Indian Agriculturist, as a rule, possesses an intimate knowledge of the essentials of his own business, and fails through lack of ways and means

Implements are made of wood although ploughs are usually tipped with iron points and there is a great similarity in their shape and general design The levelling beam is used throughout the greater part of the country in preference to the harrow and roller, and throughout Northern India the plough and the levelling beam are the only implements possessed by the ordinary cultivator

In the heavier soils of the Deccan trap a cultivating implement consisting of a single blade, resembling in shape a Dutch hoe, is much used. Seed drills and drill hoes are in use in parts of Bombay and Madras but throughout the greater part of the country the seed is either broad-casted or ploughed in Hand implements consist of various sizes of hoes, the best known of which are *kodal* or spade with a blade set at an angle towards the labourer who does not use his feet in digging, and the *khurpi* or small hand hoe. Of harvesting machinery there is none, grain is separated either by treading out with oxen or beating out by hand, and winnowing by the agency of the wind.

Cultivation—Cultivation at its best is distinctly good but in the greater part of the country it has plenty of room for improvement. As in any other country success in agriculture varies greatly with the character of the people, depending largely as it does on thrift and industry In most places considering the large population cultivation is none too good. Agriculture suffers through lack of organization and equipment Owing to the necessity of protection against thieves, in most parts the people live in villages, many of them at considerable distances from their land Again, holdings, small though they are, have been sub-divided without any regard for convenience Preparatory tillage generally consists of repeated ploughings, followed as seed time approaches by harrowings with the levelling beam. The *Rabi* crops generally receive a more thorough cultivation than the *Kharif*, a finer seed bed being necessary owing to the dryness of the growing season. Manure is

generally applied to *Kharif* crops Seeding is either done broadcast or by drilling behind a wooden plough or drill Thinning and spacing is not nearly so well done as it might be, and intercultivation is generally too superficial Harvesting is done by sickle where the crops are cut whole, and there is little waste involved. On the whole the methods of the ryats if carried out thoroughly would be quite satisfactory, but it is doubtful if this could be done with the number of cattle at his disposal.

Irrigation is necessary over the greater part of the country owing to insufficient rain fall and the vagaries of the monsoon Canal irrigation has been greatly extended over the Punjab, Sind, United Provinces and Madras through Government canals which, in addition to securing the crops over existing cultivated land have converted large desert tracts into fertile areas The Punjab and parts of the United Provinces are naturally well suited to canal irrigation owing to the frequency of their rivers The water is generally taken off at a point a little distance from where the rivers leave the hills and is conducted to the arid plains below The main canal splits up into diverging branches, which again subdivide up into distributaries from which the village channels receive their supplies Water rates are levied on the matured areas of crops, Government thus bearing a part of the loss in case of failure Much of the land is supplied by what is termed flow irrigation, *i e*, the land is directly commanded by the canal water, but a great deal has to be lifted from one to three feet the canal running in such cases below the level of the land Rates for lift irrigation are, of course, lower than those for flow

Irrigation canals are generally classed into (1) perennial and (2) inundation canals Perennial canals, which give supplies in all seasons generally have their headworks near the hills, thus commanding a great range of country Farther from the hills,owing to the very gradual slope of the land and the lowness of the rivers in the cold weather, perennial irrigation is difficult and inundation canals are resorted to These canals only give irrigation when the rivers are high As a rule, in Northern India they begin to flow when the rivers rise owing to the melting of the snow on the hills in May and dry up in September

Irrigation from Wells—About one-quarter of the total irrigation of the country is got from lifting water from wells ranging in depth from a few feet to over fifty feet Their numbers have greatly increased in recent years largely through Government advances for their construction The recurring cost of this form of irrigation has, however, greatly increased owing to the high price of draught cattle and the increasing cost of their maintenance

Tank irrigation is common in Central and Southern India Large quantities of rain water are stored in lakes (or tanks) and distributed during the drier seasons of the year The system of distribution is the same as that by canal

Manures—Feeding of animals for slaughter being practically unknown in India, the amount of farm yard manure generally available in other countries from this source thus does not exist This is partially if not entirely made up for by the large numbers required for tillage and the amount of cows and buffaloes kept for milk. Unfortunately fuel is very scarce and a greater part of the dung of animals has to be used for burning The most of the trash from crops is used up for the same purpose and the net return of organic matter to the soil is thus insignificant In some parts cakes of oil seed are used as manures for valuable crops like tea and sugarcane but in the greater of the country the only manure applied is the balance of farm yard manure available after fuel supplies have been satisfied Farm yard manure is particularly effective and its value is thoroughly appreciated but the people have much to learn in the way of storage of bulky manures and the conservation of urine

Rice—A reference to the crop statistics shows that rice is the most extensively grown crop in India, although it preponderates in the wetter parts of the country, *viz*, in Bengal, Bihar and Burma and Madras The crop requires for its proper maturing a moist climate with well assured rainfall The cultivated varieties are numerous, differing greatly in quality and in suitability for various conditions of soil and climate, and the people possess an intimate acquaintance with those grown in their own localities The better qualities are sown in seed beds and transplanted in the monsoon Broadcasted rice is grown generally in lowlying areas and is sown before the monsoon as it must make a good start before the floods arrive Deep water rices grow quickly and to a great height and are generally able to keep pace with the rise in water level

For transplanted rice the soil is generally prepared after the arrival of the monsoon and is worked in a puddle before the seedlings are transplanted The land is laid out into small areas with raised partitions to regulate the distribution of the water supply The seedlings are planted in small bunches containing from 4 to 6 plants each and are simply dibbled into the mud at distances of 6 to 12 inches apart Where available, irrigation water is given at frequent intervals and the fields are kept more or less under water until the crop begins to show signs of ripening.

Wheat—Wheat is grown widely throughout Northern India as a winter crop, the United Provinces and the Punjab supplying about two-thirds of the total area, and probably three quarters of the total outturn in India. The majority of the varieties grown belong to the Species Triticum Vulgare Indian wheats are generally white, red and amber coloured and are mostly classed as soft from a commercial point of view The grains are generally plump and well filled but the samples are spoiled through mixtures of various qualities Indian wheat is generally adulterated to some extent with barley and largely with dirt from the threshing floor and although there is a good demand in England and the Continent for the surplus produce, prices compare unfavourably with those obtained for Canadian and Australian produce. The crop is generally grown after a summer fallow and, except in irrigated tracts, depends largely on the conservation of the soil moisture from the previous monsoon

AGRICULTURAL PRODUCE.

Further details are given in the subsequent table, but the latest figures available are for 1911-12

The following table shows the area under the principal crops, in British India, and their territorial distribution, for 1912-13 The cropped area is always greater than the area of cultivated land, owing to double cropping The figures (which are preliminary) represent thousands of acres —

Province	Rice	Wheat	Millets	Gram	Total of all Food Grains and Pulses	Oilseeds	Sugar Cane	Cotton	Jute and other Fibres	Total cropped Area	Net Area cropped after deducting Area cropped more than once
Bengal..	21,166	146	10	184	23,061	1 822	222	26	2,963	30 498	25,955
Bihar and Orissa	17,019	1,281	1,257	924	28 040	1 954	266	89	321	32,547	26,697
Assam . .	4,646		2		4 761	322	36	36	99	6,276	5 825
United Provinces .	6 779	7,378	6,703	5,507	38,084	1 015	1,424	1,119	138	43,727	35,459
Punjab .	742	8,767	3,909	3 401	20 405	1 093	367	1 443	52	27,510	22 684
N W. Frontier Province	45	927	299	169	2,195	89	30	55	1	2 549	2 540
Burma. . . .	10,219	25	816	34	11,757	1 412	14	236	1	14,295	13,856
Central Provinces and Berar.	5,000	2 969	5,909	808	18,213	2 809	26	4,622	140	26.385	24,622
Madras .. .	10 944	18	11 426	138	30,740	2 942	187	2 389	291	39.120	34,683
Bombay and Sind . .	2,711	1,664	14 251	550	22 073	1,192	55	4 024	116	28,893	27 701
* Minor Areas .	83	29	47	28	310	5		29		403	368
* Total	79,354	23,204	44,669	11,743	199,639	14,655	2 527	14,068	4 122	242,203	220,430

* The figures for Mineral Areas are for 1911-12

Rains in January and February are generally beneficial but an excess of rainfall in these months usually produces rust with a diminution of the yield On irrigated land 2 to 4 waterings are generally given The crop is generally harvested in March and April and the threshing and winnowing go on up till the end of May In good years the surplus crop is bought up at once by exporters and no time is lost in putting it on the European market as other supplies are at that time of year scarce. In years of famines the local price is generally sufficiently high to restrict exports

The Millets —These constitute one of the most important group of crops in the country, suplying food for the poorer classes and fodder for the cattle The varieties vary greatly in quality, height and suitability to various climatic and soil conditions Perhaps the two best known varieties are Jowar (Sorghum vulgare) tall growing with a large open head, and Bajra with a close rat-tail head and thin stem Generally speaking the jowars require better land than the bajras and the distribution of the two crops follows the quality of the soil. Neither for jowar nor bajra is manure applied and cultivation is not so thorough as for wheat, the main objective being to produce a fine seed bed As the crop is generally sown in the beginning of the monsoon it requires to be thoroughly weeded It is often grown mixed with the summer pulses and other crops in which case thin seedings are resorted to The subsidiary crops are harvested as they ripen either before the millet is harvested or afterwards The produce is consumed in the country

Pulses are commonly grown throughout India and the gram forms one of the chief foods of the people Most kinds do well but are subject to failure or shortage of yield owing to a variety of circumstances among which rain at the time of flowering appears to be one of the most important They are therefore more suitable to grow as mixed crops especially with cereals, and are generally grown as such Being deep rooted and practically independent of a Nitrogen supply in the soil they withstand drought and form a good alternation in a cereal rotation. The chief crops under this heading are gram, mash, mung and moth, gram forming the main winter pulse crop while the others are grown in the summer The pulses grow best on land which has had a good deep cultivation A fine seed bed is not necessary For gram especially the soil should be loose and well aerated Indian pulses are not largely exported although they are used to some extent in Europe as food for dairy cows.

Cotton is one of the chief exports from India and the crop is widely grown in the drier parts of the country. The lint from Indian cotton is generally speaking short and coarse in fibre and unsuited for English mills Japan and the Continent are the chief buyers. The crop is grown during the summer months and requires a deep moist soil and light rainfall for its proper growth Rain immediately after sowing or during the flowering period is injurious. In parts of Central and Southern India the seed is sown in lines and the crop receives careful attention but over Northern India it is sown broadcast (often mixed with other crops) and from the date of sowing till the time of picking is practically left to itself The average yield, which does not amount to more than 400 lbs. per acre of seed cotton, could doubtless be greatly increased by better cultivation.

Sugarcane —Although India is not naturally suited for sugarcane growing, some 3½ millions of acres are annually sown The crop is mostly grown in the submontane tracts of Northern India, The common varieties are thin and hard, yielding a low percentage of juice of fair quality In India white sugar is not made by the grower who simply boils down the juice and does not remove the molasses. The product called gur or gul is generally sold and consumed as such, although in some parts a certain amount of sugar-making is carried on The profits, however, are small owing to the cheapness of imported sugar and there appears to be some danger to the crop if the present taste for gur were to die out. The question has been taken up by Government and a cane breeding station has been recently opened near Coimbatore in Madras with the object of raising seedling canes and otherwise improving the supply of cane sets A number of sugar factories of a modern type have been set up within recent years in Bihar and the United Provinces. The chief difficulty seems to be the obtaining of a sufficiently large supply of canes to offset the heavy capital charges of the undertakings

Oilseeds —The crops classified under this heading are chiefly sesamum, linseed and the cruciferous oilseeds (rape, mustard, etc). Although oilseeds are subject to great fluctuation in price and the crops themselves are more or less precarious by nature—they cover an immense area

Linseed requires a deep and moist soil and is thus grown chiefly in Bengal, Bihar, the United Provinces and the Central Provinces The crop is grown for seed and not for fibre and the common varieties are of a much shorter habit of growth than those of Europe The yield varies greatly from practically nothing up to 500 or 600 lbs of seed per acre The seed is mainly exported whole but a certain amount of oil pressing is done in the country

Sesamum (Or Gingelly) is grown mostly in Peninsular India as an autumn or winter crop The seed is mostly exported.

The Cruciferous Oilseeds form an important group of crops in Northern India where they grow freely and attain a fair state of development. They are one of the most useful crops in the rotation. They occupy the land for a few months only, and owing to their dense growth leave the soil clean and in good condition after their removal. A number of varieties are grown differing from each other in habit of growth, time of ripening, and size and quality of seed The best known are rape, toria, and sarson The crop is generally sown in September or early October and harvested from December to February The crop is subject to the attack of aphis (green fly) at the time of flowering and sometimes suffers considerable damage from this pest. The seed

	1905-6	1906-7	1907-8	1908-9	1909-10	1910-11	1911-12
	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Net Area by professional survey	556,599,298	583,739,245	619,456,133	623,135,293	624,358,714	618,581,099	618,605,938
Area under forest .	67,976,325	81,748,198	83,425,363	82,489,268	81,189,511	80,613,076	80,851,369
Not available for cultivation .	135,329,173	137,164,249	153,520,625	157,636,634	157,627,145	149,994,347	149,605,179
Cultivable waste other than fallow	104,646,615	106,696,580	113,288,334	113,066,521	114,665,202	115,096,758	114,700,370
Fallow land	41,601,052	39,935,421	54,208,922	50 153,056	45,335,412	46 948,606	54,982,324
Net area sown with crops	207,683,741	214,025,596	210,883,511	218,039,911	222,911,547	223,064,601	215,981,683
Area irrigated ..	35,345,538	36,653,779	39,913,573	42,486,724	41,581,436	40,895,474	40,679,142
Area under Food-grains—							
Rice	73,400,528	73,541,118	75,980,682	72,800,536	78,730,642	78,524,391	76,636,887
Wheat	22,402,307	25,137,416	18,424,191	21,198,764	22,769,918	24,397,699	25,025,236
Barley	7,326,755	7,700,109	7,629,550	8,002,683	8,104,753	7,840,222	8,432,503
Jawar . .	20,742,047	20.781,623	21,963,751	24,780,144	21,801,934	21,184,164	18,386,332
Bajra . ..	11,530,710	15,033,738	15,133,229	16,007,989	16,303,400	15,540,225	13,092,938
Ragi .. .	3,415,664	3,567,712	4,539,472	4,464,399	4,545,355	4,288,927	4.296,207
Maize	5,790,543	6,171,715	6,296,375	6,784,224	6,857,925	6,311,627	5,591,349
Gram	11,024,170	13,411.948	6,816,816	11,264,479	13,153,400	13,946,210	14,128,881
Other grains and pulse	28,022,722	29,771,837	29,585,726	31,534,019	31,396,982	23,069,948	29,507,101
Total Food-grains .	183,655,446	195,117,216	186,369,792	196,837,237	203,664,289	204,103,413	195,097,434
Area under other food-crops (including gardens, orchards, spices, &c)	7,012,988	7,274,315	7,493,186	7,193,324	7,446,923	7,467,584	7,582,432
Area under—							
Sugar	2,414,860	2,623,873	2,876,965	2,408,212	2,442,033	2,540,541	2,565,770
Coffee	99,160	96,050	99,511	97,233	94,455	92,874	94,576
Tea	507,920	505,417	513,437	520,487	525,729	532,703	543,565

is very subject to injury from rain and great care has to be taken in the drying. The produce is largely exported whole, but there is a considerable amount of local oil-pressing—the cake being in demand for feeding purposes

Jute.—Two varieties of the plant are cultivated as a crop, Capsularis and Olitorius. Jute growing is confined almost entirely to Eastern Bengal, in the Ganges-Brahmaputra Delta The crop requires a rich moist soil Owing to river inundation this part of India receives a considerable alluvial deposit every year and the land is thus able to sustain this exhausting crop without manure The crop is rather delicate when young, but once established requires no attention, and grows to a great height (10 to 11 feet) Before ripening the crop is cut and retted in water After about three weeks submersion the fibre is removed by washing and beating. At the present high range of prices jute may be considered to be the best paying crop in India

Tobacco is grown here and there all over the country chiefly, however, in Bengal, Bihar, Bombay, Madras and Burma Of two varieties cultivated Nicotiana Tabacum is by far the most common Maximum crops are obtained on deep and moist alluvium soils and a high standard of cultivation including liberal manuring is necessary. The crop is only suited to small holdings where labour is plentiful as the attention necessary for its proper cultivation is very great The seed is germinated in seed beds and the young plants are transplanted when a few inches high, great care being taken to shield them from the sun The crop is very carefully weeded and hoed It is topped after attaining a height of, say, 2 ft , and all suckers are removed The crop ripens from February onwards and is cut just before the leaves are become brittle By varying the degree of fermentation of the leaves different qualities of tobacco are obtained A black tobacco is required for *Hooka* smoking and this is the most common product but a certain amount of yellow leaf is grown for cigar making

Live-stock consist mainly of cattle, buffaloes and goats, horses not being used for agricultural purposes Sheep are of secondary importance.

For draught purposes cattle are in more general use than buffaloes especially in the drier parts of the country, but buffaloes are very largely used in the low lying rice tracts For dairying buffaloes are perhaps more profitable than cows as they give richer milk and more of it· but they require more feeding. The poorer people depend largely on the milk of goats of which there are an enormous number throughout India Cattle breeding is carried on mainly in the non-cultivated tracts in Central and Southern India, Southern Punjab and Rajputana, where distinct breeds with definite characters have been preserved. The best known draught breeds are Hansi, Nellore, Amritmehal, Gujrat, Malvi, and the finest milk cows are the Sahiwal (Punjab) Gir (Kathiawar) and Sind Owing, however, to the encroachment of cultivation on the grazing areas well-bred cattle are becoming scarce, and some of the breeds are threatened with extinction. Efforts to improve the quality of the cattle in the non-breeding districts by the use of selected bulls have hitherto been frustrated by the promiscuous breeding which goes on in the villages.

Dairying.—Though little noticed, dairying forms a very large indigenous industry throughout India. The best known products are native butter (ghee) and cheese (dahi). During recent years a considerable trade in tinned butter has sprung up in Gujrat (Bombay Presidency) While pure *ghee* and milk can be procured in the villages, in the towns dairy products can scarcely be bought unadulterated

Agricultural Improvement.—The chief improvements in the general agricultural prosperity of the country have been hitherto effected through Public Works The irrigation canals have added enormously to the security and productiveness of the land commanded, while vast desert areas have been converted into flourishing agricultural districts The Railways have undoubtedly increased values and have had a steadying influence on the prices of agricultural produce through the opening up of new markets

The more important problems awaiting solution have an economic basis The improvement of agricultural credit, the organization of the village communities, the consolidation of scattered holdings are problems of vital importance to the advancement of Indian agriculture If these questions can be satisfactorily settled there is room for a very great and general advance in agricultural methods With adequate capital and proper organization India could with ease increase her agricultural produce by fifty per cent

The improvement of agriculture has for some time received the attention of Government Great advances have been made during the last 10 years through the recruitment of a staff of agricultural experts for investigation and research thus ensuring a continuous and concentrated effort towards improvement.

The main lines of investigations have been towards the improvement of the quality and yield of crops through selection and breeding of plants, the improvement in general methods of cultivation and the prevention and cure of insect and fungus disease. Although sufficient time has not elapsed to produce any marked effect on the agriculture of the country, it has been made clear that properly organized effort directed on sound lines with due regard to economic conditions will in most cases succeed Field experiments have shown possibilities of greatly enhanced yields by better cultivation, and improved varieties, and the *ryat* has not shown himself averse from improvement where such is within his means.

		1905-6	1906-7	1907-8	1908-9	1909-10	1910-11	1911-12.
		Acres	Acres	Acres	Acres	Acres	Acres	Acres.
Area under Oilseeds—								
Linseed		2,232,523	2,514,884	1,401,220	1,981,826	2,116,281	2,512,032	3,763,222
Sesamum (til)		3,914,737	3 908,328	4,287,728	4,232,568	4,740,092	4,211,829	4,174,341
Rape and Mustard		3 503,060	4,231,554	3,297,455	3,887,122	4,093,590	3,898,746	4,224,736
Other Oilseeds		2,850,933	3,310,599	3,499,570	4,004,082	3,675,094	3,911,623	4,332,566
Total Oilseeds		12,501,253	13,965,365	12,485,973	14,105,598	14,625,057	14,534,230	16,494,865
Area under—								
Cotton		13,099,359	13,771,268	13,909,269	12,958,974	13,172,188	14,447,690	14,568,189
Jute		3,140,822	3,523,558	3,942,675	2,835,453	2,756,820	2,828,669	3,090,827
Other fibres		651,729	692,484	746,696	722,718	824,669	769,594	688,868
Indigo		401,138	448,594	405,905	286,354	295,706	282,757	274,925
Opium		654,078	614,879	538,042	416,318	374,208	383,335	220,164
Tobacco		1,018,506	1,009,210	974,458	953,712	1,013,352	1,067,682	998,943
Fodder crops		3,933,735	4,547,723	4,908,324	4,627,878	4,748,899	4,881,742	4,977,924
Estimated yield* of—								
Rice (Cleaned)	*cwt*	433 138 300	427,743,800	379,211,300	390,979,900	557,136,000	557,938,000	521,992,000
Wheat	*tons*	8,570,140	8,491 700	6,125,100	7,639,000	9,633,600	10,040,500	9,813,500
Coffee †	*lb*	31,171,668	17,777,032	33,042,427	27,648,357	34,983,569	‡	‡
Tea †	,,	221,712,407	241 403,510	244,668,973	247,364,750	258,317,942	263,605,240	268,823,436
Cotton	400 *lb bales*	4,168,451	4,934,000	3,782,401	4 200,150	4,928,000	4,303,000	3,925,000
Jute	,, ,,	8,140,900	9,206,400	9,817,800	6,310,800	7,206,600	7,932,000	8,234,700
Linseed	*tons*	353,200	425,200	163,200	297,700	427,800	563,600	641,200
Rape and Mustard	,,	961,600	1,053,100	688,000	987,500	1,218,400	1,233,200	1,271,000
Sesamum (til)	,,	389,800	541,000	285,700	464,300	560,800	511,800	371,400
Groundnut	,,	211,200	273,700	352,500	495,700	459,300	503,200	542,200
Indigo	*cwt*	48,200	65,700	52,300	38,800	39,300	46,000	48,700
Cane-sugar	*tons*	1,725,500	2,205,300	2,046,900	1,872,900	2,127,100	2,217,800	2,390,400

* The acreage of crops given in this table is for British India only, but the estimated yield includes the crops in certain of the Native States

† The statistics of the production of tea are for calendar years; those for coffee were for calendar years before 1908-9.

‡ Return of production discontinued

Crop Forecasts for 1914-15 —The following is a summary of the various crop forecasts relating to the season 1914-15 issued by the Department of Statistics, India The estimated outturn is not yet available —

Crop	Tracts comprised in the figure.	Percentage of average Indian crop represented by the tracts mentioned in col 2	Estimated Area	Ratio of reported area to annual average for these tracts at corresponding date
1	2	3	4	5
			Acres	Per cent
Cotton	All cotton growing tracts .	100	22,138,000	119
Sesamum	U P † Madras, C P and Berar, Bombay and Sind,* Bengal Bihar and Orissa, Punjab, and Ajmer, Merwara	79	3 540 400	119
Indigo	Bihar and Orissa, Madras, Punjab, Bombay and Sind* and Bengal	88 1	104,200	55
Rice	Bengal, Madras, Bihar andOrissa, Burma, U P Bombay and Sind,* C P and Berar, and Assam	98 9	72,167,000	106
Groundnut ..	Madras, Bombay,* & Burma		1 726,200	170
Sugarcane ..	U P Punjab, Bihar and Orissa, Bengal, Madras, Bombay and Sind,* Assam, N -W F Province and C P and Berar	99 4	2 450,100	106

N B —The ratios in column 3 are calculated on the total acreage in all India in the case of cotton and on that in British India in the case of other crops

* Including Native States † "Unmixed Crop."

Government Expenditure —The total expenditure incurred by the Imperial Department of Agriculture during the financial year, 1912-13, was Rs 4,22,372 as under —

	Rs
Office of the Agricultural Adviser	1,43,509
Cotton Specialist	22,295
Chemical Section . .	34,828
Mycological Section .	39,650
Entomological Section ..	36,914
Pathological Entomological Section . .	26,641
Botanical Section	36,099
Bacteriological Section . .	23,783
Agricultural Section	58,653
Total ..	4,22,372

In addition to the expenditure noted above, the Provincial Departments of Agriculture spent Rs 35,69,677 during the year under report The details are given below —

	Rs
Bengal	3,47,109
Bihar and Orissa	2,28,461
United Provinces	6,13,259
Punjab	2,90,132
Bombay	7,49,828
Madras	4,34,171
Central Provinces	6,11,287
Burma	1,56,993
Assam .	1,14,817
North-West Provinces	23,620
Total .	35,69,677

AREA, CULTIVATED and UNCULTIVATED, in 1911-12, in ACRES.

Administrations.	Area according to Survey	DEDUCT.			NET AREA.	
		Feudatory and Tributary States	Area for which no Returns exist	Total	According to Survey.	According to Village Papers.
Bengal	53,097,964	3,451,520		3,451,520	49,646,444	49,646,444
Bihar and Orissa	71,507,696	18,334,720		18,334,720	53,172,976	53,172,976
Assam	39,275,494	7,969,920		7,969,920	31,305,574	31,305,574
United Provinces (Agra)	57,372,937	4,345,232		4,345,232	53,027,705	52,799,610
United Provinces (Oudh)	15,306,720				15,306,720	15,476,229
Punjab	86,726,737	24,511,382		24,511,382	62,215,355	61,255,052
North-West Frontier Province	8,578,462	140,800		140,800	8,437,662	8,574,452
Upper Burma	57,802,617	3,997,722		3,997,722	53,804,895	53,804,895
Lower Burma	54,994,247				54,994,247	54,994,247
Central Provinces	72,552,216	19,960,343		19,960,343	52,591,873	52,945,610
Berar	11,327,431				11,327,431	11,371,931
Ajmer-Merwara	1,770,921				1,770,921	1,770,921
Coorg	1,012,260				1,012,260	1,012,260
Madras	97,452,663	6,378,899		6,378,899	91,073,764	89,072,612
Bombay	85,618,793	36,989,440		36,989,440	48,629,353	48,629,353
Sind	34,129,376	3,872,000		3,872,000	30,257,376	30,257,376
Pargana Manpur*	31,382				31,382	31,382
Total	748,557,916	129,951,978		129,951,978	618,605,938	616,120,924

Administrations.	CULTIVATED		UNCULTIVATED.		Forests
	Net Area actually Cropped	Current Fallows	Cultivable Waste other than Fallow	Not available for Cultivation	
Bengal	24,931,100	4,730,353	5,067,878	10,836,614	4,080,498
Bihar and Orissa	27,556,300	3,615,642	7,422,086	11,150,645	3,428,303
Assam	5,711,698	2,529,939	15,222,445	5,510,500	2,330,992
United Provinces (Agra)	26,390,618	2,593,248	7,440,891	7,656,765	8,718,088
United Provinces (Oudh)	9,200,093	663,965	2,758,396	2,240,591	613,184
Punjab	22,257,053	5,839,364	17,294,661	12,530,931	3,333,043
North-West Frontier Province.	2,284,540	563,764	2,723,177	2,628,633	374,338
Upper Burma	4,620,129	4,438,091	11,162,917	21,719,810	11,863,948
Lower Burma	8,719,787	743,787	14,816,218	23,613,216	7,101,239
Central Provinces	17,968,886	2,228,950	13,560,821	4,091,301	15,095,652
Berar	7,057,414	808,620	366,701	866,148	2,273,048
Ajmer-Merwara	220,175	574,871	15,056	870,087	90,732
Coorg	141,228	146,068	21,964	345,157	357,843
Madras	33,068,409	8,935,084	9,371,366	24,899,507	12,798,246
Bombay	22,906,127	10,636,216	1,542,911	5,958,594	7,585,505
Sind	2,940,938	5,933,995	5,905,619	14,685,822	791,002
Pargana Manpur*	7,188	367	7,263	858	15,707
Total	215,981,683	54,982,324	114,700,370	149,605,179	80,851,360

* A British district in Central India.

AREA, UNDER IRRIGATION IN 1911-12 · IN ACRES

Administrations.	Total Area Cropped.	AREA IRRIGATED.			
		By Canals.		By Tanks.	By Wells.
		Government	Private		
Bengal	30,436,800	111,323	244,381	728,104	20,773
Bihar and Orissa	32,955,600	797,679	334,455	628,894	625,858
Assam	6,167,760	978	119,093	.	.
United Provinces (Agra)	32,760,757	1,971,333	20,521	48,555	2,974,843
United Provinces (Oudh)	12,030,224	.	.		899,940
Punjab	26,308,442	6,964,439	420,002	7,435	3,420,444
North-West Frontier Province	2,688,888	221,087	439,344		88,913
Upper Burma	5,017,166	419,792	204,484	135,786	8,104
Lower Burma	8,725,818	396	21,790	3,505	2,218
Central Provinces	20,294,576	12,813	1,879	427,768	58,796
Berar	7,060,777			238	31,882
Ajmer-Merwara	253,496			25,134	91,190
Coorg	142,135	2,610		1,840	.
Madras	37,380,133	3,534,827	179,604	3,298,685	1,442,280
Bombay	23,499,345	146,705	15,936	58,256	696,365
Sind	3,263,325	2,636,845	66,939		46,685
Pargana Manpur	7,509				133
Total	249,001,751	16,820,827	2,068,428	5,364,200	10,408,424

Administrations	AREA IRRIGATED		CROPS IRRIGATED *			
	Other Sources	Total Area Irrigated	Wheat	Other Cereals and Pulses	Miscellaneous Food Crops	Other Crops.
Bengal	565,262	1,669,843	22,152	1,552,393	451,795	180,106
Bihar and Orissa	1,458,083	3,844,969	273,861	2,545,253	910,200	125,935
Assam	196,613	316,684		301,922	14,097	656
United Provinces (Agra)	1,308,378	6,323,630	1,802,953	3,196,839	151,038	1,749,000
United Provinces (Oudh)	712,544	1,612,484	623,182	705,382	38,004	289,836
Punjab	142,282	10,954,602	4,551,328	2,492,870	571,319	3,701,094
North-West Frontier Province	97,273	846,617	280,146	385,401	55,539	130,250
Upper Burma	80,848	849,014	73	836,759	42,221	80
Lower Burma	78,729	106,638	. ..	103,818	3,064	..
Central Provinces	23,185	524,441	14,630	457,741	49,598	2,472
Berar	521	32,641	9,403	698	21,455	1,085
Ajmer-Merwara	51	116,375	12,245	84,643	11,307	22,088
Coorg ..	. ..	4,450		4,450	.	.
Madras	1,131,482	9,586,878	5,467	9,696,159	1,099,821	476,749
Bombay	87,920	1,005,182	195,535	531,304	165,676	217,985
Sind	134,092	2,884,561	349,097	2,194,993	49,307	609,262
Pargana Manpur		133	81	9	40	3
Total	6,017,263	40,679,142	8,140,153	25,090,634	3,634,481	7,505,710

* Includes the area irrigated at both harvests

CROPS UNDER CULTIVATION IN 1911-12, IN ACRES

Administrations	Rice.	Wheat	Barley	Jawar or Cholum (Great Millet)	Bajra or Cumba (Spiked Millet)	Ragi or Marua (Millet.
Bengal	20,960,900	143,000	94,900	2,500	5,700	14,900
Bihar and Orissa	17,365,000	1,285,200	1,340,300	94,700	67,000	1,008,900
Assam	4,616,197	162	507		1	1,931
United Provinces Agra)	3,450,247	5,640,530	3,977,147	1,366,332	2,244,596	153,198
United Provinces (Oudh)	1,844,495	1,995,178	1,237,537	266,438	635,878	39,158
Punjab	513,731	9,725,494	1,339,097	554,234	1,155 046	16,805
N. West Frontier Province	47,181	1,198,993	296,183	53,356	75,638	
Upper Burma	1,957,713	27,482		484,905	318,433	..
Lower Burma	7,936,548			10	703	
Central Provinces	4,780,434	3,290,692	23,457	1,667,489	41,888	23,799
Berar	41,487	319,861	64	2,246,636	74,879	.
Ajmer-Merwara	139	26,630	62,994	28,199	10,849	81
Coorg	82,527					6.379
Madras	10,289,461	18,314	3,247	5,166,309	3,383,565	2,448,420
Bombay	1,682,035	983,684	38,303	6,063,566	4,663,795	581,891
Sind	1,088,655	368,442	18,767	389,396	414,935	745
Pargana Manpur	137	1,574		2,262	32	
Total	76,636 887	25,025,236	8,432,503	18,386,332	13,092,938	4,296 207

Administrations	Maize	Gram (pulse)	Other Food Grains and Pulses	Total Food Grains and Pulses.	Lin-seed	Til Jinjli or Ses-amum
Bengal	94,700	176,700	1,416,700	22,910,000	206,800	282,800
Bihar and Orissa	1 661,400	992,100	4,537,300	28,351,900	567,000	205 800
Assam	19,450	905	87 365	4,726,518	13,625	5,581
United Provinces (Agra)	998,417	5,175,443	4,406,615	27,392,525	612,159	349,192
United Provinces (Oudh	795,775	1,697,097	2,447,529	10,959,085	234,127	25,817
Punjab	955,348	4,099,894	1,018,936	19,378,585	46,099	94,636
N West Frontier Province	409,842	174,119	99,299	2,354,611	11	5,467
Upper Burma	161,145	38,905	466,005	3,454,588	.	1,010,649
Lower Burma	21,232	1,377	27,234	7,987,104		61,489
Central Provinces	142,268	993 113	4 348 695	15,311,835	1,721,076	808,935
Berar	2,103	117 221	616 950	3,419,201	137,718	77,741
Ajmer-Merwara	43,697	26,176	14,013	212,778	561	1,828
Coorg		1,540	998	91,444		276
Madras	118,011	134,900	7,024,105	28,586,332	25,905	887,349
Bombay	165,268	422,274	2,763,247	17,364,063	196,903	303,344
Sind	1,833	76,439	232,038	2,591,250	20	53,113
Pargana Manpur	860	678	72	5,615	321	324
Total	5,591,349	14,128,881	29,507,101	195,097,434	3,763,222	4,174,347

CROPS UNDER CULTIVATION IN 1911-12 IN ACRES.

Administrations	Rape and Mustard	Other Oil Seeds	Total Oil Seeds	Condiments and Spices	Sugar Cane	Sugar Other.
Bengal ..	1,317,600	80,600	1,887,800	157,400	222,600	38,000
Bihar and Orissa	780,000	496,600	2,050,300	82,400	263,100	200
Assam .	281,823	163	301,189	2,977	36,561	.
United Provinces (Agra)	101 947	126,544	1,189,842	105,728	1,120,040	.
United Provinces (Oudh)	76,970	454	337,368	24,024	220,597	.
Punjab	1,456,202	1,788	1,598,725	32,351	298,296	.
N. West Frontier Province	99,447	40	104,965	5,347	31,683	.
Upper Burma	296	*139,428	1,150,373	53,823	2,542	25,628
Lower Burma	3,341	*3,133	67,963	21,500	11,360	1,404
Central Provinces	51,622		2,980,548	58,268	22,951	
Berar	486	398,915	295,812	25,228	1,252	.
		79,867				
Ajmer-Merwara	1,138		3,527	1,560	689	.
Coorg .		45	321	2,444		
Madras		2,014,128	2,927,382	720,664	108,032	90,387
Bombay	1,550	855,563	1,357,360	204,044	66,807	
Sind . ..	52,314	134,686	240,133	4,779	3,619	.
Pargana Manpur ..		612	1,257		22	
Total	4,224,736	4,332,566	16,494,865	1,502,537	2,410,151	155,619

Administrations	Cotton	Jute	Other Fibres	Total Fibres	Indigo	Other Dyes
Bengal ..	34,100	2,737,700	39,300	2,811,100	1,000	
Bihar and Orissa	89,100	258,200	20,200	367,500	110,100	7,100
Assam ..	37,620	94,927	312	132,859		
United Provinces (Agra) .	841,524		76,716	918,240	23,881	3,042
United Provinces (Oudh)	59,657	..	18,198	77,855	5,721	..
Punjab	1,462,500	..	23,442	1,485,942	38,672	4,481
N W Frontier Province	56,373	.	703	57,076	9	
Upper Burma	171,979	..	300	172,279	99	55
Lower Burma	20,190		342	20,532	3	
Central Provinces .	1,391,955		65,187	1,457,142	15	31
Berar . .	3,256,248		43,900	3,300,148	13	719
Ajmer Merwara . .	27,560		80	27,640	13	
Coorg	6	..		6		.
Madras	2,675,838	..	279,725	2,955,563	90,324	4,434
Bombay . .	4,107,362	.	119,774	4,227,136	34	293
Sind	335,656		656	336,312	5,241	516
Pargana Manpur .	521		33	554		.
Total ..	14,568,189	3,090,827	688,868	18,347,884	274,925	20,664

CROPS UNDER CULTIVATION IN 1911-12 · IN ACRES.

Administrations.	Opium	Tea	Coffee	Tobacco.	Other Drugs and Narcotics	Fodder Crops
Bengal		146,400		306,300	2,400	98,100
Bihar and Orissa	2,600	2,200	.	116,300	600	30,700
Assam		354,276	1	8,384		5,971
United Provinces (Agra)	103,882	7,895	..	75,778		992,959
United Provinces (Oudh)	111,217			17,657		117,416
Punjab	2,262	9,937		76,430	1,029	2,896,436
N W. Frontier Province				12,447		74,743
Upper Burma	200	1,736	60	29,670	10	48,546
Lower Burma			3	59,228	.	2,810
Central Provinces				17,958	102	354 742
Berar				8 489		156
Ajmer-Merwara				7	13	2,049
Coorg			43,313	38	22	.
Madras		21,107	51,127	192,205	48,273	273 018
Bombay		14	72	68,286	570	71,112
Sind				9,766	189	9,166
Pargana Manpur	3				.	..
Total	220,164	543,565	94,576	998,943	53,208	4,977,924

Administrations.	Orchards and Garden Produce	Miscellaneous Crops		Total Area Cropped	*Deduct* Area Cropped more than once.	Net Area Cropped.
		Food	Non-Food			
Bengal	944 200	472 700	438 800	30,436,800	5,505,700	24,931,100
Bihar and Orissa	655,200	510,300	405,100	32,955,600	5,399,300	27,556,300
Assam	371,779	37,147	62,098	6,167,760	456,062	5,711,698
United Provinces (Agra)	267,105	166,469	51,119	32,760,757	6,370,139	26,390,618
United Provinces (Oudh)	94,213	61,453	3,818	12,030,224	2,830,131	9,200,093
Punjab	163,856	308,320	13,120	26,308,442	4,051,389	22,257,053
N W. Frontier Province	5,033	39,181	3,793	2,688,888	404,348	2,284,540
Upper Burma	34,350	38,764	4,443	5,017,166	397,037	4,620,129
Lower Burma	402,928	35,771	115,212	8,725,818	6,031	8,719,787
Central Provinces	86,349	4,015	620	20,294,576	2,325,690	17,968,886
Berar	13,047	5,508	211	7,069,777	12,363	7,057,414
Ajmer-Merwara	526	3,954	739	253,496	33,321	220,175
Coorg	4,547	.		142,135	907	141,228
Madras	1,172,953	..	138,332	37,380,133	4,311,724	33,068,409
Bombay	137,464	18	2,072	23,499,345	593,218	22,906,127
Sind	42,654	84	19,616	3,263,325	322,387	2,940,938
Pargana Manpur	7	.	51	7,509	321	7,188
Total ..	4,396,211	1,663,684	1,259,144	249,001,751	33,020,068	215,981,683

Meteorology.

The meteorology of India like that of other countries is largely a result of its geographical position. The great land area of Asia to the northward and the enormous sea expanse of the Indian Ocean to the southward are the determining factors in settling its principal meteorological features When the Northern Hemisphere is turned away from the sun, in the northern winter, Central Asia becomes an area of intense cold. The meteorological conditions of the temperate zone are pushed southward and we have over the northern provinces of India the westerly winds and eastward moving cyclonic storms of temperate regions, while, when the Northern Hemisphere is turned towards the sun, Southern Asia becomes a super-heated region drawing towards it an immense current of air which carries with it the enormous volume of water vapour which it has picked up in the course of its long passage over the wide expanse of the Indian Ocean, so that at one season of the year parts of India are deluged with rain and at another persistent dry weather prevails

Monsoons.—The all-important fact in the meteorology of India is the alternation of the seasons known as the summer and winter monsoons During the winter monsoon the winds are of continental origin and hence, dry, fine, weather, clear skies, low humidity and little air movement are the characteristic features of this season. The summer rains cease in the provinces of the North-West Frontier Province and the Punjab about the middle of September after which cool westerly and northerly winds set in over that area and the weather becomes fresh and pleasant These fine weather conditions extend slowly eastward and southward so that by the middle of October, they embrace all parts of the country except the southern half of the Peninsula, and by the end of the year have extended to the whole of the Indian land and sea area, the rains withdrawing to the Equatorial Belt Thus the characteristics of the cold weather from October to February over India are —Westerly winds of the temperate zone over the extreme north of India; to the south of these the north-east winds of the winter monsoon or perhaps more properly the north-east Trades and a gradually extending area of fine weather which, as the season progresses, finally embraces the whole Indian land and sea area Two exceptions to these fine weather conditions exist during this period, *viz*, the Madras coast and the north-west of India In the former region the north-east winds which set in over the Bay of Bengal in October coalesce with the damp winds of the retreating summer monsoon, which current curves round over the Bay of Bengal, and, blowing directly on to the Madras coast gives to that region the wettest and most disturbed weather of the whole year, for while the total rainfall for the four months June to September, *i e*, the summer monsoon, at the Madras Observatory amounts to 15 36 inches the total rainfall for the three months October to December amounts to 29.48 inches The other region in which the weather is unsettled, during this period of generally settled conditions, is North-west India. This region during January, February and part of March is traversed by a succession of shallow storms from the westward The number and character of these storms vary very largely from year to year and in some years no storms at all are recorded. In normal years, however, in Northern India periods of fine weather alternate with periods of disturbed weather (occurring during the passage of these storms) and light to moderate and even heavy rain occurs In the case of Peshawar the total rainfall for the four months, December to March, amounts to 5.26 inches while the total fall for the four months, June to September, is 4 78 inches, showing that the rainfall of the winter is, absolutely, greater in this region than that of the summer monsoon These two periods of subsidiary "rains" are of the greatest economic importance The fall in Madras is, as shown above, of considerable actual amount, while that of North-west India though small in absolute amount is of the greatest consequence as on it largely depend the gram and wheat crops of Northern India

Spring Months —March to May and part of June form a period of rapid continuous increase of temperature and decrease of barometric pressure throughout India During this period there occurs a steady transference northward of the area of greatest heat In March the maximum temperatures, slightly exceeding 100, occur in the Deccan; in April the area of maximum temperature, between 100° and 105°, lies over the south of the Central Provinces and Gujarat, in May maximum temperatures, varying between 105° and 110°, prevail over the greater part of the interior of the country while in June the highest mean maximum temperatures exceeding 110° occur in the Indus Valley near Jacobabad Temperatures exceeding 120° have been recorded over a wide area including Sind, Rajputana; the West and South Punjab and the west of the United Provinces, but the highest temperature hitherto recorded is 126° registered at Jacobabad on June 12th, 1897 During this period of rising temperature and diminishing barometric pressure, great alterations take place in the air movements over India, including the disappearance of the north-east winds of the winter monsoon, and the air circulation over India and its adjacent seas, becomes a local circulation, characterised by strong hot winds down the river valleys of Northern India and increasing land and sea winds in the coast regions These land and sea winds, as they become stronger and more extensive, initiate large contrasts of temperature and humidity which result in the production of violent local storms These take the forms of dust storms in the dry plains of Northern India and of thunder and hailstorms in regions where there is inter-action between damp sea winds and dry winds from the interior These storms are frequently accompanied with winds of excessive force, heavy hail and torrential rain and are on that account very destructive.

By the time the area of greatest heat has been established over north-west India, in the last week of May or first of June, India has become the seat of low barometric pressures relatively to the adjacent seas and the whole character of the weather changes. During

the hot weather period, discussed above, the winds and weather are mainly determined by local conditions Between the Equator and Lat 30° or 35° south the wind circulation is that of the south-east trades, that is to say from about Lat. 30°-35° south a wind from south-east blows over the surface of the sea up to about the equator Here the air rises into the upper strata to flow back again at a considerable elevation to the Southern Tropic or beyond To the north of this circulation, *i.e.*, between the Equator and Lat. 20° to 25° North, there exists a light unsteady circulation, the remains of the north-east trades, that is to say about Lat 20° North there is a north-east wind which blows southward till it reaches the thermal equator where side by side with the south-east Trades mentioned above, the air rises into the upper strata of the atmosphere Still further to the northward and in the immediate neighbourhood of land there are the circulations due to the land and sea breezes which are attributable to the difference in the heating effect of the sun's rays over land and sea It is now necessary to trace the changes which occur and lead up to the establishment of the south-west monsoon period The sun at this time is progressing slowly northward towards the northern Tropic Hence the thermal equator is also progressing northward and with it the area of ascent of the south-east trades circulation Thus the south-east trade winds cross the equator and advance further and further northward, as the thermal equator and area of ascent follows the sun in its northern progress At the same time the temperature over India increases rapidly and barometric pressure diminishes, owing to the air rising and being transferred to neighbouring cooler regions—more especially the sea areas Thus we have the southern Trades circulation extending northward and the local land and sea circulation extending southward until about the beginning of June the light unsteady interfering circulation over the Arabian Sea finally breaks up, the immense circulation of the south-east Trades, with its cool, moisture laden winds rushes forward, becomes linked on to the local circulation proceeding between the Indian land area and the adjacent seas and India is invaded by oceanic conditions—**the south-west monsoon** proper This is the most important season of the year as upon it depends the prosperity of at least five-sixths of the people of India.

When this current is fully established a continuous air movement extends over the Indian Ocean, the Indian seas and the Indian land area from Lat. 30° S. to Lat 30° N the southern half being the south-east trades and the northern half the south-west monsoon The most important fact about it is that it is a continuous horizontal air movement passing over an extensive oceanic area where steady evaporation is constantly in progress so that where the current enters the Indian seas and flows over the Indian land it is highly charged with aqueous vapours.

The Current enters the Indian seas quite at the commencement of June and in the course of the succeeding two weeks spreads over the Arabian Sea and Bay of Bengal up to their extreme northern limits It advances over India from these two seas. The Arabian sea current blows on to the west coast and sweeping over the Western Ghats prevails more or less exclusively over the Peninsula, Central India, Rajputana and north Bombay. The Bay of Bengal current blows directly up the Bay One portion is directed towards Burma, East Bengal and Assam while another portion curves to south at the head of the Bay and over Bengal, and then meeting with the barrier of the Himalayas curves still further and blows as a south-easterly and easterly wind right up the Gangetic plain The south-west monsoon continues for three and a half to four months, *viz*, from the beginning of June to the middle or end of September During its prevalence more or less general though far from continuous rain prevails throughout India the principal features of the rainfall distribution being as follows The greater portion of the Arabian Sea current, the total volume of which is probably three times as great as that of the Bengal current, blows directly on to the west coast districts Here it meets an almost continuous hill range, is forced into ascent and gives heavy rain alike to the coast districts and to the hilly range, the total averaging about 100 inches most of which falls in four months The current after parting with most of its moisture advances across the Peninsula giving occasional uncertain rain to the Deccan and passes out into the Bay where it coalesces with the local current The northern portion of the current blowing across the Gujarat, Kathiawar and Sind coasts gives a certain amount of rain to the coast districts and frequent showers to the Aravalli Hill range but very little to Western Rajputana, and passing onward gives moderate to heavy rain in the Eastern Punjab, Eastern Rajputana and the North-west Himalayas In this region the current meets and mixes with the monsoon current from the Bay

The monsoon current over the southern half of the Bay of Bengal blows from south-west and is thus directed towards the Tenasserim hills and up the valley of the Irrawady to which it gives very heavy to heavy rain That portion of this current which advances sufficiently far northward to blow over Bengal and Assam gives very heavy rain to the low-lying districts of East Bengal and immediately thereafter coming under the influence of the Assam Hills is forced upwards and gives excessive rain (perhaps the heaviest in the world) to the southern face of these hills The remaining portion of the Bay current advances from the southward over Bengal, is then deflected westward by the barrier of the Himalayas and gives general rain over the Gangetic plain and almost daily rain over the lower ranges of the Himalayas from Sikhim to Kashmir.

To the south of this easterly wind of the Bay current and to the north of the westerly wind of the Arabian Sea current there exists a debatable area running roughly from Hissar in the Punjab through Agra, Allahabad and part of Chota Nagpur to Orissa, where neither current of the monsoon prevails. In this area the rainfall is uncertain and usually [illegible]

be light, but that the storms from the Bay of Bengal exhibit a marked tendency to advance along this track and to give it heavy falls of occasional rain

The Total Rainfall of the monsoon period (June to September) is 100 inches over part of the west coast, the amount diminishes eastward, is below 20 inches over a large part of the centre and east of the Peninsula and is only 5 inches in South Madras, it is over 100 inches on the Tenasserim and South Burma coast and decreases to 20 inches in Upper Burma, it is over 100 in the north Assam Valley and diminishes steadily westward and is only 5 inches in the Indus Valley

The month to month distribution for the whole of India is —

May	2·60 inches
June	7 10 ,,
July	11 25 ,,
August .	9 52 ,,
September	6 78 ,,
October	3 15 ,,

Cyclonic storms and cyclones are an almost invariable feature of the monsoon period In the Arabian Sea they ordinarily form at the commencement and end of the season, *viz.* May and November, but in the Bay they form a constantly recurring feature of the monsoon season The following gives the total number of storms recorded during the period 1877 to 1901 and shows the monthly distribution —

	Jan	Feb	Mar	Apl	May	June
Bay of Bengal .	..	..	1	4	13	28
	July	Aug.	Sep	Oct	Nov	Dec
Bay of Bengal	41	36	45	34	22	8
	Jan	Feb	Mar	Apl	May	June
Arabian Sea	..	..		2	15	
	July	Aug	Sep	Oct	Nov	Dec
Arabian Sea	2	.	1	1	5	..

The preceding paragraphs give an account of the normal procession of the seasons throughout India during the year, but it must be remembered, that every year produces **variations from the normal,** and that in some years these variations are very large This is more particularly the case with the discontinuous element rainfall The most important variations in this element which may occur are —

(1) Delay in the commencement of the rains over a large part of the country, this being most frequent in North Bombay and North-west India

(2) A prolonged break in July or August or both

(3) Early termination of the rains, which may occur in any part of the country.

(4) The determination throughout the monsoon period of more rain than usual to one part and less than usual to another part of the country Examples of this occur every year.

About the middle of September fine and fresh weather begins to appear in the extreme north-west of India This area of fine weather and dry winds extends eastward and southward, the area of rainy weather at the same time contracting till by the end of October the rainy area has retreated to Madras and the south of the Peninsula and by the end of December has disappeared from the Indian region, fine clear weather prevailing throughout This procession with the numerous variations and modifications which are inseparable from meteorological conditions repeats itself year after year

MONSOON OF 1914.

The monsoon rains of 1914 were on the whole abundant, and in this respect contrasted favourably with those of 1913 The Arabian Sea current appeared on the west coast of the Peninsula, on the 4th June, but did not penetrate freely inland until about the 23rd In northeast India a strong burst of rainfall occurred about the middle of June, but it was not till the end of the month that the Bay current established itself there The currents were very vigorous during nearly the whole of July and provided abundant rain They were of normal strength in August, but were determined to an abnormal extent to Lower Burma, Bihar and the Peninsula to the detriment of the greater part of northern and central India A pronounced break obtained in the region usually served by the Arabian Sea current from August 25th to September 3rd; but thereafter a great improvement occurred in the activity of the monsoon, and a cyclonic storm which travelled along a curved path across the north Madras coast to the Simla Hills resulted in abundant rainfall over a large part of the country during the third week. The dissipation of the storm on the 19th September marked the termination of the rainy season of 1914 in the northwest: in ordinary years this occurs about the 15th. During the last ten days of September the monsoon was active chiefly in Burma, northeast India and the Peninsula, and the changes characteristic of the transition from the summer to the autumnal rains were in progress

The Rainfall—The total rainfall of the period June to September in the plains of India according to the data of the stations in the Indian Daily Weather Report was in excess by 3″ or 8 per cent, but to this result July alone contributed nearly 2½″ The local distribution was very satisfactory inasmuch as in 21 of the 33 rainfall divisions the recorded amounts were within 19 per cent of the normal; in ten they were in excess by more than 20 per cent and only in two, Kashmir and Mysore was there a defect of over 19 per cent In the United Provinces, Rajputana and Central India East, where the monsoon rains of 1913 were largely deficient, the quantity received in the present monsoon season was within 5 per cent. of the normal

Rainfall June to September 1914

Division	Actual	Normal	Departure from normal	Percentage departure from normal.
Burma	85 5	73 9	+11 6	+ 16
Assam	51 5	60 4	— 5·8	— 10
Bengal	49 6	56 0	— 6 4	— 11
Bihar and Orissa .	44 3	45 3	— 1 0	— 2
United Provinces . .	36 3	36 6	— 0 3	— 1
Punjab	20 5	15 7	+ 4 8	+ 31
North-West Frontier Province .	6 4	5 1	+ 1·3	+ 25
Sind .	4·7	4 8	— 0 1	— 2
Rajputana	18 6	18 4	+ 0 2	+ 1
Bombay .	50 7	38 6	+12 1	+ 31
Central India ..	34·0	34 0		....
Central Provinces . .	38 0	40 6	— 2 6	— 6
Hyderabad . .	38 3	27 2	+11 1	+ 14
Mysore	11 9	15 5	— 3·6	— 23
Madras	30 1	26 3	+ 3 8	+ 5
Mean of India	39·8	36 8	+ 3 0	+ 8

The Textile Industry.

India has been the home of the cotton trade from the earliest times. Its cotton, known as white wool, was well known to the ancients, and its cloth was familiar to the West in the days of the overland route The name Calico comes from the fine woven goods of Calicut, and the products of the Dacca handlooms are still remarkable as the finest muslins human skill can produce

Indian Cotton.

The exports of Indian cotton began to assume importance with the opening of the sea route They received an immense stimulus during the American Civil War, when the close blockade of the Confederate ports produced a cotton famine in Lancashire, and threw the English spinners back on India for their supply of raw material When the war broke out the shipments of Indian cotton were 528,000 bales, but during the last years of the war they averaged 973,000 bales Most of this cotton was sold at an enormously inflated price, and induced a flow of wealth into Bombay, the great centre of the trade, for which there was no outlet The consequence was an unprecedented outburst of speculation known as the "Share Mania," and when the surrender of Lee re-opened the Southern Ports widespread ruin followed It is estimated that the surplus wealth brought into the country by the American Civil War aggregated £92 millions Since then the cultivation of Indian cotton, although interrupted by famine, has steadily increased For the last season for which returns are available, 1913-14, the total area in all the territories reported on was computed at 24,595,000 acres which marked a net increase of 2,567,000 acres or 11·7 per cent on the 22,028,000 acres (revised figure) of the previous year The total estimated outturn was 5,201,000 bales of 400 lbs as against 4,600,000 bales for previous year, representing an increase of nearly 13 per cent. To this figure may be added some 1,000 bales estimated as the production in Native States in Benar and Orissa which make no return.

Bombay, the Central Provinces and Hyderabad are the **chief producing centres** The following table gives the rough distribution of the outturn The figures are the estimated figures for the past season, and are not exact, but they indicate the distribution of the crop —

Burma . .	50,000	288,000
Behar and Orissa ..	19,000	86,000
Assam	12,000	33,000
Hyderabad	400,000	3,653,000
Bengal	51,000	51,000
United Provinces ..	1,586,000	1,586,000
Ajmer-Merwara	15,000	57,000
Punjab	594,000	2,053,000
North-West Frontier ..	14,000	59,000
Sind	133,000	332,000
Bombay and Baroda ..	1,307,000	6,351,000
Central Provinces ..	961,000	4,715,000
Central India	273,000	1,426,000
Madras	513,000	2,593,000
Rajputana	132,000	470,000
Mysore	16,000	93,000

Of an average outturn of four million bales it may be said that 1,733,000 bales are exported, 1,781,000 consumed by the Indian mills, and 450,000 consumed in India outside the mills. The distribution of the export trade is indicated in the appended table.

Exports of cotton to principal countries in thousands of cwts. (3½ cwts. equal one bale.)

	1911-12	1912-13	1913-14
	Cwts	Cwts	Cwts
Japan . ..	3,515	3,591	4,834
Germany .. .	891	950	1,685
Belgium ..	774	864	1,089
Italy .	680	583	828
Austria-Hungary ..	472	396	747
France .	292	328	510
United Kingdom	418	305	388
China ..	90	196	194
Spain . .	128	87	165

From this it will be seen that the United Kingdom is a very small purchaser of Indian cotton The higher counts of yarn now chiefly spun in Lancashire cannot be produced from Indian cotton, and the United Kingdom takes her supplies from the United States and Egypt Japan is the principal consumer Formerly Japan bought Indian yarn largely, but her own textile industry has expanded so rapidly that she is now not only independent of the Indian yarn supply, but is a strong and successful competitor for the Chinese trade, and even exports small quantities of hosiery to India, where it has secured an entry owing to its cheapness. After Japan the principal buyer is the Continent, where the short staple Indian cotton finds a ready sale owing to its cheapness.

Bombay is the great centre of the cotton trade The **principal varieties** are Dholleras, Broach, Oomras (from the Berars), Dharwar and Coomptas. Broach is the best cotton grown in Western India. Hinganghat cotton, from the central Provinces, has a good reputation. Bengals is the name given to the cotton of the Gangetic valley, and generally to the cottons of Northern India. The Madras cottons are known as Westerns, Coconadas, Coimbatores and Tinnevellys. The best of these is Tinnevelly. Cambodia cotton has been grown with success in Southern India, but it shows a tendency to revert. The high prices of cotton realised of recent years have given a great impetus to cultivation. Government have also been active in improving the class of cotton produced, by seed selection, hybridization and the importation of exotic cottons. Although these measures have met with a considerable measure of success, they have not proceeded far enough to leaven the whole outturn, which still consists for the most

part of a short-staple early maturing variety, suitable to soils where the rainy season is brief.

Reference has been made to the popularity of the Indian handloom cloths in the earliest days of which we have record. This trade grew so large that it excited alarm in England, and it was killed by a series of enactments, commencing in 1701, prohibiting the use or sale of Indian calicoes in England. The invention of the spinning jenny and the power loom and their development in England converted India from an exporting into an importing country, and made her dependent on the United Kingdom for the bulk of her piece-goods The first attempt to establish a cotton mill in India was in 1838, but the foundations of the industry were really laid by the opening of the first mill in Bombay in 1856 Thereafter, with occasional set backs from famine, plague and other causes, its progress was rapid

The following statement shows the quantity (in pounds) of yarn of all counts spun in all India in the twelve months, April to March, in each of the past three years —

——	1911–12	1912–13	1913–14
Bombay	441,521,380	485,566,927	479,682,975
Madras	42,838,086	44,974,138	44,673,626
Bengal	32,625,497	37,355,113	33,219,947
U P.	39,487,426	44,765,289	44,468,505
Punjab	6,630,835	5,339,339	6,274,754
C P and Berar	27,738,443	33,581,772	36,532,870
Native States	34,188,532	37,890,324	37,850,354
GRAND TOTAL	625,030,199	688,472,902	682,703,031

The spinning of yarn is in a large degree centred in Bombay, the mills of that province producing nearly 75 per cent of the quantity produced in British India The United Provinces of Agra and Oudh and Madras produced about 7 per cent each, while Bengal and the Central Provinces produced 5 5 and 4 7 per cent respectively Elsewhere the production is as yet very limited.

BOMBAY SPINNERS.

Here is a detailed statement of the quantity (in pounds) and the counts, or numbers, of yarn spun in Bombay island —

——	1911–12	1912–13	1913–14
Nos 1 to10	81,453,298	95,429,461	89,351,981
„ 11—20	170,766,063	188,102,363	186,216,653
„ 21—30	70,058,529	74,850,464	74,751,191
„ 31—40	4,551,901	4,420,751	3,830,673
Above 40	705,207	837,260	822,287
Wastes, &c.	105,900	40,701	51,911
TOTAL	327,640,898	363,681,000	355,024,696

YARN AT AHMEDABAD

The corresponding figures for Ahmedabad are as follows —

——	1911–12	1912–13	1913–14
Nos. 1—10	2,279,985	2,039,676	1,503,504
„ 11—20	15,282,525	15,656,673	14,912,547
„ 21—30	36,599,568	37,049,666	39,543,101
„ 31—40	12,404,849	11,687,071	11,890,408
Above 40 ..	1,014,041	1,375,446	958,218
Wastes, &c.	4,856	1,662	144,959
TOTAL ..	67,585,824	67,810,194	68,952,737

YARN SPUN THROUGHOUT INDIA.

The grand totals of the quantities in various counts of yarn spun in the whole of India, including Native States, are given in the following table —

——	1911–12	1912–13	1913–14
Nos. 1—10 ..	116,179,494	137,002,274	130,762,148
„ 11—20 ..	338,330,790	369,393,282	361,882,814
„ 21—30 ..	149,332,247	158,836,811	166,968,487
„ 31—40 ..	20,280,954	19,641,700	19,712,298
Above 40	2,199,468	2,937,880	2,698,686
Wastes, &c.	704,246	660,955	678,598
TOTAL ..	625,030,199	688,472,902	682,703,031

In the early days of the textile industry the energies of the millowners were largely concentrated on the production of yarn, both for the China market, and for the handlooms of India. The increasing competition of Japan in the China market, the growth of an indigenous industry in China and the uncertainties introduced by the fluctuations in the China exchanges consequent on variations in the price of silver compelled the millowners to cultivate the Home market The general tendency of recent years has been to spin higher counts of yarn, importing American cotton for this purpose to supplement the Indian supply, to erect more looms, and to produce more dyed and bleached goods This practice has reached a higher development in Bombay than in other parts of India, and the Bombay Presidency produces nearly 87 per cent of the cloth woven in India The United Provinces produces 3 8 per cent, the Central Provinces 5 per cent and Madras about 3 per cent Grey (unbleached) goods still represent nearly 77 per cent of the whole production, but dyeing and bleaching are making rapid progress

ANALYSIS OF WOVEN GOODS.

The following brief extract is taken from the statement of the quantity (in pounds and their equivalent in yards) and description of woven goods produced in all India, including Native States —

——	1911–12	1912–13	1913–14.
Grey and Bleached piece-goods—			
Pounds ..	204,901,143	211,111,391	202,763,449
Yards	883,380,610	914,191,236	872,445,720
Coloured piece-goods—			
Pounds . .	59,554,232	71,828,052	68,829,264
Yards	252,770,980	306,251,309	291,845,868
Grey and coloured goods other than piece-goods—			
Pounds	1,606,191	1,812,894	2,166,496
Yards .	416,702	415,133	637,640
Hosiery—			
Pounds ..	497,006	500,997	471,349
Dozens	273,478	284,799	267,411
Miscellaneous—			
Pounds	85,684	217,668	157,992
Total—			
Pounds	266,644,256	285,491,002	274,388,550
Yards	1,136,151,590	1,220,442,545	1,164,291,588
Dozens ..	690,180	699,932	905,051

BOMBAY WOVEN GOODS.

The output of woven goods during the three years in the Bombay Presidency was as follows (The weight in pounds represents the weight of all woven goods; the measure in yards represents the equivalent of the weight of the grey and coloured piece-goods)

——	1911–12	1912–13.	1913–14.
Pounds	219,437,846	230,203,530	218,042,731
Yards	950,404,102	1,001,664,978	941,672,596
Dozens	543,108	485,076	701,305

The grand totals for all India are as follow —

	1911–12	1912–13.	1913–14.
Pounds	266,644,256	285,471,002	274,388,550
Yards	1,136,151,590	1,220,442,545	1,164,291,588
Dozens	690,180	699,932	905,051

TRADE OF THE YEAR.

Cotton manufactures represent 22 per cent of the total value of Indian manufactures exported and nearly 5 per cent of the whole export trade The position of the cloth and yarn market during the year was not satisfactory. Towards the close of the year 150,000 bales of cloth were reported to be in stock, and the monthly production about 43 000 bales, reckoning 350 lbs per bale Of yarn 160,000 bales were in stock in the Far Eastern markets, out of which 85,000 bales remained unsold. Within the twelve months there was a fall of over 1 anna 3 pies per lb in yarn and 1 anna 9 pies per lb in cloth at Bombay There have been of late over production and heavy imports It is the belief in the trade that the loss of credit and monetary difficulties, brought about by the Swadeshi Bank failures in Bombay and in the North of India, were not so much the real cause of depression as the glut in the piece-goods market For the town and island of Bombay the profits for the year 1913 came to Rs 182 lakhs, including Rs 29 lakhs for the agents' commission The wages amounted to Rs 2,47 lakhs as against Rs 2,68 lakhs in 1912 The profits of the weaving mills, excluding commission, came to 21 per cent out of which 10 per cent was paid in dividends, as against 28 and 11¼ per cent respectively earned in 1912 while the spinning mills earned about 11 per cent on capital, out of which 6 per cent was paid in dividends last year, as compared with 22 and 5½ per cent respectively paid in the previous year There were some labour troubles Thus the year was not so prosperous as the previous one

Indian Production.—It will be of interest to note here that the number of operatives employed in Bombay each year per 1 000 spindles has fluctuated in recent years The year most trying for the mills was 1911, when there was a drop from 29 to 28 for every 1,000 spindles, but it recovered to 29 in 1912 and to 31¾ in 1913 As regards the production of lower counts Nos 1-25 of yarn, India is still holding her own as will be seen from the figures of imported yarn and Indian yarn in thousands of lbs

	Imported Lbs	per cent.	Produced. Lbs	per cent
1904–05	2,524	8	531,445	92
1913–14 .. .	2,150	5	616,617	90

Home Consumption.—It has been calculated that on the average of the last three years the total weight of yarns consumed in the Indian mills comes to 246 million lbs. and that consumed outside the mills, that is, in the production of cloth by hand weaving, is about 262 million lbs The production in Indian weaving mills consists chiefly of grey and bleached shirtings (66 million lbs) dhuties (59 million lbs), T cloths, domestics and shirtings (30 million lbs) and chadars (24 million lbs) The continued increase in production was arrested last year and the output amounted to 274 millions lbs , showing a decline of nearly 4 per cent The yardage of grey and bleached piece-goods receded by 42 millions yards to 872 million yards, or, taking the weight, by 8¼ million lbs to 203 million lbs which latter figure is 74 per cent of the total production of all woven goods

Export Trade —The figures of the export trade are given below in millions of lbs and in lakhs of rupees, indicating the recent expansion of the trade

	Yarn		Woven goods
	Lbs	Rs	No.
1909–10	227	971	221
1910–11	183	862	239
1911–12 .	151	759	219
1912–13	204	992	228
1913–14 .	198	983	229

The trade in cotton twist and yarn was bad last year and the demand from most consuming countries was poor The exports declined by 3 per cent due to smaller shipment to China and its Treaty Ports, which took 178 million lbs and Rs 8,77 lakhs or 90 per cent of the total Shanghai and Japanese mills are competing briskly with Indian mills on the China market China increased her taking from Japan by 34 million lbs in 1913 The United Kingdom shipped 4 5 million lbs to the Further East in 1913 India's export of yarn to countries other than China amounted to 20 million lbs as in the preceding year The Straits took 4¾ million lbs , valued at Rs 27½ lakhs, which is more by a lakh of rupees than in 1912 The trade with Turkey in Asia advanced from 6¼ million lbs to 7¼ million lbs and the value rose by Rs 4½ lakhs to over Rs. 35½ lakhs, but against this must be set off a decline in the shipments to Turkey in Europe from 517,600 lbs. to 234,000 lbs , owing to the political disturbances in the Balkans. Egypt showed a contraction by 454,100 lbs to 1,653,900 lbs The United Kingdom also reduced her demand for Indian yarn by more than a half to 301,691 lbs Japan, which took 23,143,000 lbs in 1888-89, had only 180,000 lbs in 1899-1900 and of late years nothing at all, her exports to India increasing in the same period.

Piece-goods.—As regards piece-goods the detailed figures in thousands are shown below—

	1912–13		1913–14	
	Yds	Rs	Yds	Rs
Grey goods	44,091	73,29	43,717	71,08
White	346	1,68	479	1,79
Coloured	42,076	1,34,89	45,038	1,40,82
TOTAL	86,513	2,09,86	89,234	2,13,69

The increase in value was by nearly Rs 4 lakhs to Rs 2,13½ lakhs, grey goods representing 33 per cent of the total value, and in that branch the trade declined by 374,000 yards and Rs 2½ lakhs to 44 million yards and Rs 71 lakhs The shipments to China declined from 935 yards and Rs 1 28 lakhs to 740,300 yards and Rs 1 14 lakhs The principal foreign markets for Indian cloth are East Africa (17 million yards), Asiatic Turkey (10 million yards) and Aden (5 million yards). Coloured goods advanced by 3 million yards and Rs 6 lakhs to 45 million yards and Rs 141 lakhs They are sent mainly from Madras and Bombay to the Straits (17 million yards), Ceylon (nearly 9 million yards), and Persia (nearly 4 million yards) Shipments to Ceylon decreased as there was larger stock in hand while those to the Straits advanced The trade in handkerchiefs made by handlooms in the north of the Madras Presidency declined from Rs 11 lakhs to Rs 8 lakhs, due to the colours used being inferior to those used in English-made goods, which are also cheaper Exports to the United Kingdom were valued at Rs 8 lakhs as against Rs 10¼ lakhs in 1912-13

Progress of the Mill Industry.

The following statement shows the progress of the Mill Industry in the whole of India

Year ending 30th June	Number of Mills	Number of Spindles	Number of Looms	Average No of Hands Employed Daily.	Approximate Quantity of Cotton Consumed	
					Cwts	Bales of 392 lbs
1897	173	4,065,618	37,584	144,335	4,553,276	1,300,936
1898	185	4,259,720	38 013	148,964	5,184,648	1,481,328
1899	188	4,728,333	39,069	162,108	5,863,165	1,675,190
1900	193	4,915,783	40,124	161,189	5,086,732	1,453,352
1901	193	5,006,936	41,180	172,883	4,731,090	1,351,740
1902	192	5,006,965	42,584	181,031	6,177,633	1,765,038
1903	192	5,043 297	44,092	181,399	6,087,690	1,739,340
1904	191	5,118,121	45,387	184,779	6,106,681	1,744,766
1905	197	5,163,486	50,139	195,277	6,577,354	1,879,244
1906	217	5,279,595	52,668	208,616	7,082,306	2,023,516
1907	224	5 333,275	58,436	205,696	6,930,595	1,980,170
1908	241	5,756,020	67,920	221,195	6,970,250	1,991,500
1909	259	6,053,231	76,898	236,924	7,381,500	2,109,000
1910	263	6 195,671	82,725	233,624	6,772,535	1,935,010
1911	263	6,357,460	85,352	230,649	6,670,531	1,905,866
1912	268	6,463,929	88,951	243,637	7,175,357	2,050,102
1913	272	6,596,862	94,136	253,786	7,336,056	3,096,016

Comparative Figures

In Great Britain, the United States of America and in India, there are 2,011 mills, 1,449 mills and 272 mills respectively The number of spindles in each country is as follows —5 93 crores, 3 22 crores and 66 lakhs for India, looms 8.05 lakhs, 6 96 lakhs, and 94,000 for India; the number of hands employed, 6 27 lakhs for Great Britain, 3 18 lakhs for America and 2.53 lakhs for India, cotton consumed in bales, 42 84 lakhs, 59 lakhs and 21 lakhs Indian bales for India If these Indian bales, which are 392 lbs per bale are reduced to American bales, which are 500 lbs bales, the number of bales consumed in India would be about 20 per cent less. The wages earned by the workmen of each country are as follows —England 48.90 crores per annum, America 33 40 crores, India 6.53 crores Out of her total production England retains 20 per cent for home consumption, America 94 per cent, and India 79 per cent.

Wages.

The following comparison of wages has been prepared by a Mill Proprietor. "Wages come to 2.68 crores for Bombay, which employs 1.10 lakh workers. The Bombay Mills employ a very expensive staff of managers and overseers. To them and all other office and clerical staffs, 26 lakhs were given; so if this sum is deducted the workman proper got 2.42 crores, or Rs 220 per annum per head. The English workman gets Rs 780 per annum and the American workman gets Rs. 1,050 per annum If the same test of profits and wages to the whole of India is applied, then for 1912 the industry as a whole earned 6.34 crores and wages to workmen proper would come to 5 90 crores and to the staff 63 lakhs, or a total of 6.53 crores to be divided amongst 2.43 lakh hands which are employed in India. The average rate of wages at this figure would work out at Rs. 269 per annum."

Statement of the amount in rupees of Excise duty realised from goods woven in the Cotton Mills in British India, under the Cotton Duties Act, II of 1896, also the amount of equivalent duty levied in the Native States, in each year from 1895-96 to 1912-13

	Bombay	Madras	Bengal	United Provinces of Agra and Oudh (also Ajmer-Merwara)	Punjab.	Central Provinces and Berar (*a*)
1895-96 (*b*)	196	496	69	4,259	615	...
1896-97	9,14,480	56,300	4,480	45,870	13,270	89,040
1897-98	9,60,600	66,470	1,180	44,350	14,460	79,269
1898-99	11,26,390	89,130	900	61,000	12,730	84,969
1899-1900	10,95,236	88,678	2,523	54,818	10,448	88,109
1900-01	10,28,542	41,827	5,038	50,116	5,806	84,978
1901-02	15,26,103	54,139	5,863	69,284	4,379	1,10,140
1902-03	15,84,121	67,813	6,605	74,023	3,031	1,30,620
1903-04	17,64,527	62,350	10,908	89,189	1,104	1,56,371
1904-05	20,43,832	65,379	11,929	96,710	2,607	1,61,368
1905-06	22,78,425	1,10,943	11,165	1,32,364	5,144	1,68,743
1906-07	24,36,265	1,32,693	23,709	1,35,884	7,464	1,64,680
1907-08	28,82,296	1,35,131	31,556	1,66,044	8,746	1,75,944
1908-09	29,51,859	1,42,295	53,351	1,88,345	9,509	1,98,419
1909-10	33,88,658	1,45,333	55,822	1,92,552	6,611	2,17,217
1910-11	36,78,555	1,48,136	56,359	1,82,083	7,300	2,07,818
1911-12	42,17,878	1,65,048	48,631	1,84,653	10,862	2,52,415
1912-13	48,27,698	2,06,862	81,709	2,11,847	17,971	2,71,882
1913-14	45,68,187	2,13,166	78,946	2,55,468	22,530	3,00,919

	Total British India		Native States	Grand Total.	
	Gross duty	Net duty	Gross duty	Gross duty	Net duty.
1895-96 (*b*)	5,635	5,635	244	5,879	5,879
1896-97	11,23,440	10,91,590	18,459	11,41,899	11,10,049
1897-98	11,66,329	11,38,950	47,835	12,14,164	11,86,785
1898-99	13,75,119	13,53,120	52,186	14,27,305	14,05,306
1899-1900	13,39,812	13,09,514	40,937	13,80,749	13,50,451
1900-01	12,16,367	11,62,947	48,449	12,64,756	12,11,396
1901-02	17,69,908	17,16,836	61,171	18,31,079	17,77,965
1902-03	18,66,213	18,25,469	65,541	19,31,754	18,91,010
1903-04	20,77,449	20,36,104	59,061	21,36,510	20,95,149
1904-05	23,81,825	23,33,636	67,320	24,49,145	24,06,976
1905-06	27,06,784	26,71,061	83,455	27,90,239	27,54,516
1906-07	29,00,957	28,64,202	81,976	29,82,671	29,46,152
1907-08	33,99,717	33,55,946	97,499,	34,97,216	34,53,443
1908-09	35,43,778	34,98,480	1,14,498	36,58,276	36,12,977
1909-10	40,06,193	39,61,020	1,37,699	41,43,892	40,98,719
1910-11	42,26,575	1,75,878	1,75,878	44,56,129	44,01,707
1911-12	48,79,478	48,04,492	1,82,479	50,61,957	49,86,971
1912-13	56,17,969	55,76,567	2,21,178	58,39,147	57,97,745
1913-14	54 39,216	53,95,192	2,38,393	56,77,609	56,33,585

(*a*) From the 1st October 1902 from which date the province was leased in perpetuity to the British Government. (*b*) For February and March 1896.

COTTON FIRES IN BOMBAY.

The Bombay Cotton Green has been situated at Colaba since 1844 and occupies an area of about 1½ miles square On it each dealer rents a plot which is known as his *jatha* The cotton season opens at the Divali in October or November, when the dealers bring to their *jathas* the balance of the previous crop which has been stored throughout the monsoon, and from that date until the monsoon breaks in the following June the Cotton Green is crowded with bales and is the scene of great activity It has long been recognised that the Green is inconvenient both in regard to its situation and its limited size and arrangements for its transfer have been made

In recent years there have been several fires on the Green, culminating in a long series in 1914 when the damage done by fire surpassed all records It is estimated that 150 000 bales valued at Rs 1,65,00,000, were in 1914 affected by fire Allowing for 75,000 damaged bales (valued at Rs 82,00 000) which were sold by Insurance Companies, the loss works out as follows 75,000 bales, totally burnt or rendered useless for spinning purposes, valued at Rs. 83,00,000.

But the number of fires in the different years varies greatly In 1904 there was only one, and the same in 1905, but in 1906 the number was thirty-eight, coming to more recent years we find one in 1911, three in 1912, thirteen in 1913, and forty-three in 1914 The fires are generally confined to a particular area of the Green, where, though the public is not excluded, there is a regular system of watchmen

Committee of Enquiry —The disastrous fires of 1914 led to the appointment by the Government of Bombay of a Committee "to inquire into the causes of the outbreaks of fire on the Cotton Green and to consider and recommend what preventive and protective measures should be adopted to guard against such outbreaks in future"

A Government Resolution, published in November, summarises the suggestions of that Committee as follows —

(i) The removal of the Cotton Green from Colaba to some more spacious, better arranged, better drained and more remote site

(ii) The restriction of the height of cotton stacks, with proper alleys, lanes or roads between the various stacks and jathas

(iii) The storage of cotton in godowns which are properly built

(iv) The organization and maintenance by the cotton merchants and Insurance Companies jointly of a better staff for guarding the Green

(v) The provision of an adequate number of hydrants and full pressure of water throughout the 24 hours

(vi) Efforts by Insurance Companies to safeguard as closely as possible their own interests after a fire has occurred

(vii) The institution of a tribunal or court of enquiry of the nature referred to in the preceding paragraph

Fraudulent Incendiarism —Government accepted the committee's conclusion that the fires of 1914 were due to wilful and fraudulent incendiarism, the motive for which is to be found in the exceptional conditions which characterized the cotton market during that season In the absence of a definite clue, the Committee found itself unable to determine upon which of the several classes which stood to benefit by the destruction of large stocks of cotton the culpability for these conflagrations lay

The Resolution also stated that, pending the completion of the Sewri Reclamation, the Port Trust are making arrangements, at a cost of approximately three lakhs, to lay out a suitable storage ground near the reclamation This, in conjunction with the existing Cotton Green, will admit of even a large crop being stored in conditions which will not reproduce the dangerous features which characterized the storing of last year's crop The insurance companies have already taken action, by the imposition of almost prohibitive rates where these precautions are not observed, to compel the restriction of the height of stacks of bales and the provision of a liberal allowance of free space between adjoining stacks The provision of the additional storage area referred to above will facilitate the adoption of these very necessary safeguards

Artificial Damping —The attention of the International Cotton Committee, under the presidency of Sir Charles Macara, was in June drawn to the subject of the cotton fires The two representatives of India on the Committee, suggested the possibility that the artificial damping of the cotton might be a contributory cause to the outbreaks The point was made that the International Federation during the ten years of their existence have waged strenuous warfare against the artificial damping of cotton and have heard from Lord Crewe, the Secretary of State for India, that the practice was one which was fraudulent and should be met by penal legislation A strong opinion was expressed in favour of the Government of India passing an Act in accordance with the terms of Lord Crewe's speeech M Berger, the representative of France stated that since the perfecting of the system of testing cotton for damp on its arrival at the port of Havre the sellers of a consignment of cotton which contained more than 8½ per cent of moisture were compelled by the French law courts to make good the excess of moisture to the firm to whom the cotton was consigned, this case being the first of the kind on record

The Jute Industry.

Considering its present dimensions, the jute industry of Bengal is of very recent origin The first jute mill in Bengal was started at Rishra in 1855, and the first power-loom was introduced in 1859 The original outturn was 8 tons per day In 1909 it had grown to 2,500 tons per day, it is now 2,400 tons per day (working short time), and it shows every indication of growing and expanding year by year Another interesting thing about the jute industry of Bengal is that, although it is practically a monopoly of Scotsmen from Dundee, the industry itself owes its inception to an Englishman The founder of the industry was George Acland, an Englishman, who began life as a midshipman in the navy, and was for some years in the East India Marine Service He quitted this service while still a young man, and engaged in commercial pursuits in Ceylon, where he was successful Later on he turned his attention to Bengal, and arriving in Calcutta about 1853 he got into touch with the management of the paper works, then at Serampore, where experiments were being tried with country grasses and fibre plants to improve the quality or cheapen the manufacture of paper This seems to have suggested to Acland the manufacture of jhea, and in 1854 he proceeded to England, with a view to obtaining machinery and capital in order to manufacture goods from that material During this trip he visited Dundee, and while there Mr John Kerr, of Douglas Foundry, suggested to him the importing of machinery into Bengal "where the jute comes from and spin it there" This suggestion bore fruit, for shortly afterwards Acland placed orders with Kerr for a few systems of preparing and spinning machinery, and returned to India the same year accompanied by his two sons and a few Dundee mechanics who were to assist him in erecting and operating the first jute mill in Bengal This as has been stated, was at Rishra, the site of the present Wellington mills, near Serampore, and here, in 1855, the first machine spun jute yarns were made As not infrequently happens the pioneer got very little out of his venture After several ups and downs the Acland interest in the Rishra mill ceased in 1867, and the company which Acland had formed in 1854 was wound up in 1868

Power-looms —The pioneer's example was followed by Mr George Henderson of that ilk and firm, and in 1859 the Borneo Jute Co was launched under his auspices To this company is due the credit of introducing the power-loom for jute cloth Unhampered by the financial difficulties which had burdened the Aclands, the Borneo Jute Co. made rapid progress, doubling their works in 1864, and clearing their capital twice over In 1872 the mills were turned into a limited liability company, the present "Barnagore Jute Manufacturing Co , Ld ", which is credited at the present moment with making a monthly profit of three lakhs Four other mills followed in succession—Gouripore, Serajgunge, and India Jute Mills

"From 1868 to 1873," writes Mr David Wallace in "The Romance of Jute," "the five mills excepting the Rishra mill simply coined money and brought the total of their looms up to 1,250" To illustrate the prosperity of the industry at this period we may take the dividends paid by the Barnagore Company On the working of their first half year, a 15 per cent interim dividend was declared, which seemed to justify the enormous capital at which the company was taken over from the Borneo Company, and shares touched 68 per cent premium The dividend for the first year, ending August 1873, was 25 per cent , for 1874, 20 per cent , and for 1875 10 per cent Then came a change The investing public had forgotten the effect of the Port Canning bubble, and the condition of the jute industry in 1872-73 seeming to offer a better return than coal or tea, both of which had just enjoyed a boom it was only necessary to issue a prospectus of a jute mill to have all the shares snapped up in the course of an afternoon

In 1872-73 three new companies were floated locally—the Fort Gloster, Budge Budge and Sibpore, and two Home companies, the Champdany and Samnugger, all of which commenced operations in 1874 In 1874-5 eight other mills were launched—the Howrah, Oriental (New Union), Asiatic (now Soorah), Clive, Bengal Pressing and Manufacturing Co (now the Bellaghatta-Barnagore branch mill), Rustomjee (now the Central), Ganges (registered in England), and Hastings, owned by Messrs Birkmyre Bros , of Greenock fame—in all thirteen new companies, coming on all of a heap and swelling the total looms from 1,250 up to 3,500 This was too much of a strain for the new industry, and for the next ten years all the mills had a severe struggle The older ones all survived the ordeal, but four of the new concerns—the Oriental, the Asiatic, the Bengal Pressing and Manufacturing Co and the Rustomjee—became moribund, to appear again later on under new names and management Fort Gloster also suffered badly

Between 1875 and 1882 only one new mill was put up This was Kamarhatty, promoted by Messrs Jardine, Skinner & Co , which came into being in 1877, as the result of Dr Barry's visit to Calcutta in 1876, when he transferred the agency of the Gouripore Co from Messrs. Jardine, Skinner & Co to his own firm This mill, together with additions made by some of the other mills, brought the total looms up to 5,150 in 1882 By the end of 1885 the total was further augmented by the Hooghly, Titaghur, Victoria and Kanknarrah mills, bringing the number of looms at work up to 6,700 From this period on to 1894 no new mills came into existence except the Calcutta Twist Mill, with 2,460 spindles, since merged into the Wellington branch of the Champdany Co Between 1896 and 1900 the following new mills were started —the Gordon Twist Mill with 1,800 spindles (now the Fort Gloster Branch mill), Khardah, Gondolpara (French owned), Alliance, Arathoon, Anglo-India, Standard, National, Delta (which absorbed the Serajgunge), and the Kinnison A lull of four years witnessed large extensions to the existing mills, after which came the following series of new

mills, besides further heavy extensions—Dalhousie, Alexandria, Naihati, Lawrence, Reliance, Belvedere, Auckland, Kelvin and Northbrook

Progress of the Industry.

THE record of the jute industry may well be said to be one of uninterrupted progress. The following statement shews **quinquennial averages** from the earliest year for which complete information is available with actuals for the last four years; and the figures in brackets represent the variations for each period, taking the average of the quinquennium from 1879-80 to 1883-84 as 100. It will be seen that the number of looms and spindles in operation has increased to a very much larger extent than either the number of mills at work or the amount of nominal capital employed

	Number of mills at work	Nominal Capital (in lakhs of Rs)	Number (in thousands) of		
			Persons employed.	Looms	Spindles
1879-80 to 1883-84	21 (100)	270 7 (100)	38 8 (100)	5 5 (100)	88 (100)
1884-85 to 1888-89	24 (114)	341 6 (126)	52 7 (136)	7 (127)	138 4 (157)
1889-90 to 1893-94	26 (124)	402 6 (149)	64 3 (166)	8 3 (151)	172 6 (196)
1894-95 to 1898-99	31 (148)	522 1 (193)	86 7 (223)	11 7 (213)	244 8 (278)
1899-1900 to 1903-04	36 (171)	680 (251)	114 2 (294)	16 2 (295)	334 6 (380)
1904-05 to 1908-09	46 (219)	960 (355)	165 (425)	24 8 (451)	510 5 (580)
1909-10	60 (286)	1,151 (425)	204 1 (526)	31 4 (571)	645 9 (734)
1910-11	58 (276)	1,150 (425)	216 4 (558)	33 1 (602)	682 5 (776)
1911-12	59 (281)	1,193 (441)	201 3 (519)	32 9 (598)	677 5 (770)
1912-13	61 (290)	1,196 5 (442)	204 (525)	34 (618)	708 7 (805)

The production of the mile has increased to a still greater extent The following figures shew the export of jute manufactures and the declared values for the quinquennial periods The combined value of gunny bags and gunny cloth exported by sea in 1912-13 is over eighteen times as great as the average value of the exports in the period 1879-80 to 1883-84.—

	Jute manufactures		Value in lakhs of Rs
	Gunny bags in millions of number	Gunny cloths in millions of yards	
1879-80 to 1883-84	54 9 (100)	4 4 (100)	124 9 (100)
1884-85 to 1888-89	77 (140)	15 4 (350)	162 9 (130)
1889-90 to 1893-94	111 5 (203)	41 (992)	289 3 (232)
1894-95 to 1898-99	171 2 (312)	182 (4,136)	518 (415)
1899-1900 to 1903-04	206 5 (376)	427 2 (9,709)	826 5 (662)
1904-05 to 1908-09	257 8 (469)	698 (15,864)	1,442 7 (1,154)
1909-10	364 4 (664)	940 1 (21,366)	1,709 6 (1,369)
1910-11	360 9 (657)	955 3 (21,711)	1,699 4 (1,361)
1911-12	289 9 (528)	871 5 (19,807)	1,600·8 (1,282)
1912-13	311 7 (568)	1,021 8 (23,223)	2,287·1 (1,831)

Up to the last quinquennium the **exports of raw jute** were marked by increases from year to year though the improvement was not so rapid as in the case of manufactures A slight decrease in the exports occurred in 1909-10 as compared with the figures for the preceding quinquennial period and a further decline in 1910-11, but a marked recovery was made in 1911-12 which was accentuated in 1912-13 —

	Jute, raw, in millions of cwt.	
1879-80 to 1883-84	7 5	(100)
1884 85 to 1888-89	8 9	(119)
1889-90 to 1893-94	10	(133)
1894-95 to 1898-99	12 3	(164)
1899-1900 to 1903-04	12 7	(169)
1904-05 to 1908-09	15 09	(201)
1909-10	14 6	(195)
1910-11	12 7	(169)
1911-12 .	16·2	(216)
1912-13	17·5	(233)

The price of raw jute reached its highest point in 1906-07, the rate being Rs 65 per bale, in 1907-08 it dropped to Rs 42 per bale, and the fall was accentuated in 1908-09 and 1909-10, the price having declined to 36 4 and Rs 31 per bale respectively In 1910-11 the price rose again to Rs 41-8-0, to Rs 51-4-0 in 1911-12 and further to Rs 54-12-0 in 1912-13 The following are the quinquennial average prices per bale (400 pounds) of ordinary jute calculated from the prices current published by the Bengal Chamber of Commerce —

	Price of jute, ordinary, per bale of 400 lbs			
	Rs	a	p	
1879-80 to 1883-84 .. .	23	8	0	(100)
1884-85 to 1888-89 .. .	23	3	2	(99)
1889-90 to 1893-94 .. .	32	6	5	(138)
1894-95 to 1898-99 .	30	12	0	(131)
1899-1900 to 1903-04	32	1	7	(137)
1904-05 to 1908-09 . ..	44	13	6	(191)
1909-10	31	0	0	(132)
1910-11 .	41	8	0	(177)
1911-12	51	4	0	(218)
1912-13	54	12	0	(233)

The average **prices of gunny cloth** have been as follows —

	Price of Hessian cloth 10½oz 40″ per 100 yds			
	Rs	a	p.	
1879-80 to 1883-84	10	7	11	(100)
1884-85 to 1888-89	8	0	7	(77)
1889-90 to 1893-94 ..	10	6	6	(99)
1894-95 to 1898-99 . .	9	11	8	(93)
1899-1900 to 1903-04	10	2	10	(97)
1904-05 to 1908-09 .. .	11	14	1	(112)
1909-10.. .	9	3	6	(88)
1910-11.. . .	9	5	6	(89)
1911-12.. .	11	14	0	(113)
1912-13..	16	6	0	(156)

The Jute Mills Association now one of the most important, if not the most important, of the bodies affiliated to the Bengal Chamber of Commerce, was started under the following circumstances —In 1886 the existing mills, finding that, in spite of the constant opening up of new markets, working results were not favourable, came to an agreement, with the late S E J Clarke, Secretary to the Chamber of Commerce, as trustee, to work short time The only mills which stood out of this arrangement were the Hooghly and Serajgunge The first agreement, for six months dating from 15th February 1886, was subsequently renewed at intervals without a break for five years up to February 15, 1891. The state of the market at the time of the renewals dictated the extent of the short time, which varied throughout the five years between 4 days a week, 9 days a fortnight and 5 days a week Besides short time, 10 per cent of the sacking looms were shut down for a short period in 1890 An important feature of this agreement was a mutual undertaking by the parties not to increase their spinning power during the currency of the agreement, only a few exceptions being made in the case of a few incomplete new mills

In 1890, with a view to further improving the situation, the associated mills entered into a compact to fix a scale of minimum selling rates for fabrics used in the country trade, rates for markets west of Suez to be left open. This artificial attempt to improve the mill sale-sheets lasted for about 18 months, and had a disastrous effect on mutual confidence among the mills All sorts of ruses to get round the minimum scale were adopted, and recrimination became the order of the day Certain of the more favoured mills encouraged a sort of double barrelled business by which they were able to dispose of country goods at the fixed rates in consideration of selling a quantity of foreign goods at buyers' prices This, combined with other devices adopted by certain mills, had the effect ultimately of breaking up all combination among the mills Nor has the jute trade ever been able to work in complete harmony since Mutual suspicions have rendered it very difficult even to work half time on occasion, and the moment demand shows the slightest sign of catching up supply, nothing on earth will prevent one mill after the other putting in new extensions and thus hastening the moment when supply will overtake demand

Working days —With the introduction of the electric light into the mills in 1896, the working day was increased to 15 hours, Saturdays included, which involved an additional amount of cleaning and repairing work on Sundays In order to minimise this Sunday work and give them a free Sunday, an agitation was got up in 1897 by the Mill European assistants to have the engines stopped at 2 or 3 p m. on Saturdays The local Government took the matter up, but their action went no further than applying moral suasion, backed by a somewhat half-hearted threat. The Mill Association held meetings to consider the question and the members were practically agreed as to the utility of early closing

on Saturdays, but, *more suo*, could not trust themselves to carry it out without legislation Unfortunately the Government of India refused to sanction the passing of a Resolution by the provincial Government under the Factory Act and the matter was dropped. Several other abortive attempts were made later on to arrive at some agreement relative to short time, but they mostly failed Only a year or two ago the Jute Mills Association in despair brought out an American business expert Mr J H Parks, to advise them on the possibility of forming a jute trust with a view to exercising some control over the production and price of jute Mr Parks came, and wrote a report which the Association promptly pigeon-holed because the slump was over and the demand was so prodigious that there was no need to worry about the price of jute Hard times are once more looming ahead, and it is possible that Mr Parks' scheme may be withdrawn from its resting place and studied with a view to applying it to future exigencies It is doubtful, however, whether even Mr Parks can introduce amity of purpose and consistency in action to the jute trade in Bengal

Effect of the War—In view of the rumours prevailing in some parts of the mofussil regarding the effect of the war on the jute industry a notice has been circulated by the District Officers in Bengal giving the export figures for 1912-13 of raw jute, gunny bags and gunny cloth to the different parts of the British Empire and to foreign countries It is pointed out that Germany and Austria take more than a quarter of the exports of raw jute, but as customers for gunnies, they, and indeed the continent of Europe as a whole, are comparatively insignificant Secondly, that the best customers are the United Kingdom, the United States, the Argentine, Chili and Australia which take more than half the raw jute exports and nearly four-fifths of the gunnies The Notice further says—"The War should not interfere materially with our trade in gunnies It will stop the export of 230,000 tons of raw jute to Germany and Austria, and this surplus will be available for the mills in India, the United Kingdom, the United States, and France The British Admiralty has no apprehensions as to the safety of the trade routes of the Empire, and the British Government has taken special steps to guarantee marine insurance These facts, together with the other facts and figures contained in this note, should restore confidence to all concerned in jute"

GLASS AND GLASSWARE.

A pamphlet recently issued by the Commercial Intelligence Department shows that the total value of glass and glassware imported into India in the year ending March, 1914, was £1,296,853, the greater part of which came from Austria-Hungary.

Glass manufacture in India consists of two well-defined classes, the indigenous household industry and the modern factory industry The indigenous household industry, which is represented in all parts of the country, is chiefly concerned with the manufacture of cheap bangles Glass manufacture in India on the modern factory system has hitherto been an uphill struggle against great difficulties In Bengal, the Pioneer Glass Manufacturing Company, Limited, of Titagarh, started work in 1890 and the Bengal Glass Company of Sodepur in 1898 They ceased working in 1899 and 1902, respectively The Madras Glass Works founded in 1909 has ceased work, though it is hoped to restart it A factory started in Hyderabad also proved a failure and its plant was taken over by the Glass Works at Ambala The Himalayan Glass Works at Rajpur in the Dehra Dun district closed after three or four years' working in 1908, but was restarted later under new management Finally, the Upper India Glass Works at Ambala, which was started by Indian capitalists in 1895, was at first a failure Since 1903, however, it has been much more successful It established itself firmly in its earlier years by specialising in the manufacture of bangle glass, and in this line it is interesting to record that the bangle glass of Ambala and Firozabad has succeeded in capturing the market, whereas formerly large quantities of glass used to be imported from Belgium for this purpose At the present time one or two glass factories only are working in India, and a new factory the Western India Glass Works, Limited, of Bombay, is about to start work

Records of the earlier ventures have shown that the failures in some cases were due, in part at least, to preventible causes prominent among which were (1) the lack of sufficient fluid capital and the consequent inability of the companies to meet their heavy initial expenses, and (2) inexperience and lack of technical knowledge on the part of the promoters But there are also certain real and special difficulties with glass manufacturers in India have to contend against The principal difficulties are—(1) The temperature of India in the hot weather (2) The difficulty of obtaining skilled labour for glass blowing Both foreign blowers and men from local industries such as Nagina have been tried but neither have been entirely satisfactory (3) There are considerable technical difficulties, such as the supply of a suitable quality of sand and a suitable alkali With regard to the alkali, local sources, such as the *reh* of Northern India, have not yet given results adequate for the manufacture of high class glassware At present imported bicarbonate of soda is mainly used As this is imported from England there is no reason to anticipate any shortage of the supply It is also probable that soda compounds will in time be locally manufactured in India

The Handloom Weavers.

By F. Booth Tucker.

Next to agriculturists the handloom weavers of India rank second in numerical importance among her skilled industrial workers In round figures about 11 million souls are dependent on this industry. From a position of prosperity and even affluence they have suddenly been reduced, through no fault of their own, but by circumstances over which they have no control, and which it was impossible for them to foresee, to a condition of indigence and even starvation Taking a superficial view of the situation one might be tempted to say that the remedy is in their own hands Let them forsake their homes and take service in the mills and the problem will be solved. But this would be a short-sighted and unwise policy There are fundamental objections to it which cannot be overlooked

What the handloom industry of India calls for is *not* annihilation, but leadership To invite a noble and ancient industry which has been for many ages one of the main bulwarks of India's prosperity voluntarily to commit harakiri " is a height of self-sacrifice of which even Japanese models would hardly approve The mill-owners of Lancashire would no doubt benefit greatly—at least for the time being—if they could persuade the foolish mill-owners of India that in view of Lancashire's superior skill, intelligence, education, capital or other causes, the latter ought promptly to commit suicide, and if they could persuade the Government of India that in bolstering up the industry in its unequal struggle they were embarking in a wasteful and useless expenditure of money and energy, and that their proper course would be to tax it out of existence, or at least abandon it to its fate!

Training Schools.

Unfortunately in the case of the voiceless handloom weavers the mill interests have to a large extent overpersuaded Government that it is useless to help them to sustain the unequal struggle Nearly every handloom weaving school in India and elsewhere has sooner or later been converted into a training school for mill foremen and managers, aspiring to salaries of from Rs. 50 to Rs. 500 What wonder when it is remembered that the managers of these institutions have been almost without exception themselves trained in mill schools to mill methods, and have become accustomed to look down upon the handloom industry, and to regard it as being foredoomed to extinction.

Similarly, when Government have appointed experts, or committees, to investigate the question and to report on the advisability and best means of helping the handloom weaver, to whom has the duty been entrusted ? Almost invariably to mill experts, whose verdict has been a foregone conclusion They might well have saved themselves the trouble and expense I have sometimes written to such persons myself and urged them to confer with our own experts, who have been engaged in the exclusive study of the problem for the last 7 or 8 years, or to allow me an opportunity of presenting personally the handloom weavers' side of the story, and almost without exception they have been too busy, or have not been able to visit the centres suggested, or have paid them a cursory and contemptuous call while a more or less one-sided report has been presented, which has frequently resulted in Government withholding its much-needed help from this struggling community and further generously subsidising the wealthy mill-schools!

Not that the two interests are necessarily opposed to each other, any more than are the Infantry and Cavalry of an army in the field While Indian mills are looking abroad for markets for their yarn, the 11 million skilled weavers at their door are well worthy of their consideration and should form the most valuable market for their output Mills that will study the requirements of this home field need not look outside the four corners of India for many a year to come

What is wanted.

What the handloom weavers of India need is —

1 Leadership. They are like sheep without a shepherd The few leaders that have hitherto been supplied them have too often been wolves in sheep's clothing, who have failed either to understand their needs, or win their confidence

2 The second great need is instruction in improved methods

3 The weaver must also be placed in touch with the markets of the world.

4 This will involve a generous expenditure of money by Government in doing for the weaver what he obviously cannot do for himself But the outcome will abundantly repay the outlay

Properly led, properly instructed and properly connected with the world's great cloth bazaar, the weaver of India may yet again become India's pride, and the merchants of the world may yet again vie with one another in seeking the products of his age-learned skill

The task is not nearly so difficult as it seems The machinery exists, but needs extension and expansion There are some things which the weaver can, must and will do for himself There are other things which must be done for him.

Leadership.

1. He must be supplied with Leaders who know his needs and in whom he can safely trust These leaders ought not, save under exceptional circumstances, to be chosen from his rivals The mill-trained expert is, as a rule, of very little use to him and is often a positive source of danger The leaders whom he needs must be in thorough sympathy with his cause, must understand his conditions, must include those who are able themselves to handle the shuttle and must not be mere students and theoreticians And here I would like to say that it is highly dangerous for a

Presidency, or State to allow its policy towards the handloom weaver to be dictated by a young graduate from a mill school. We should not dream of putting the cleverest University Graduate to fill the chair of a Commissioner or to dictate the policy of Government, because he had gained honours in Political Economy, Science, Languages or other elements of knowledge And yet in not a few instances the destinies of the vast weaving community have been entrusted to the guidance of the merest tyros in this difficult art! What wonder that the ship has soon been wrecked and consequently abandoned, and then the cause regarded as hopeless

The great majority of these Leaders will have to be selected from the weavers themselves and not from callow unfledged students of the theory of their art

Suitable Schools Needed.

2 Therefore they must have suitable Schools. I say suitable because many of the schools established for their benefit have been anything but suitable Frequently it has been necessary to close them for this very reason. The founder of one such brought the Governor of his Presidency to warn the weavers that if they failed to drink at the fountain of textile knowledge which Government had at great expense established for them, it would be his painful duty to stop its unvalued flow One man could lead them to water, but even a Government could not force the unwilling horse to drink Soon afterwards the institution was closed, and the weavers of course were blamed for their stupidity

By a suitable school I mean,

(1) A school that is under the sympathetic management of a leader who understands the weavers' needs and can win their confidence.

(2) A school in which the teachers can themselves weave and can consequently be looked up to by the weavers

(3) A school exclusively for weavers and not for mill-students, nor a combination of the two A school in which the adult weaver is taken by the hand and taught improved methods His advice, assistance, suggestions and objections should be encouraged, and he should be given the free opportunity to choose for himself the kind of implements, materials and methods which he himself may prefer, within, of course, reasonable limits He may not be able to read, or write, but when it comes to questions of his own particular art, he will usually exhibit a shrewdness, alertness and commonsense, which should be developed and encouraged.

(4) Being a family man, the adult weaver must receive such remuneration as he may require for the support of his family, while learning improved methods.

(5) The school must be in close touch with the world's markets and must teach the weaver the kinds of cloth that it will pay him to make The weaver is keenly awake to the commercial side of his undertaking, and will appreciate such assistance. The mere theoretical pedagogue is bad enough in an ordinary educational system, stuffing too often our children's heads with useless knowledge, but in a weaving school he spells blue ruin to its best interests.

(6) The weaver ought to be helped by means of loans and time payments to become the owner of the improved implements of which he has been taught the use, should he so desire. He should be allowed to select those which he himself prefers and should be enabled to pay for them by instalments.

(7) Travelling branches should be established which can go from village to village at regular intervals, explaining methods, inviting criticisms establishing centres and helping to market the produce of the weavers, and to obtain for them good yarn at reasonable prices

Marketing of Produce.

3 The marketing of produce is not so difficult as might at first sight appear. Each centre should gradually work up a market of its own and when one line ceases to yield a reasonable profit, another should be substituted; as the weavers become better organized and trained, the market will gradually run after them

We have ourselves established in connection with our various weaving schools a trading agency which takes over the whole of their output, and whose business it is to find out what the markets require. It works on a strictly business basis and greatly facilitates the working of our schools.

It is now some eight years since the Salvation Army took up the cause of the handloom weavers of India, and I think that we may claim to have gained a thorough working knowledge of their needs, and to have largely won their confidence

One of our Officers has invented a loom which has been generally accepted as the best and fastest handloom in existence. What is even more important, it works so easily that a child can use it Thus all the members of a weaver's family can work it in turn and bring their output almost to a level with that of a mill Fast slays for throwing the shuttle can be obtained from Rs 7, and upwards, and the complete loom from Rs. 35 and upwards

A fast loom is of no use to a weaver without a warping machine that can turn out long warps For this we have a very simple device suitable for village use One warping machine can keep some twenty fast looms supplied with warps. The cost of this machine is only Rs 35.

The preparation of thread from cotton, wool, or silk has also received our attention, and improved methods have been introduced which are greatly appreciated by the weavers and villagers Improved spinning and reeling machines can be obtained for Rs 15 and upwards.

The price of the implements has been brought down to the lowest point consistent with good workmanship and materials The strain upon a fast loom is very severe, and unless it is well made it soon goes to pieces The weavers themselves well understand this and prefer a good machine, even if it costs more.

Salvation Army Work.

We have already 20 centres of our own in India, where weaving, warping and silk reeling are being taught, while we have helped to start many others of a similar character The influence of our work has spread to other lands, and we have supplied looms, or weaving masters to Ceylon, the Straits Settlements, Burma China and Rhodesia I would close with quoting the testimony of a Burmese merchant who came over to our Ludhiana Weaving School to study the suitability of our methods for his country

"I arrived here on the 31st March 1913 to study the workings of the School and Looms, and on the 2nd of April, *i e*, in two days' time I found to my surprise that I could weave at the rate of fifty picks per minute. A little more care and attention, one could weave on these looms thoroughly in a fortnight I at once placed an order for 5 looms, one warping machine and accessories, amounting in all to about Rs 1,100 which were done and promptly despatched to my entire satisfaction I am leaving with regret on Saturday The school management and discipline are thorough and up-to-date The Manager is hard working, energetic and industrious I fear he and his subordinates are overworked The Manager is generous and attentive I am surprised to find the S A Officers here undergoing a life of sacrifice from choice The way he and his staff do their duties cheerfully made me a disbeliever, love respect and honour them" (Sd) MAUNG HLA PE, Mandalay, Burmah.

Silk.

In the early days of the East India Company the Indian Silk trade prospered greatly, and various sub-tropical races of the Silkworm were introduced But the trade gradually declined for the following reasons —

In the seventeenth and eighteenth centuries India's chief competitor in the silk trade was the Levant Company Successful efforts, however, were made to acclimatise in Europe one or two races of a temperate worm, procured from China and Japan When sericulture became part of the agriculture of France and Italy, a quality of silk was produced entirely different from that of India and Turkey, and its appearance created a new demand and organized new markets

All subsequent experience seems to have established the belief that the plains of India, or at all events of Bengal, are never likely to produce silk that could compete with this new industry On the lower hills of Northern India, on the other hand, a fair amount of success has been attained with this (to India) new worm, as, for example, in Dehra Dun and Kashmir In Manipur, it would appear probable that *Bombyx mori*, possibly obtained from China, has been reared for centuries The caprice of fashion has, from time to time, powerfully modified the Indian silk trade The special properties of the *korah* silk were formerly much appreciated but the demand for them has now declined This circumstance, together with defective systems of rearing and of hand-reeling and weaving, accounts largely for the present depression in the mulberry silk trade of India

Mulberry-feeding worms.—Sir George Watt states that in no other country does the necessity exist so pressingly as in India to treat the subject of silk and the silk industries under two sections, *viz.*, Bombycidae, the domesticated or mulberry-feeding silk worms, and Saturniidae, the wild or non-mulberry-feeding worms In India the mulberry worm (Bombyx Mori) has been systematically reared for many centuries, there being six chief forms of it. In the temperate tracts of India various forms of *Morus alba*, (the mulberry of the European silk-producing countries), are grown specially as food for the silkworm This is the case in many parts of the plains of Northern India, Baluchistan, Afghanistan, Kashmir, and along the Himalaya at altitudes up to 11,000 feet The other species even more largely grown for the Indian silkworm is *M Indica* of which there are many distinctive varieties or races This is the most common mulberry of Bengal and Assam, as also of the Nilgiri hills

India has three well-known purely indigenous silkworms the *tasar*, the *muga* and the *eri*. The first is widely distributed on the lower hills, more especially those of the great central tableland, and feeds on several jungle trees The second is confined to Assam and Eastern Bengal, and feeds on a laurel The third exists in a state of semi-domestication, being reared on the castor-oil plant From an art point of view the *muga* silk is the most interesting and attractive, and the cocoon can be reeled readily The *eri* silk, on the other hand, is so extremely difficult to reel that it is nearly always carded and spun—an art which was practised in the Khasi Hills of Assam long before it was thought of in Europe

Experiments and results —Numerous experiments have been made with a view to improving sericulture in India French and other experts are agreed that one of the causes of the decline of the silk industry in India has been the prevalence of diseases and parasites among the worms, the most prevalent disease being pebrine M Lafont, who has conducted experiments in cross breeding, believes that improvement in the crops will be obtained as soon as the fight against pebrine and other diseases of the worms is taken up vigorously by the producers of seed and the rearers of worms, while improvement in the quality of the cocoons will be obtained by rearing various races, pure and cross breds

In Kashmir and Mysore satisfactory results have been obtained In the former State sericulture has been fostered on approved European principles with Italian reeling machi-

nery, seed being imported annually on a large scale In 1897 in Mysore Mr Tata, after selecting a plantation and site for rearing houses, sent to Japan for a Superintendent and trained operatives The Mysore authorities have made a grant of Rs 3,000 a year to the Tata farm in return for instruction given to the people of Mysore in Japanese methods of growing the mulberry and rearing the insects The products of the Mysore State are exported to foreign countries from Madras The work of the Salvation Army is also noteworthy in various parts of India They have furnished experts, encouraged the planting of mulberry trees, and subsidised several silk schools The Bengal Silk Committee under the guidance of some French experts have conducted cross-breeding experiments with a view to establish a multivoltine hybrid of European quality There is a Government sericultural farm at Berhampore, where, it is said, a pure white multi-voltine of silkworm is reared The results of the Bengal Committee's labours may be summed up as follows the only really effective method of dealing with the problem is to work up gradually to a point at which the whole of the seed cocoon necessary for the province will be supplied to reelers under Government supervision, and to establish gradually a sufficient number of large nurseries throughout the silk districts of the province

Central Nurseries—The report of the Agricultural Department, Bengal, for the year ending June 30, 1913, gives an account of a scheme which has been devised with the object of reclaiming the silk industry The aim of the scheme is gradually to establish throughout the silk districts a sufficient number of central nurseries with rearing houses and thus enable the whole of the seed cocoons required in the province to be supplied under Government supervision It is believed that this is the only really effective method of dealing with the problem A number of the existing smaller nurseries were closed during 1913 and others are being converted into enlarged and improved central nurseries with rearing houses complete The ultimate success of the scheme depends largely on the willingness of the reelers to pay an adequate price for pure seed

Exports of silk—In both raw silk and silk manufactures, India now receives far more than she gives, and for the reason already given the exports have decreased, especially those of manufactured silks Statistics published by the Lyons Silk Merchants Union give the estimated world's production of silk in 1913 as nearly 27 million kilogrammes (1 kilog equals 2·2046 lbs) in which total appears, exports from India 100,000 kilog, India's share in the previous year's total being 168,000 kilog In 1911-12 the exports of Raw Silk were valued at £305,589 and of Manufactured Silk at £43,430 The import figures for the same year were Raw Silk £706,494 Silk Manufactures £1 769,062

Bibliography—The Imperial Gazetteer contains copious references to the silk industry Several monographs have been published on the subject, and details are to be found on the industry as a whole in Watt's "The Commercial Products of India" and the same author's "Indian Art at Delhi, 1903"

Indigo.

Indigo dyes are obtained from the Indigofera, a genus of Leguminosae which comprises some 300 species, distributed throughout the tropical and warm temperate regions of the globe, India having about 40 Western India may be described as the headquarters of the species, so far as India is concerned, 25 being peculiar to that Presidency On the eastern side of India, in Bihar, Bengal, Assam and Burma, there is a marked decrease in the number of species but a visible increase in the prevalence of those that are met with

There is evidence that when Europeans first began to export the dye from India, it was procured from the Western Presidency and shipped from Surat It was carried by the Portuguese to Lisbon and sold by them to the dyers of Holland, and it was the desire to obtain a more ample supply of dye stuff that led to the formation of the Dutch East India Company and so to the overthrow of the Portuguese supremacy in the East. Opposition to indigo in 17th century Europe was keen owing to its interference with the woad industry, but it was competition to obtain indigo from other sources than India that led to the first decline of the Indian indigo industry. In the middle of the eighteenth century, when the cultivation of indigo in the West Indies had been given up—partly on account of the high duties imposed upon it and partly because sugar and coffee were found to be more profitable—the industry was revived in India, and, as one of the many surprises of the industry, the province of Bengal was selected for this revival It had no sooner been organised, however, than troubles next arose in Bengal itself through misunderstandings between the planters, their cultivators and the Government, which may be said to have culminated in Lord Macaulay's famous *Memorandum* of 1837 This led to another migration of the industry from Lower and Eastern Bengal to Tirhut and the United Provinces Here the troubles of the industry did not end, for the researches of the chemical laboratories of Germany threatened the very existence of any natural vegetable dye They first killed the maddar dye of Europe, then the safflower, the lac and the *al* dyes of India, and are now advancing rapidly with synthetic indigo, intent on the complete annihilation of the natural dye Opinions differ on many aspects of the present vicissitude, meantime the exports from India have seriously declined, and salvation admittedly lies in the path of cheaper production both in cultivation and manufacture These issues are being vigorously faced and some progress has been accomplished, but the future of the industry can scarcely help being described as of great

uncertainty The issue is not the advantage of new regulations of land tenure, but one exclusively of natural *versus* synthetic indigo (See Watt's "Commercial Products of India")

Decline of the Industry.—Since synthetic indigo was put upon the market, in 1897, the natural indigo industry of India has declined very rapidly, apart from slight recoveries in 1906-07 and 1911-12, the decline continued without a break The figures for the last few years may be contrasted with those for the five years ending in 1897, in which the area under indigo averaged 2,400 square miles and the value of the exports over £3,000,000 a year

	Area under Indigo	Quantity Exported	Value of Exports
	Acres	Cwts	£
1901-02	791 000	89 750	1,234,837
1902-03	646,000	65,377	803 738
1903-04	707,000	60,410	717,468
1904-05 .	477,000	49,252	556,405
1905-06	384,000	31,186	390,918
1906-07	421,000	35,102	466 985
1907-08	394,000	32,490	424,849
1908-09	284,000	21 946	326,986
1909-10 .	289,000	18,061	234,544
1910-11	276,000	16,939	223,529
1911-12 .	271,000	19,155	250,535

Present Position—The crop is most important in Bihar and Madras, in the Punjab and United Provinces it now occupies little over 100 square miles altogether In Bengal the crop is largely raised by British planters, in the other provinces chiefly by native cultivators Scientific research work on questions connected with cultivation and manufacture has been carried out by the Bihar Planter's Association, with the aid of a grant from Government since 1897. It is hoped that good results may be obtained from the biological line of work—on plant breeding and physiology—recently taken up But the official "Review of the Trade of India in 1913-14" says that 'it would seem probable that unless great improvements can be effected in cheapening the method of production, either by selection of seed yielding the highest percentage of indigotin, or by chemical improvement in manufacture, or in similar ways, the industry is unfortunately doomed"

The average **wholesale price** of Indigo in Calcutta in recent years is as follows —

1911 .	Rs	233-1 7	per cwt
1912	,,	211-11-3	,,
1913	,,	233-1-2	,,

Crop Forecast—The Director of Statistics in his first memorandum on the crop for the season 1914-15 states that the season has, on the whole, been so far favourable, although the crop suffered through want of rain in Bihar and Orissa in the early part of the season and owing to excessive rain in parts of the United Provinces The total area so far reported amounts to 104,000 acres (excluding the United Provinces, estimated in 1913 at 24,400 acres), as against 139,000 acres (revised figure) for the same tracts in October 1913 Details for the provinces are stated below —

	1914-15	1913-14
	Acres	Acres
Bihar and Orissa	38,900	63,100
Madras	38,500	45,400
Punjab	21,000	23,000
United Provinces	Not reported	
Bombay and Sind (including Native States)	4,500	6,200
Bengal ..	1,300	1,200
Total (excluding United Provinces)	104,200	138,900

Tea cultivation in India is chiefly in Assam, Bengal and Southern India, the cultivation elsewhere being comparatively unimportant The latest available official general statistics are those for the year 1913 They show a total area of 609,700 acres under tea, which is nearly 3 per cent more than in 1912 Of this area, 556,100 acres were plucked in 1913 There were 285 tea gardens in Bengal, 732 in Assam and 259 in Southern India The total number of plantations was 4,386 The area under cultivation has increased in the last 10 years by 15 per cent and the production by 37 per cent The average production per acre for the whole of India, excluding Burma (where the produce of the tea gardens is almost wholly converted into wet pickled tea, which is eaten as a condiment) was 554 lbs in 1913, as compared with 548 lbs in 1912

Area and Production

The total area under tea in 1912 was divided between the different Provinces as follow —

Assam—	Acres
Brahmaputra Valley	225,877
Surma Valley (Cachar and Sylhet)	141,672
Total, Assam	367,549
Bengal	156,002
Bihar and Orissa (Chota Nagpur)	2,160
United Provinces	7 978
Punjab	9,322
Madras	26,278
Travancore and Cochin	37,430
Burma	3,000
Grand Total	609,719

The total production in 1913 was 307,097,000 lbs, divided between the different parts of India as follows —

	Lbs
Assam	199,722,000
Bengal	80,109,000
Bihar and Orissa	22,245,000
Northern India	4,709,000
Southern India	312,000
Total	307,097,000

Value of Exports —

The following table shows the value and distribution of the Indian tea exports in the past five years (the figures being given in thousands of rupees) —

Countries	1909–10	1910–11	1911–12	1912–13	1913–14.
United Kingdom	8,82,82	8,87,38	9,53,07	9,48,75	10,84,81
Russia	1,14,43	1,49,10	1,31,05	1,48,72	1,66 53
Ceylon	24,40	30,57	28,18	26,95	24,38
Australia and New Zealand	36,45	41,76	45,18	42,22	48,93
China (exclusive of Hongkong)	26 31	41,28	20,50	40,90	50,75
Canada	46,66	44,85	57.25	61,23	64,53
Turkey, Asiatic	12,10	17,22	15,58	20,76	15,30
United States	10,96	10,65	15,79	10,77	10,32
Egypt	2,79	4,18	6,63	7,42	7,70
Germany	3,40	2,05	3,39	2,92	3,69
Straits Settlements	1,77	2,49	3,21	3,34	3,55
Persia	1,74	1,42	2,02	1,74	1,40
Other Countries	6,90	8,69	12,80	13,68	15,62
TOTAL	11,70,73	12 41 64	12,94,65	13,29,40	14,97,51

Exports.

The following were the exports in 1913-14 of Indian tea by sea —

	Lbs
United Kingdom	209,073,152
Russia	33,398,209
Other European Countries	1,243,808
Egypt	1,593,680
Elsewhere in Africa	893,513
Canada	11,564,565
U S A	1,942,237
Rest of America	82,500
Ceylon	3,899,677
China	11,006,653
Asiatic Turkey	2,829,625
Rest of Asia	2,286,463
Australasia	9,704,752
Total by Sea	289,518,833

The exports by land were as follows —

Afghanistan	1,325,296
Total by land	2,196,108

The sea and land exports together make, therefore, a Grand Total of 291,795,041

Features of the Trade.

The total tea shipments from India in the year 1913 were 289,518,833 lbs against 281 815,329 lbs in the preceding year. Part of the increase over 1912 was due to the largely increased consumption of Indian tea by Russia and Germany, especially Russia Exports to America also steadily increased

The tea companies had a generally prosperous year in 1913 To some extent the bigger dividends for last year were due to a larger outturn This was specially the case in the Dooars district In all other cases the upward movement was caused, or at least materially assisted, by higher prices The average price obtained in the past season for the delicate Darjeeling tea grown on the slopes of the Himalayas was 11 61*d* a pound, as compared with 11 22*d* for the 1912 season The average price of Assam leaf was 9 74*d* against 9 23*d*, that of Cachar and Sylhet was 8 32*d*, against 7 35*d*, and that of Travancore 8 50*d*, against 7 73*d* The higher range of prices for Cachar and Sylhet and for Travancore, which are both commonest grades, was mainly due to a deficiency in these grades both in India and Ceylon

The following table shows the consumption of Indian tea in India —

Year.	Lbs.	Year	Lbs
1908–09	18,260,533	1911–12 . .	15,294,472
1909–10 . .	13,477,297	1912–13	. 19,805,560
1910–11	14,224,808	1913–14 .	. 22,797,000

The following statement illustrates the variations in prices of the three principal grades of tea sold at the auction sales in Calcutta in 1888 and the past five years ending 1912, the average price of 1901 to 1910 being taken as 100 in each case The figures represent the average of the prices of tea from all districts at each sale —

Year	Broken Pekoe.		Pekoe.		Pekoe Souchong		Average for all description.	
	Price	Variation	Price	Variation	Price	Variation	Price	Variation
	As p		As p		As p		As p	
1888 .	10 3	155	8 1	137	6 3	123	8 8	124
1909 .	7 8	116	7 9	115	6 0	118	7 5	106
1910 .	7 3	110	7 0	119	6 4	125	7 10	112
1911	7 9	117	7 7	129	6 9	133	7 11	113
1912	7 5	112	6 11	114	5 9	113	7 8	110
1913	8 1	122	7 5	126	6 10	135	8 3	118

Capital and Labour.

The number of persons employed in the industry in 1913 is returned at 572,533 permanently employed, and 94,379 temporarily employed Compared with the returns of the previous year, there is an increase of 24,988 permanent employes and a decrease of 1,211 in the number of temporary hands The capital of joint stock companies engaged in the production of tea amounted to about Rs 26 9 crores or over £17·9 millions, *viz* —

	Rs
Companies registered in India	4,07,73,708
Companies registered in the United Kingdom (£15,187,963)	22,78,19,445

Particulars are available concerning the present position of 98 companies registered in India, which have an aggregate paid up capital of Rs 301 lakhs Of these companies, 85 companies declared dividends for 1912, amounting to 14 7 per cent on the aggregate capital of Rs 265 lakhs 88 companies have up to now declared dividends for 1913, amounting to 17 4 per cent on their aggregate capital of Rs 274 lakhs The value per Rs 100 of joint stock capital as calculated on the prices of the shares of 87 companies quoted in the Calcutta share market was Rs 144 in March 1913, and of 92 companies was Rs 166 in March 1914

Similar details are available regarding 68 companies registered in the United Kingdom with sterling capital of £9·3 million Rs 1,394 lakhs The total dividends declared in 1912 by 67 companies out of them with an aggregate capital of £9 2 millions (about Rs 394 lakhs) amounted to 10 4 per cent In 1913 the dividends so far declared by 58 companies come to 11 4 per cent on their aggregate capital of about £8 8 millions Rs 1,323 lakhs).

Foreign Tea in India.

The imports of foreign tea into India in the year April-March 1913-14 were 8,539,000 lbs., or 400,000 less than in the preceding year. About a seventh was re-exported as foreign tea, chiefly from Bombay to Persia, Turkey in Asia, Maskat, and the Bahrein Islands by sea, and by land to Afghanistan, leaving some 7,262,000 lbs for consumption in India. Part of this, no doubt, was used for blending with Indian teas and the blend, when exported, would doubtless be treated as Indian produce in the customs declarations

The history of the introduction of coffee into India is very obscure Most writers agree that it was brought to Mysore some two centuries ago by a Mahommedan pilgrim named Baba Budan, who, on his return from Mecca, brought seven seeds with him This tradition is so universally believed in by the inhabitants of the greater part of South India, that there seems every chance of its being founded on fact About the beginning of the 19th century there is no doubt coffee had found its way to India, and in 1823 a charter was granted to Fort Gloster near Calcutta authorising it to become a cotton mill, a coffee plantation and a rum distillery Some of the coffee trees planted in fulfilment of that charter are supposed to be still alive, and about the same time coffee was successfully grown in the Botanic Gardens Calcutta, but the industry of coffee planting nowhere found an abiding place on the plains of India but migrated to the hills of South India in Mysore more especially, and thus into the very region where tradition affirms it had been introduced two centuries previously

The first systematic plantation was apparently Mr Cannon's near Chikmuglur This was established in 1830 It is supposed, however, that Major Bevan may have actually grown coffee on the Wynad at a slightly earlier date, and that Mr Cockburn's Shevaroy plantation bears the same date as Mr Cannon's In 1840 Mr Glasson formed a plantation at Mnantoddy, and in 1846 plantations were organised on the Nilgiri hills

The Position of the Industry —The reported area under coffee has shown a continuous diminution since 1896 According to the agricultural statistics, the total in British India fell from 188 square miles in 1901-02 to 148 square miles in 1911-12, while for Mysore the corresponding figures were 195 and 167 square miles It is reported that in some of the coffee-growing districts coffee is giving way to tea, or, where the altitude is not prohibitive, to rubber The advent of large supplies of cheap Brazilian coffees in the markets of Europe has, by bringing down prices, no doubt injured the coffee industry of India very seriously, but the following figures of export trade show no marked change in the position since 1902 —

	Cwts
1901-02	255,042
1902-03	269,165
1903-04	291,254
1904-05	329,647
1905-06	360,182
1906-07	228,094
1907-08	244,234
1908-09	302,022
1909-10	232,645
1910-11	272,249
1911-12	241,085
1912-13	267,000
1913-14	260,000

The exports to the United Kingdom have in the last few years fallen off considerably, but there has been no great diminution in the trade with France, and exports to other Continental countries have shown some increase No estimate of the quantity of coffee consumed in India can be given

OILS AND OIL CAKES.

The value of non-essential oil seeds exported from India in 1913-14 was £17,000,000, of which £11½ million represents exports to France, Belgium, Germany, and Austria-Hungary A pamphlet on the subject recently published by the Commercial Intelligence Department points out that it is both economically and industrially unsound for India to export her oil seeds instead of manufacturing the oils and oil cakes in India It allows other countries to reap the manufacturers' profits and at the same time deprives Indian agriculture of the great potential wealth as cattle-food and manure, contained in the oil cakes An immense quantity of oil is as a matter of fact, already manufactured in this country by more or less crude processes Village oil mills worked by bullocks and presses worked by hand exist in all parts of the country and supply most of the local demand for oil There has also been a great increase in recent years in the number of oil mills worked by steam or other mechanical power These crush all the commoner oil seeds and development has been especially marked in the case of mustard oil castor oil and groundnut oil In spite of all this there has been a perceptible diminution in the export of oil from India, particularly of cocoanut oil and linseed oil, and an increase in the export of oil seeds, which is particularly marked in the case of copra and groundnuts The situation created by the War has naturally led to much discussion of the possibility of developing on a large scale the existing oil-milling industry in India

There are three difficulties with which any proposal to develop in India an oil-milling industry on a great scale is faced In the first place there exist high protective tariffs in European countries which encourage the export from India of the raw material rather than the manufactured product Secondly, there is a better market for the oil cake in Europe than in India and the freight on oil seeds is less than the freight on cake Thirdly, it is much easier and less expensive to transport oil seeds by sea than it is to transport oil While this has been the position in the European markets, Indian made oils, other than cocoanut oil, have made enough headway in Eastern markets to suggest the possibility of a development of those markets

The problem of finding a market for **oil cakes** is equally important The value of oil cakes is much better appreciated in Europe than in India The Indian cultivator is prejudiced against the use of machine-made cake as a cattle food or as manure because he considers that it contains less oil and therefore less nourishment than the village-made cake He is therefore unwilling to buy it except at a reduced price His prejudices on this point have no justification in fact since experts are agreed that mill cake is a better food for cattle than village-made cake Even when the mill cake contains less oil than the village cake, there is still more oil in the cake than cattle can digest The excess of oil in the village cake, when it exists, is a drawback and not an advantage to the use of the cake as food A considerable amount of demonstration work has been done by the Agricultural Departments of Government in order to remove the cultivator's prejudices and there is said now to be an increasing demand for most classes of mill cake

The necessity of protecting the vast forest areas in India and Burma was first recognised in the Madras Presidency nearly a century ago, when steps were taken to protect on a limited scale the more valuable areas in the Anamalis, while in December 1886 Doctor Cleghorn was appointed the first Conservator of Forests in that Presidency It was not, however, until 1856 that Lord Dalhousie laid down a definite policy with the object of affording more widespread protection to the vast areas of valuable forest in British India The action taken by the Supreme Government came none too soon, for already in many localities the wanton hacking by the local population and even more so by timber contractors, had reduced the forests to a state from which they could not be expected to recover for many years, even under the strictest protection

Recruitment of the Staff.

In order to introduce a system of conservative management on scientific lines it was of first importance to collect a staff of trained foresters, and as no forest training college existed at that period in England, the Government of India, as a commencement, enlisted the services of three German Forest Officers The first of these to come to India was the late Sir Dietrich Brandis, K C I E, F R S and it was to his extraordinary energy and abilities that a sound foundation was originally laid to the scientific management of the State forests Soon after his arrival in India, the staff was materially strengthened by the recruitment of officers from the Indian Army In 1869 the first batch of technically-trained English forest officers joined the service, having received their training either in Germany or France, and this system of continental training remained in force until 1876, after which the training was carried on entirely at the National Forest School of Nancy The first batch of Coopers Hill trained foresters arrived in India in 1887 and the last in 1907, after which date the training took place at Oxford University, and later also at the Universities of Cambridge, Edinburgh and Dublin In this way the Government of India have been able to collect by degrees a highly trained staff of men to carry on the administration of their State forests. The total strength of the Imperial Establishment at the present time is 248, of whom 29 are administrative officers and 219 Executive officers, among the latter are included Instructors and Research Officers who are employed at the Forest Research Institute, Dehra Dun

In order to keep pace with the recruitment of the superior staff, a Forest School was opened in 1878 at Dehra Dun for the training of Forest Rangers Recently this School has been converted into a College and the instruction extended to include a course for training men for the Provincial Services Besides the Forest College at Dehra two new Rangers' Schools have been established, one at Pyinmana in Burma and the other at Coimbatore in Madras Besides this nearly every Province has established a local Forest School for the training of the lower subordinate establishment

Area of State Forests.

The forests belonging to the State covered in 1912-13, 2,38,926 square miles, or roughly one-fourth of the whole of India and Burma. Of this 96,867 square miles are Reserved Forests, 8,492 square miles Protected Forests and 1,33,564 square miles Unclassed forests, by far the greater portion of the latter class occurring in Burma The distribution of these areas is by no means uniform, the majority being found in Burma, Assam, Northern Bengal and along the foot of and extending into the Himalayas from the Nepal frontier westward through the United Provinces and the Punjab In the Gangetic valley, in the plains of the Punjab, in Sind and Rajputana few forests occur except along the rivers, nor does one come across large wooded tracts until one enters the Central Provinces and the Godavari catchment area From there southward in the Satpuras and throughout the North and South Deccan there exist well distributed areas of forests, though generally not in large blocks, while on the Western Ghats, in the Nilgiris and Anamalis, are found some of the finest teak forests of India proper The East Coast of India is fairly well stocked with forest growth, especially in the Godavari basin, to the west of Cuttack and Puri and again in the Sundarbans, while the Andaman Isles are densely wooded

Revenue, Expenditure and Outturn.

The gross Revenue from State forests in 1912-13 amounted to Rs 322,09,809, while the expenditure stood at 172,07,810, giving a net revenue of Rs 150,01,999 The total outturn of timber and fuel in that year amounted to 242 million cubic feet, out of which 9,462,190 cubic feet of fuel and 3,157,166 cubic feet of timber were given free to the local population The number of bamboos removed came to nearly 302 million, valued at 12 lakhs of rupees and the number of cattle grazed amounted to 15,674,598, while the total revenue derived from Minor Products was 110 lakhs of rupees

From the above figures it will be readily understood that not only is the revenue realised by the State considerable but that the handling of such large amounts of Forest Produce requires a competent staff of officers

Management.

The system under which the State forests are managed varies in different Provinces In all cases, however, the aim of the Forest Department has been to introduce Working Plans for their forests, based on European systems of management The system most usually adopted in India, especially for working the valuable teak and sâl forests, is the Selection System, in other words maintaining an equal distribution of all age classes throughout the forest In a few cases such as in deodar and other coniferous forests and also in a few instances in sâl forests, the Uniform Method or a system by which trees of more or less uniform age are grouped together has been applied, and this method of mere intense management may come into more general use in the future, as a greater number of trained officers become available In many cases, owing to the destruction of the forests in the past, it has only been possible to prescribe Improvement Felling, though in time a more regular system of working will be introduced. The forests which are destined to supply small building timber and fuel to the local population are generally worked by either the Coppice with Standard or Pure Coppice methods, according to the state and composition of the

forest, while certain areas have been put aside for the formation of Fuel and Fodder Reserves or as grazing areas

Forest Surveys.

The preparations of maps for the State Forests is undertaken by the Great Trigonometrical Survey Department The area for which detailed surveys have been prepared was roughly 80,000 square miles in 1911-12, to which figure yearly additions are being made As soon as possible after the compilation of detailed maps, Working Plans are prepared for the forest, and up to 1911-12 about 50,000 square miles of Forests have been dealt with

Method of Extraction

Once the forests have been organized and plans of working prepared by an officer put on special duty for the purpose, it remains for the executive officers to arrange for the exploitation of the trees, according to the provisions of the sanctioned plans This work is carried out in various ways in different localities Sometimes it is done departmentally, as for instance in certain divisions on the West Coast and also in three or four of the western Pegu Yoma divisions, in Burma This system which had to be adopted by the Department when work was first commenced and contractors could not be obtained, has now generally been replaced by a system of giving leases to work the forests or by selling the annual coupes standing to contractors In the case of the valuable teak forests of Burma the system of granting leases for a period of from 10 to 20 years has generally been adopted and has been found to work satisfactorily, the trees for felling being marked by the Forest Department In other provinces this system has been adopted on a more restricted scale, and in India proper the custom of holding annual sales and selling the trees standing has been found more convenient and profitable The right to collect Minor Produce is generally put up for auction, which gives the highest bidder the right to collect the produce from the forest for a given period, generally one year In order to meet the requirements of the local population a system of issuing permits is in force, the permit being issued free to right or privilege holders and on payment of a low fee to other persons This enables agriculturists to obtain their requirements as to fuel, building timber and grass etc, without delay and without having to pay enhanced rates to a middleman The right to grazing is dealt with in the same way

Important Timbers.

The forests of British India contain a vast number of trees and woody plants, in fact a far greater number than is generally realized by the public For instance the number of tree species is about 2,500, while the number of woody shrubs and climbers is not far short of that total Of all Indian species of timber teak stands first, both in quality and as to the amount annually exported from the State forests. The outturn of this timber from Burma only, in 1912-13, amounted to 255,876 tons, while the total outturn from British India is estimated at 304,304 tons Sal comes next in importance and is obtained in the greatest quantities from the United Provinces and Nepal, while a very considerable amount is also available from Bengal, the Central Provinces, Assam and the Feudatory States of Orissa The outturn of sāl in 1912-13, from Government Forests, amounts to 167,093 tons and from Native States and private land to 35,650 tons, about one-third of the total of which is converted into railway sleepers Of other species of nearly equal importance is deodar, the timber of which is extensively used in construction and as railway sleepers, sandalwood, sissoo and blackwood, the last two timbers being highly prized for building purposes and furniture making, the sundri-wood of the Sundarbans and Bassein, used in boat and carriage building, Andaman and Burman Padauk, used for the construction of gun carriages, furniture and railway carriages, the Pyinkado of Burma, used in building and one of the first sleeper woods in the world, the Red Sandars of Madras, babul, the in or eng wood of Burma, all used for building and for a variety of other purposes and Khair from which "Cutch" is obtained A great variety of other useful timbers could be mentioned of nearly equal importance to the above, which go to supply the requirements of the enormous population of the Indian Empire.

Minor Forest Products.

Turning now to Minor Forest Products, the most important come under the main heads fibres, and flosses, grasses, distillation products oil seeds, tan and dyes, gums and resins, rubber, drugs and spices, edible products, bamboos, canes, and animal and miscellaneous products The number is very large, while some of them are of considerable economic importance, so much so that they realized over 110 lakhs of rupees in 1912-13 It is not possible to do more than to mention one or two of the most important of these commodities, as for instance myrabolams for tanning, of which 1,397,755 cwt were exported from India last year Cutch is of even greater importance, being produced chiefly in Burma and the United Provinces though also prepared on a more limited scale elsewhere, the total amount of Cutch exported from Burma during the year ending March 1913, amounting to 3,438 tons Another equally well known product is lac, produced chiefly in Sind and the Central Provinces which besides being used locally, is annually exported in the form of shellac, which in 1912-13 valued Rs 2,11,33 184 Of other Minor Forest Products which deserve mention are rosha and lemon oils, gum kino, babul gum, gurjan oil, thitsi damar and rubber, which are classed as exuded products, sabai grass for papermaking and Munj grass for fibre and thatching, mohwa seed yielding a valuable oil, sandal and agar wood oil and the essential oils obtained from them, simul floss used for stuffing pillows, kamella powder and lac dye used for dyeing, podophyllum resin, cassia bark, cardamoms, pepper and strychnine, come under the head of drugs and spices, and a variety of other products often of considerable local values

From what has been said above it will be seen that the Minor Products obtained from the Indian forests play by no means a small part in the economy and commerce of the country

AREA of FOREST LANDS, OUTTURN of PRODUCE and REVENUE and EXPENDITURE of FOREST DEPARTMENT

Province	Area of Province	Area of Lands under the control of the Forest Department				Proportion of Colm 6 to Colm 2	Outturn of Produce		Revenue	Expenditure	Surplus
		Reserved Forests	Protected Forests	Unclassed State Forests, &c	Total		Timber and Fuel	Minor Produce			
	Sq miles	Sq miles	Sq miles	Sq miles	Sq miles	Per cent	Cu ft	£	£	£	£
Bengal	115,664	4,240	2,771		7,011	6 0	34 094,103	31,450	77,830	42,886	34,944
United Provinces	106,773	4,114	30	30	4 174	3 9	18,279,130	49 886	158 563	82 529	76,034
Punjab	97 211	2,207	5,207	1,319	8,733	8 9	29,706 898	113 363	81,199	49,369	31,830
Burma	169,989	26,077		111 150	137 227	80 7	52 265 353	55,694	671 341	256.187	415,154
Eastern Bengal and Assam	93,906	6,485	4	22,416	28,905	30 7	21,049 906	62 533	126 042	72,489	53,553
Central Provinces and Berar	99,874	21 384			21,384	21 4	32 627,467	94 466	140,948	105,969	34,979
Coorg	1,582	520			520	32 8	511,830	1,440	18,404	7 179	11,225
North-West Frontier Province	13,184	236			236	1 8	1,080,092	1 555	13 689	4,833	8,856
Ajmer-Merwara	2,767	142			142	5 1	506,813	1 163	2 256	1 328	928
Baluchistan	46,656	313		472	785	1 6	286,110	1,989	1,547	1,759	—212
Andamans	3.143	156		1 796	1 952	62 1	1,941 475	337	27,785	15 131	12,654
Madras	142,298	18,629		1,401	20 030	14 0	25 174,044	105 865	258,694	215,053	43,641
Bombay	123 235	11,884	495		12,379	10 0	43,059.945	115,447	247 882	138,028	109,854
Total, 1910-11	1,016 282	96,387	8,507	138,584	243,478	23 9	260,583,175	635,188	1,827,030	1,016,268	810,762
1909–10	987,990	96,474	8,814	140 263	245,551	24 9	241,132 930	554,095	1,735 053	994,710	740,343
1908–9	986 144	94 561	8 835	138 378	241 774	24 5	232,035,865	526,669	1,697 120	981 736	715 384
1907–8	985 938	94,059	8,853	134,897	237,809	24 2	234,982 123	551,144	1 724,198	967,528	756,670
Totals 1906–7	987,749	94 037	9,468	136,633	240,138	24 3	222 146 948	504,419	1,766,099	937,587	828,512
1905–6	970,617	92,496	10 018	131,137	233,651	24 1	246,334 840	461,300	1 778,306	950 568	827,738
1904–5	967,255	92,182	9,435	131,324	232,941	24 1	251,568,276	387,795	1,601,997	864,524	737,473
1903–4	967,824	91,567	9,865	131,269	232,701	24 0	232 916,345	298,607	1,481 116	811,133	669,983
1902–3	966,073	90 750	9,519	116,555	216,824	22 4	245,900,612	307,423	1,298,103	749,956	548 147
1901–2	975,912	89,424	9,418	118 037	216,879	22 2	231,601,077	302,542	1,188,248	716,426	471,822

Rubber Cultivation.

The most important rubber-yielding tree found growing naturally in the Forests of India is *Ficus elastica*, a very large tree of the outer Himalayas from Nepal eastwards, in Assam, the Khasia Hills and Upper Burma. It has also been cultivated in Assam in the Charduar plantation in the Tezpur Sub-Division, as also in the Kulsi plantation of the Gauhati Sub-Division in the Kamrup Division. There are also a number of other rubber-yielding trees found in the Indian and Burman forests from which rubber can be collected on terms quoted by Government. Attempts have been made to cultivate Para, Ceara and Castilloa in various parts of India and Burma. In India proper the chief attempts were made on the west coast, about 180 acres being planted from 1908 onward at Gersoppa. Similar attempts have been made in Madras, but at present Para rubber is being grown as a commercial product rather in Burma than the rest of India.

Statistics of Cultivation.

Few statistics are available of the cultivation of rubber in India, but in June, 1914, the *Indian Trade Journal* published a table showing the approximate acreage under rubber in 1913, and the number of trees planted. The figures, which do not pretend to any great degree of accuracy, may be summarised as follows —

Province and District.	Joint Stock Companies	Private Owner.	Capital invested in Joint Stock Companies	Area in acres	Approximate Number of trees
Burma	19	194	Rs 50,81,410 and £237,436	29,544	4,911,399
Assam	3	unknown	.	4,686	137,430
Madras Presidency	5	unknown	Rs 10,46,090 and £208,000	12,022 04	1,636,476
GRAND TOTAL INDIA.	27	Over 200	Rs 61,27,500 and £445,436	46,252 04	6,685,305

The yield of the Assam plantations is very small, but the number of trees to the acre is much less in that province than in Madras or Burma. Although Burma easily heads the list in acreage and number of trees planted, most of these trees are less than six years old, and, therefore, not at present productive. It is not surprising, therefore, to find that the outturn of Madras as indicated by the export figures is at present more than double that of Burma. The Export figures for the last four years have been as follows —

	1910-11	1911-12	1912-13.	113-14.
	cwts	cwts	cwts	cwts.
Bengal	1,257	1,315	1,041	474
Madras	1,414	4,866	8,888	15,959
Burma	1,214	2,770	4,698	6,831
Total	3,885	8,951	14,627	23,264

Thus while the Assam production, as shown in the Bengal export figures, has been steadily declining, the production in the other two provinces has risen rapidly. Madras exports of rubber in 1913-14 shown an expansion of 79 per cent. in quantity and 50 per cent. in value. It seems possible, however, that in a few years' time Burma will outstrip Madras.

The Commissioner of Settlements and Land Records, Burma, gives the following rough estimates of future production —

1914	1,000 000 lbs.
1915	1,500,000 ,,
1916	1,800,000 ,,
1917	3,000,000 ,,

BIBLIOGRAPHY.—For fuller details see "Dictionary of the Economic Products of India" and the abridged edition of the same published in 1908 under the title "The Commercial products of India" by Sir George Watts, and the "Commercial Guide to the Forest Economis Products of India" by R. S. Pearson, published by the Government Press, Calcutta, 1912.

PAPER MAKING.

This industry is not making the headway in India that had been anticipated, there being only nine mills at work with a nominal capital of about Rs 54 lakhs, which in 1913 produced over 60½ million lbs of coarse paper, valued at Rs 80 lakhs

There are five large paper mills in the country working on up-to-date Western lines, *viz*, at Titagarh, Kankinara and Raniganj in Bengal, the Upper India Couper Mills at Lucknow and the Reay Mill at Poona There are also two smaller mills at Bombay and Surat which make only country paper, and there are one or two other mills which recently were not working The five large mills have a large Government connection as the greater part of Government orders for paper is placed in India Apart however from Government orders the Indian paper mills cannot be said to have made headway against the competition of imported paper

The existence of the local industry depends chiefly on the supply of Sabai grass which on account of unfavourable seasons sometimes yields short crops It is of great importance, therefore, to look for materials affording a constant outturn, and various reports have been published on the available paper-making materials Considerable attention has been devoted to **Bamboo**, since 1875 when it was found that this plant—of which there are four chief varieties in India—yielded a fibrous paper stock which made a quality of paper superior to esparto grass and at a considerably less cost It was at that time estimated that one acre of bamboo would yield 10 tons of dried stems equivalent to 6 tons of merchantable cellulose In 1905 Mr R W Sindall was invited by Government to visit Burma with a view of enquiring into the possibility of manufacturing paper pulp His report on the subject appeared in March 1906 He made numerous experiments with bamboo and woods of Burma and laid down lines along which further enquiry should be made Subsequently Mr W Raitt, a pulp expert, was engaged at the Forest Research Institute in conducting tests on the treatment of bamboos by the soda and sulphate processes, the treatment of bamboo before boiling, with remarks on the utilisation of nodes and internodes His results were embodied in the "Report on the investigation of Bamboo for Production of Paper-pulp," published in 1911 Lastly, Mr R S Pearson of the Forest Service, Dehra Dun, as the outcome of enquiries made throughout India published in 1912 a note on the Utilization of Bamboo for the Manufacture of Paper-pulp The yield per acre from bamboo is larger than that of grasses usually used for paper The cost of working into pulp has been estimated to yield a product cheaper than imported unbleached spruce sulphite and unbleached sabai grass pulp

The leading Indian **paper grass** for the last thirty years has been the bhaib, bhabar, or sabai grass of Northern India It is a perennial grass plentiful in drier tracts from Chota Nagpur and Rajmahal to Nepal and Garhwal The Calcutta mills draw their supplies from Sahibganj, Chota Nagpur and the Nepal Terai The quantity annually exported from Sahibganj is between three to four lakhs of maunds The cutting in these districts is said to commence in October when the plants are six or seven feet high Sabai grass yields from 36 6 to 45 5 per cent of bleached cellulose

MATCH FACTORIES.

The imports of **Matches** in 1912 totalled Rs 90 lakhs—a decrease of Rs 9 lakhs as compared with the previous year's total Japan, Scandinavia, Austria-Hungary, Germany and Belgium, in the order given, are the sources of our supply and it does not seem improbable that if the war is protracted the price of matches may show some slight increase In the opinion of the Forest experts at Dehra Dun there is an abundance of raw material in this country for match manufacture

Indian timbers for matches —In an article on the Indian match industry which appeared in the *Indian Agriculturist* the woods of the following species are said to be employed in Burma for match splints *Bombax insigne*, *B malabaricum* (simul), *Anthocephalus Cadamba* (kadam), *Sarcocephalus cordatus*, *Spondras mangifera* (amra), and *Engelhardtia spicata* (palash) These woods are not the best for the purpose, but are those most easily procurable There are other kinds of white wood, such as poplar, pine, willow, and adler, in abundant quantities, but they are difficult to extract and transport and are therefore costly

The attempts to manufacture matches in India have not hitherto been attended with great success, but recently two well-equipped factories have been started in Burma which give promise of good results One of these is in Rangoon and is owned by Chinese, the other is at Mandalay, and is under European management Further investigations are said to be necessary in order to settle the question as to the most suitable woods to employ, and when these have been brought to a satisfactory conclusion it is thought that Burma will be able to produce matches of first-class quality It may be added that in 1912, the latest year for which complete statistics are available, there were six match factories in India

The **Law in India** prohibiting the importation of the old sulphur matches as from July 1st, 1913, has not seriously affected the position of the Swedish manufacturers, as they were able to supply another "strike-anywhere" match to take the place of the kind then prohibited, but as the new kind is dearer to manufacture the prices have gone up, and are likely to rise still further.

Mines and Minerals.

The feature which stands out most prominently in a survey of the mineral industries of India is the fact that until recent years little has been done to develop those minerals which are essential to modern metallurgical and chemical industries, while most striking progress has been made in opening out deposits from which products are obtained suitable for export, or for consumption in the country by what may conveniently be called direct processes In this respect India of to-day stands in contrast to the India of a century ago The European chemist armed with cheap supplies of sulphuric acid and alkali, and aided by low sea freights and increased facilities for internal distribution by the spreading network of railways has been enabled to stamp out, in all but remote localities, the once flourishing native manufactures of alum, the various alkaline compounds, blue vitriol, copperas, copper, lead, steel and iron, and seriously to curtail the export trade in nitre and borax The reaction against that invasion is of recent date The high quality of the native-made iron, the early anticipation of the processes now employed in Europe for the manufacture of high-class steels, and the artistic products in copper and brass gave the country a prominent position in the ancient metallurgical world, while as a chief source of nitre India held a position of peculiar political importance until, less than forty years ago, the chemical manufacturer of Europe found among his by-products, cheaper and more effective compounds for the manufacture of explosives

With the spread of railways, the development of manufactures connected with jute, cotton and paper, and the gradually extended use of electricity the demand for metallurgical and chemical products in India has steadily grown Before long the stage must be reached at which the variety and quantity of products required, but now imported, will satisfy the conditions necessary for the local production of those which can be economically manufactured only for the supply of groups of industries

Value of Output --The total value of minerals for which returns of production are available for the year 1912 was £9,321,486 being an increase of £1,310,318 on the previous year's output The following are the more important of the minerals included in the above

——	1911	1912
	£	£
Coal	2,502,616	3,310,365
Gold	2,238,143	2,271,806
Petroleum	884,398	975,278
Manganese-ore	648,801	884,404
Salt	469,235	509,824
Mica	188,642	284,290
Building materials and road metal	246 446	270,980
Saltpetre	220 268	217,035
Lead-ore and Lead	181,989	153,069
Tungsten-ore	99,989	115,200

Coal.

Most of the coal raised in India comes from the Bengal—Gondwana coal-fields Outside Bengal the most important mines are those at Singareni in Hyderabad, but there are a number of smaller mines which have been worked at one time or another

The production of Indian coal during 1913 aggregated 16,208,009 tons or improved by 10 per cent The following table shows the outturn, prices (declared export values), exports and imports for ten years Of the total outturn 86 per cent is produced in the Ranigan and Jheria fields The coal industry suffered in 1913 from excessive and abnormal floods and fires at places, and want of labour which was diverted to the rice cultivation owing to early monsoon rains There was also some shortage in Railway wagons caused by the great demand for fodder transport

	Outturn Tons	Declared value per ton	Exports Tons	Imports Tons.
		Rs a p		
1904-05	8,216,706	7 13 2	594,832	252,393
1905-06	8,417,739	7 13 3	836,149	179,935
1906-07	9,783,250	7 15 11	935 350	257,203
1907-08	11,147 339	8 1 7	727,881	308,348
1908-09	12,769,635	8 13 5	571,582	455,806
1909-10	11,870,064	8 13 7	758,828	428,535
1910-11	12,047,413	8 10 6	889,601	334,181
1911-12	12,715,534	8 13 0	873 987	297,912
1912-13	14,706,339	10 0 4	881 239	653,694
1913-14	16,208,009	9 8 11	723,641	559,190

Provincial production of coal during the years 1911 and 1912

Province	1911	1912	Province	1911	1912
	Tons	Tons		Tons	Tons
Assam	294,893	297,160	Hyderabad	505,380	481,652
Baluchistan	45,707	54,386	N W Frontier Province	140	50
Bengal	11,468,904	4,306,129	Punjab	30,575	38,409
Behar and Orissa		9,126 385	Rajputana (Bikaner)	14,761	18,251
Central India	143,558	149,921			
Central Provinces	211,616	233,996	Total	12,715,534	14,706,339

Prices of Coal —Prices for first class Jheria in 1913 opened at Rs 3-12, rose to Rs 5-8 in May, but fell to Rs 3-8 in November They advanced to Rs 5-4 in early March, owing to transport difficulties and closed at Rs 3-8 to Rs 4-8 per ton at the pit's mouth

MANGANESE ORE.

This industry commenced some twenty years ago by quarrying the deposits of the Vizagapatam district, and from an output of 674 tons in 1892, the production rose rapidly to 92,008 tons in 1900 when the richer deposits in the Central Provinces were also attacked, and are now yielding a larger quantity of ore than the Vizagapatam mines India now takes the first place among the manganese-producing countries in the world The most important deposits occur in the Central Provinces, Madras Central India, and Mysore—the largest supply coming from the Central Provinces The uses to which the ore is put are somewhat varied The peroxide is used by glass manufacturers to destroy the green colour in glass making, and it is also used in porcelain painting and glazing for the brown colour which it yields The ore is now used in the manufacture of ferromanganese for use in steel manufacture Since 1904, when the total output was 150,190 tons, the progress of the industry has been remarkable owing to the high prices prevailing In 1905 production reached 247,427 tons, the following year it was more than doubled (571,495 tons), and in 1907 the figures again rose to 902,291 tons In 1909, on account of the fall in prices the output contracted to 642,675 tons, but it almost regained its former position in 1910 when the production rose to 800,907 tons In 1911 it fell to 670,290 tons, and in 1912 to 637,444 tons The ore raised in the Central Provinces is of a very high grade, ranging from 50 to 54 per cent of the metal, and in consequence of its high quality is able to pay the heavy tax of freight over 500 miles of railway besides the shipment charges to Europe and America, for the whole of the ore is exported to be used principally in steel manufacture in the United Kingdom, Germany, and the United States

Exports of Manganese —The following tables show the quantity and value of manganese ore exported by sea from British India to countries of final destination in the twelve months ending March, 1914

	Twelve months ending March			
	1912-13		1913-14	
	Quantity	Value	Quantity	Value
United Kingdom	211,921	34,75,018	258,776	42,17,102
Germany	7,250	1,35,908	18,950	3 59,287
Holland	23,850	4,19,025	8,200	1,30 500
Belgium	171,066	27,64,300	187,821	31,84,620
France	112 223	19,23,656	103,847	19,14,722
Italy	6,600	1,18,800	7,800	1,40,400
Austria-Hungary	3,300	59,401	10 310	1,85,580
Japan	3,271	71,558	16,018	3,98,033
United States of America	168 600	24,69,810	106,327	16,01,205
TOTAL	708,081	1,14 40,476	718,049	1,21,31,449

The fall in prices in the latter part of 1907 produced by 1909 an almost complete cessation of mining for lower grades of ore at mines far removed from railways Owing to an excess of production over exports the stocks on the mines at the end of 1908 stood at the high total of nearly 300,000 tons The rise in the price of ore during 1910 resulted in a considerable increase in the total production, namely from 642,675 tons in 1909 to 800,907 tons in 1910 but with a fall in price in 1911 the output also fell In 1912 there was a rise of over 36 per cent in the value of the outturn At the same time there was a slight fall in the amount produced The rise in the value of the total output is therefore due to improved prices and not to increased outturn The average value of first grade ore was 11.1*d* and of second grade ore 10 8*d* as against 9 5*d* and 9 3*d* in 1911*

Quantity and value of Manganese-ore produced in India during 1911 *and* 1912

—	1911		1912	
	Quantity	Value f.o.b. at Indian ports	Quantity	Value f.o.b. at Indian ports
	Tons	£	Tons	£
Bihar and Orissa—				
Gangpur ..	25,152	25,257	27,173	37,476
Bombay—				
Panch Mahals	45,330	45,519	43,538	60,046
Central India—				
Jhabua	7,319	6,068	5,652	6,688
Central Provinces—				
Balaghat	144,642	147,053	135,435	199,202
Bhandara	119,606	121,600	115,365	169,683
Chhindwara	1,540	1,566	16,517	24,294
Nagpur	179,263	182,500	147,225	216,544
Madras—				
Sandur . ..	66,950	53,002	62,488	71,080
Vizagapatam	58,915	46,641	54,758	62,287
Mysore	21,573	19,595	29,293	37,104
Total	670,290	648,801	637,444	884,404

GOLD.

The greater part of the total output of gold in India is derived from the Kolar gold field in Mysore. During the last decade the production of this mine reached its highest point in 1905 when 616,758 ounces were raised. In 1906 the quantity won was 565,208 ounces and this figure fell to 535,085 ounces in 1907. The figures for the latter years reveal a small improvement. The Nizam's mine at Hutti in Hyderabad comes next, but at a respectable distance, to the Kolar gold field. This mine was opened in 1903. The only other mines from which gold was raised were those in the Dharwar district of Bombay and the Anantapur district of Madras. The Dharwar mines gave an output of 2,993 ounces in 1911 but work there ceased in 1912. The Anantapur mines gave their first output of gold during the year 1910, the amount being 2,542 ounces, valued at Rs. 1,51,800. Gold mining was carried on in the North Arcot district of Madras from 1893 till 1900, the highest yield (2,854 ounces) being obtained in the year 1898. The Kyaukpazat mine in Upper Burma was worked until 1903, when the pay chute was lost and the mine closed down. In 1902 dredging operations were started on the Irrawaddy river near Myitkyina, and 216 ounces of gold were obtained in 1904, the amount steadily increased from year to year and reached 8,445 ounces in 1909, but fell to 5,972 ounces in 1910 increasing again to 6,390 ounces in 1911 and being in 1913, only 5,393 ounces. The gold craze, which was prevalent in Rangoon a few years ago, has disappeared as suddenly as it sprang up. The Burma Gold Dredging Company holds a right to dredge for gold in the bed of the Irrawaddy river and notwithstanding the obstacles encountered from time to time in the shape of floods, etc., the company has so far been fairly successful in its operations. The small quantity of gold produced in the Punjab, the Central Provinces, and the United Provinces is obtained by washing. Gold washing is carried on in a great many districts in India, but there is no complete record of the amount obtained in this way. The average earnings of the workers are very small, and the gold thus won is used locally for making jewellery. The latest statistics available for the whole of India are —

Gold Produced in India in 1912.

—	Quantity	Value	Labour
Burma—	Oz	£	
Myitkyina	4,994·77	18,931	154
Katha and Pakokku	15·16	75	4
Upper Chindwin .	58·22	331	50
Hyderabad	16,993	64,980	1,516
Mysore	561,065	2,158,362	26,203
Madras	7,269	28,499	1,756
Punjab	147·52	583	289
United Provinces	12·25	45	90
Total .	590,554·92	2,271,806	30,602

PETROLEUM.

Petroleum is found in India in two distinct areas—one on the east, which includes Assam Burma, and the islands off the Arakan coast This belt extends to the productive oil fields of Sumatra, Java, and Borneo The other area is on the west, and includes the Punjab and Baluchistan the same belt of oil-bearing rocks being continued beyond the borders of British India to Persia Of these two the eastern area is by far the most important, and the most successful oil fields are found in the Irrawaddy valley Yenangyaung is the oldest and most developed of these fields Native wells have been at work here for over 100 years, and in 1886, prior to the annexation of Upper Burma, the output is estimated to have averaged over 2 million gallons a year Drilling was begun in 1887 The Yenangyat field yielded a very small supply of petroleum before 1891, in which year drilling was started by the Burma Oil Company Singu now holds the second place among the oil fields of India Petroleum was struck at the end of 1901, and in 1903 5 million gallons were obtained In 1907 and 1908 the production of this field was 43 million gallons, and after a fall to 31½ million gallons in 1910 it rose to 56½ million gallons in 1912 Several of the islands off the Arakan coasts are known to contain oil deposits, but their value is uncertain About 20,000 gallons were obtained from the eastern Barongo Island near Akyab and about 37,000 gallons from Ramri Island in the Kyaukpyu district during 1911 Oil was struck at Minbu in 1910 the production for that year being 18,320 gallons which increased to nearly 4 million gallons in 1912 The existence of oil in Assam has been known for many years and an oil spring was struck near Makum in 1867 Nothing more however, was done until 1883, and from that year up till 1902 progress was slow Since that year the annual production has been between 2½ and 4 million gallons

On the west oil springs have been known for many years to exist in the Rawalpindi and other districts in the Punjab In Baluchistan geological conditions are adverse, and though some small oil springs have been discovered, attempts to develop them have not hitherto been successful

The output of **petroleum in Burma** during 1913 showed a substantial increase of more than 27½ million gallons over the yield of 1912 and is the largest yet obtained, exceeding as it does the record output of the previous year The output in gallons and the value in rupees during the past nine years are

	Gallons	Rs
1913	272,865,397	1,52,86,613
1912	245,335,209	1,44,43,605
1911	222,225 531	1,30,89,345
1910	211,507,903	1,23,74,436
1909	230 396,617	1,34,90,140
1908	173,402,790	1,03 69,607
1907	148,888,002	89,93,826
1906	137,654,221	84,69,995
1905	142,063,846	88,91,907

Of the several oilfields the most important is that at Yenangyaung in the Magwe district, the yield from which constituted a record and exceeds the previous record output of 1909 by over 13½ million gallons and 7¼ lakhs of rupees in value The year 1909 was a phenomenal year in Magwe when owing to the competition of companies no efforts were spared to increase the output from the wells in this area During the year under report no such conditions prevailed and the large increase in the output of petroleum from these fields is no doubt the result of the very rich yield from the new areas brought under operation a couple of years ago Some half a dozen limited liability companies work this area and their operations during the year were without exception successful

The consumption of **kerosene** in India (excluding Burma) is rapidly increasing and has risen from about 79 million gallons in 1900-01 to 168 million gallons in 1911-12 The enormous increase in the output of the Burma oil fields has reversed the position held by foreign and Indian oil in the market In 1908-09, however, the proportion of foreign oil consumed was a little higher than that of Burma oil as a result of a contraction in her shipments concurrently with a large increase in imports from foreign countries, but from 1909-10 Burma oil has regained its position The imports of kerosene in oil in 1912 were as follows —

	Gallons
Burma	12,540,024
Roumania	2,693,860
Russia	7,535,184
Straits Settlements	3,285,841
Sumatra	612,474
United States of America	35,684,624
Other Countries	688
Total	62,352,653

Amber, Graphite and Mica —Amber is found in very small quantities in Burma the output for 1912 being 27 cwt valued at £179 Graphite is found in small quantities in various places but no progress has been made in mining except in Travancore,and there,owing to the difficulties of working, the mine has been shut down The outturn from it was £9,425 in 1911 India has for many years been the leading producer of mica, turning out more than half of the world's supply In 1912 the output was 43,000 cwt , and the value of the amount exported £ 284,290

Tin, Copper, Silver, Lead and Antimony.- The only persistent attempt to mine tin is in Burma The output was for sometime insignificant but rose in 1913 to 114 tons valued at Rs 3 66,293 and 64 tons of tin ore valued at Rs 98 345 Copper is found in Southern India in Rajputana, and at various places along the outer Himalayas, but the ore is smelted for the metal alone, no attempt being made to utilize the by-products An attempt is being made to work lodes near Pangyang, in the Northern Shan States, for the production of silver and lead, and in Southern Burma for antimony.

Gem Stones —The only precious and semi-precious stones at present mined in India are the diamond, ruby, sapphire, spinel, tourmaline, garnet, rock-crystal, agate, cornelian, jadeite and amber Amber has already been referred to, of the rest only the ruby and jadeite attain any considerable value in production and the export of the latter has declined owing to the disturbances in China, which is the chief purchaser of Burmese jadeite The output of diamonds is comparatively unimportant being valued at £411 in 1912 The ruby-mining industry of Burma has lately undergone a favourable change The average annual value of the stones produced is but about £59,000 but in 1912 the total value of rubies, sapphires and spinels amounted to £69,547

Radio-active Minerals —The General Report of the Director of the Geological Survey of India for 1913 includes a brief report by R C Burton on an occurrence of pitchblende at mica mines near Singar, Gaya district, Bengal The pitchblende occurs as rounded nodules in a pegmatite that is intrusive in mica schists Other minerals occuring in the pegmatite are mica, triphite, ilmenite, tourmaline, and uranium ochre, whitish columbite, zircon, and torbernite have also been recorded Of these minerals triphite is stated to be the commonest It is associated so persistently with the pitchblende and uranium ochre that its presence is taken as an indication of the presence of these minerals Many of the pitchblende nodules occur in a matrix of triphite, some occur in a felspathic matrix One nodule of pitchblende weighing 36 lb has been obtained The pegmatite has been mined for many years for mica As yet, not much pitchblende has been obtained, but one pit has yielded up to the present about 4 cwts of the mineral

Iron Ore —The output of iron-ore rose from the estimated value of about £10,000 in 1910 to £34,496 in 1911 and £47,044 in 1912 This increase was marked both in Orissa and in Singbhum, and furnishes evidence of the activity of the Tata and the Bengal Iron and Steel Companies

Inspection of Mines.

During the year 1913 the average number of persons working in and about the mines regulated by the Indian Mines Act was 181,260 of whom 116,492 worked underground and 64,763 on the surface One hundred and eleven thousand nine hundred and forty-six of the persons were adult males, 62,961 were adult females and 6,353 children under 12 years of age

Accidents —During the year 1913, at mines regulated by the Indian Mines Act, 1901, there were 136 fatal accidents, being an increase of 3 as compared with the number in 1912 and an increase of 6 as compared with the average number of the last five years.

These accidents involved the loss of 211 lives This is an increase of 26 upon the number of deaths in 1912 In the report for 1912 it was stated that one accident caused 23 deaths The year under report was a peculiarly unfortunate one as regards the large loss of life occasioned by certain accidents Twenty-seven lives were lost on the occasion of an explosion, twenty-seven by three inruptions of water and seven by a fall of roof

Of these 136 accidents, the Chief Inspector of Mines regards (*a*) 60 as being due to misadventure, (*b*) 33 to the fault of the deceased, (*c*) 7 to the fault of fellow workmen, (*d*) 8 to the fault of subordinate officials, and (*e*) 28 to the fault of the management

Very many of these accidents might have been prevented by the exercise of ordinary care and forethought on the part of both officials and men, and the Chief Inspector of Mines is satisfied that only by closer supervision and stricter discipline can their number be diminished Such accidents result from persons passing through fences into old workings to get easily worked coal, from persons sitting in dangerous places or under roof coal at which they have just been working, from persons being struck down by falling roof and sides as they travel to and from their working places, and from disobedience to an official's orders in trivial matters

The **death rate** per thousand persons employed was 1 16, while that of the preceding four years was 1 17 At coal mines only these figures were 1 39 and 1 32, and at mines other than coal 0 54 and 0 74 At coal mines in England during the ten years ending with and including 1912, the death rate per thousand persons employed varied from 1 17 (lowest) to 1 69 (highest) The death rate per million of tons raised at coal mines only was 11 95, while that of the preceding four years was 11 97 At coal mines in England during the ten years ending with and including 1912 the death rate per million tons raised varied from 4 29 (lowest) to 6 37 (highest)

Chief Inspector of Mines in India, G F Adams, M Inst, C

E Bibliography —Report of the Chief Inspector of Mines in India, under the Indian Mines Act (VIII of 1901) for 1913 By R R. Simpson, M Sc, Offg Chief Inspector of Mines.

Industrial Arts.

"The Arts of India," wrote Sir George Birdwood in the first lines of his book on the industrial arts of India which has now become a classic, "are the illustration of the religious life of the Hindus, as that life was already organised in full perfection under the code of Manu, B C 900-300" Whether that statement be accepted in its entirety or not, some knowledge of the religion of the Hindus is most essential to an understanding of their arts That subject is dealt with elsewhere in this book and so is the subject of caste, of which a knowledge is equally important in this connexion But, by way of preface to a brief outline of some of the more important art industries of the country, it may be well to state what is the basis of practically the whole industrial system of India The child learns his hereditary craft from his father or is apprenticed to a *mistri*, or master-craftsman, who is often a relative of the pupil There is no regular fee, but a small present is often paid to the owner or foreman of the shop, and in some trades a religious ceremony may take place at the time of apprenticeship The child begins his work at a very early age, at first he is expected to undertake the menial duties of the shop and is put to cleaning the tools, later he begins to perform the simplest operations of the trade There is little definite instruction, but the boy gradually acquires skill by handling the tools and watching the workmen at their task As soon as he has made a little progress, the apprentice is granted a small wage which is gradually increased as he becomes more useful, and when his training is finished, he either goes out into the world or secures a place on the permanent roll of his master's shop To the poor artisan the arrangement has this great advantage, that at a very early age the child earns his livelihood and ceases to be a burden on his parents In former days the system answered well enough for the rude village industries which satisfied the needs of the bulk of the population, and it also succeeded in maintaining a class of workmen who dealt in metals and textile fabrics with such sense of form and colour that their work has challenged comparison with the most artistic products of the West It has not, however, enabled the Indian artisans to keep abreast with modern industrial development Imported articles have to a considerable extent supplanted the products of home industry, the quality of Indian work has in many cases deteriorated, and the workman has neither taken due advantage of the wide openings afforded to him by advancing civilisation and trade, nor adhered rigidly to old methods and traditions The efforts made to assist him have not as yet been attended with a great measure of success, but the potentialities of the Schools of Art and Technical Institutions are only beginning to be appreciated

Wood-carving.

Indian wood-work, which must come first in importance in the art products of the country, shows great diversity, and many points of interest, and the wood-carvers of the country, have gained a well-deserved reputation outside India The more noteworthy crafts include carving as applied to architecture, furniture, and cabinet work inlaying with other woods or metals, veneering, and lattice-work The art and industrial schools of Calcutta, Madras, Bombay and Lahore have given much attention to developing these crafts on indigenous lines, with the result that degeneration has to a large extent been prevented and a superior class of carpenters, dispersed over the country On a smaller scale, objects are carved in sandal-wood with a minuteness and intricacy of elaboration only equalled by the results attained in ivory As to style, there is a great variety of types throughout the country, the two chief influences on the art conception being religion and the nature of the wood used Mahomedan and Sikh work—for example, is largely constructed on a geometric basis, though in the modern Sikh work-as in the Hindu—grotesque animal forms or mythological subjects are freely introduced The woods chiefly used for ornamental work are teak, *shisham*, deodar, sandal-wood, ebony, walnut, *tun*, *nim*, Madras red-wood (sometimes called black-wood), *dudhi* (white-wood), red cedar, *sal*, *babul*, and others of less importance Deep under-cutting and sculpture are possible with teak, red-wood, and walnut, whereas *shisham* and deodar can be used only for low relief work In recent years a great demand for cheap and inferior carving—on tables and other articles alien to the Indian mind—has sprung up in Europe and America and has been met by the export of vast quantities of poor work, for which the soft woods only are used while bone takes the place of ivory in inlaying "In these abominations," writes Sir George Watt in the catalogue of the 1903 Exhibition at Delhi, "it is thought sufficient proof of an Indian character to introduce some portion of a mosque or temple, and that being done all attention to such details as suitability of design or nature of ornamentation can be disregarded"

Metal Work.

The purely indigenous or village metal manufactures are perhaps, after those connected with wood, the most important of all the art industries of India Most of the household utensils are made of metal, which thus to a large extent take the place of the porcelain and glass of Europe Brass is most frequently employed by Hindus and copper by Mahommedans, the copper vessels being generally tinned for safety Every large village has its copper and ironsmiths and also its jeweller, and in some instances these local industries attain considerable magnitude, as is the case with the manufacture of copper and brass vessels at Srinagar, Benares and other towns The making of ornamental bowls, vases, trays, and other European articles constitutes an important industry in many places, and a variety of processes is of course employed such as enamelling, damascening, and colouring either with lac or paint The provinces of India have each two or three centres noted for their copper or brass ware, and there are as many different art conceptions as centres Some of the styles are well known all over the world, such as the Benares

style of punched brass, which is as a rule bad in design and execution, and the engraved or repousse work in polished brass that comes in huge quantities from Jaipur. Better than either of those are the perforated and repoussé copper work of Lucknow, the best products of Bombay, Poona, and some of the southern India centres, and the gongs and idols made in Burma. Ordinary domestic utensils which are free from ornamentation so that they can be readily scoured, and the more elaborate implements used for religious ceremonials are among the most and beautiful interesting metal wares in India, but they vary in style and finish throughout the country. Sir George Watt writes —

'The copper or brass vessel of most general use by the Hindus is the *lota*, a globular melon-shaped vessel flattened from the top and having an elegantly reflexed rim by which it is carried suspended between the fingers and thumb. In shape this doubtless originated from the partially expanded flowers of the sacred lotus, its name thus coming from the same root as the Latin *lotus*, 'washed,' and the English lotion, 'a wash.' With the Mahomedans the *lota* (or *lonta*) has been given a spout because the Quran ordains that a man shall perform his ablutions in running water, hence the water when poured out of the *lonta* is considered to be running water. It is carried by holding the rim at one side and it thus dangles instead of being (as with the Hindus) suspended from the middle of the hand. The shapes of the *lota* and *lonta* and their respective uses have given birth to two widely different forms of both domestic and decorative metal work characteristic of India. For example, the spout and the use of copper more especially when tinned, has originated a whole range of forms and designs not only quite unknown to the Hindus but next to impossible with the materials permitted by their religion. It is scarcely possible any longer to divide the gold and silver plate work of India into four or five well defined classes distinguished by the style of ornamentation, as the workers in these metals have been quick to adopt a variety of European models. In Madras mythological medallions, in imitation of the encrusted style of Southern India art, still form the characteristic feature of much of the silver work. In Bombay two distinctive forms survive, the Poona and Kutch. Of these the former is a deep form of repousse, the silver usually being oxidised the latter has a floral design of European origin in shallow repousse. Rangoon work is generally known by the frosted surface of the silver and Moulmein work by the silver being either polished or burnished. But in almost every case the design of one province is copied in another, and the best forms of ornamentation, such as the shawl pattern of Kashmir, have fallen into disuse either because of the labour involved in their production or because the smiths have found by experience that it is just as easy to sell inferior work.

Great varieties of form and style are to be seen in the arms and jewellery made in India. Sir George Birdwood in his "Industrial arts of India" says that "the forms of Indian jewellery as well as of gold and silver plate, and the chasings and embossments decorating them, have come down in an unbroken tradition from the Ramayana and Mahabharata." The old types survive side by side with the copies of articles imported from the Rue de la Paix, and in any Indian jeweller's shop a bewildering mixture of the archaic and the modern is to be seen.

Shawl and Carpet Weaving.

It is only in Northern India (more especially in Kashmir) that the spinning and weaving of wool extends to the production of highly-finished and artistic goods. Scattered here and there all over the country are hand-loom factories where coarse blankets, carpets, and other fabrics are produced. This indigenous wool industry is most important in the Punjab. The great centre of shawl production is Kashmir, the industry has also been carried on for many years in parts of the Punjab, where it was introduced by colonies of Kashmir weavers. France was for many years the chief foreign market for Kashmir shawls, and the trade which was damaged also by the competition of cheap imitations produced at Paisley, never recovered from the effects of the Franco German War. The bulk of the Kashmir shawl-weavers became carpet-weavers or agriculturists. The latest report from the Punjab regards the case of the genuine shawl industry as "almost hopeless." Carpet-weaving is carried on in various parts of the country. It is one of the many industries which is said to have been ruined by modern civilisation and in so far as many carpet factories in India are turning out an inferior article, according to designs furnished by dealers in Europe, this is correct. But it is wrong to ascribe the cheapening of the caste weavers product and his increased output to underselling by those jails in which the weaving of carpet has been introduced as an occupation for prisoners. On the other hand the jails, and especially that at Yerrowda, near Poona, have set a high standard by conserving old designs, by using good material, and by avoiding the use of aniline dyes. Since the London Exhibition of 1851 a considerable export trade in Indian pile carpets has been created. Amritsar, which caters for the American market in particular, is the most important carpet-weaving centre in India, but there are factories in many other places in Northern India, Rajputana, Central India and the United Provinces. In the lower provinces the industry hardly exists. Cotton and woollen carpets in other than pile stitch are made all over India. They are known as *dari* (a rug) and *shatranji* (a carpet) and are made in great variety. The poorer classes of Mahomedans generally use the cotton manufactures as praying carpets.

Apart from woven mats or carpets there is manufactured a great variety of so-called mats made from grass and other materials such as aloe, bamboo, coir, date and other palm leaves. Mats or rather screens (tatties) made of the sweetly scented *Khas-khas* are hung in front of doors, &c., to afford shade and to cool, by evaporation, the air which passes through the moistened texture. Bamboo mats are manufactured here and there all over India, and in Bengal more especially *darma* mats (those constructed of reeds) are all but

universally used in house-construction The traffic in *darma* mats must, therefore, be very great, and give employment to a far larger number of persons than can be learned from published statistics In some of the jails aloe-fibre mats are produced and find a fair market, while cane mats are not uncommon, These are formed by selected canes being placed parallel to each other and bound in position by cross-ties They are exceptionally strong, and especially valued in public offices where there is much traffic

Embroidery

This is one of the most important of the art industries of India attaining its highest development in Northern India The stitches employed in the various kinds of work are numerous, but all have this in common that they are formed by the needle being pulled away from and not drawn towards the worker Mrs F A Steel has written a description of the Punjab darn stitch, known as *pulkhari*, but most of the varieties still await their historian Darn stitch is chiefly used on coarse cotton and chain stitch on silk or woollen fabrics, the former covering the textile the latter ornamenting parts of it. European demands have led to the production of large quantities of silk embroidery, in which coloured silks and gold and silver wire are employed, for curtains, table cloths and so on Another common form of embroidery is what is called chikan work on some white washing material such as calico or muslin in this the most usual form of stitch is the satin stitch combined with a form of button holing The manufacture of lace and knitting have been introduced into India by missionaries "Laid" embroidery with gold and silver wire (called *karchob* work because it is done on a frame) is common throughout the country in different forms The wires are drawn in a number of centres, particularly in Lahore, Delhi, Agra, and Benares the details of wire drawing and the form of stitch, together with the combination with precious stones and silk, make a great number of classifications of this work possible A rough division between the two forms is that the massive kind is called *zardozi* and the light and graceful *kamdani*.

Ivory

The carving and inlaying of ivory are still, though perhaps in diminished importance, arts much practised in India The best material used is African ivory, which is whiter and of closer grain than the Indian, but Sir George Watt has pointed out that the "fish tooth" ivory, or Mammoth ivory of Siberia, is also used by Indian workers The centres of the craft are Delhi, Murshidabad in Bengal, Mysore, Travancore, and Moulmein A curious fact about this industry is that, though carving is generally an hereditary occupation, there is no special caste identified with the craft like that of the silver smiths, and this is held to show that the industry as it now exists is of comparatively modern origin Its development in recent times is due to the desire of sightseers in India to have "something Indian" to take away with them in an easily portable form But some of the best work is still of great beauty and fine workmanship The carving of horns and shells may possibly be counted as variations of this art

Statuary

Part of that division of handicrafts which is vaguely connoted under the term "fine arts" is the subject of an article elsewhere in this book Apart from painting, it is not a very considerable division Statuary, except the wide-spread production of statuettes (in stone, wood, or cast metal) of mythological subjects, is little practised Various brass workers are expert in reproducing in miniature scenes of Indian life and animals of the country, and at Lucknow some realistic terra cotta statuettes are produced. Wherever wood-carving is practised, and particularly in Burma, statuary in that material is turned out and is used chiefly for decorative purposes.

Fisheries.

The fisheries in Indian waters are unorganised in the modern sense of the term Vast numbers of the coastal population are through natural circumstances engaged in fishing, but in a great proportion of cases this means of livelihood shares their time with agriculture The Bengal Government took the important step, a few years ago, of initiating deep sea fishing, by introducing a steam trawler The undertaking did not live to see commercial development on a large scale Special measures have also been taken by the Madras Government with more or less success, there being in this province a Fishery Department of Government under an Honorary Director The inland fisheries where there are large rivers or tanks are often important in many parts of India

Bengal.

The importance of the Bengal fisheries may be gauged from the fact that 1 6 per cent of the population is engaged in catching curing, and selling fish, a percentage which rises to 2·6 in the Presidency, Rajshahi and Dacca Divisions, moreover, large numbers of cultivators are returned as fishermen also. The waters of the Bay, the rivers, and swamps swarm with fish, and every ditch and puddle furnishes small fry to eke out the frugal diet of the people The best salt-water fish are the bekti, tapsi, or mango-fish, mullet, pomfret, and sole Inland the hilsa (Clupea ilisha) is found in shoals in the Ganges, while the rohu (Labeo rohita) and the katal (Catla buchanani) abound everywhere, as do also innumerable other varieties much esteemed by the Bengalis, prawns and crabs are caught in myriads The mahseer is found in the higher reaches of the rivers which debouch from the Himalayas, and in some of the rivers of the Chota Nagpur plateau

The Bengali is a clever fisherman In the Bay of Bengal he practises deep-sea fishing, drying his catch ashore on stakes driven into some sandy beach The larger rivers are rawled from a sailing boat, and the smaller streams are fished from weirs The tanks and ditches are periodically dragged, the fish at other times being angled or caught in a cast-net Every streamlet is studded with hundreds of wicker fish-traps, while prawn cages are ubiquitous The wonder is that any living fish escapes, so persistent and remorseless is the hunt for the finny tribe Every other interest is subordinated to its pursuit, and not only is navigation impeded, but the drainage of the country is blocked by the obstruction of every channel and outlet.

The right of fishery in all but the largest rivers has generally been alienated by Government to private persons, having been included in the "assets" on which the permanent settlement of estates was based, but in some cases the fishery itself is a separate "estate"

In tanks the right of fishing vests in the owner or occupant, in the Bay and large rivers fishing is free to all

Altogether 644,000 persons in Bengal subsist by fishing, or double the number subsisting by pasture Nor is this to be wondered at, considering the nature of the country and the resources, even though imperfectly developed of its rivers, its estuaries and the sea board In addition, moreover, to those actively engaged in fishing, there are 324,000 maintained by the sale of fish, so that the total number supported by catching and selling fish is very little under 1 million, or 2 per cent of the total population Fishing is in Bengal not considered an honourable reputation, and the ambition of fishing castes is to attain greater respectability by becoming cultivators As it is, one in every twelve of those whose principal occupation is fishing also cultivates some land in Bengal, and one in six in Bihar and Orissa

Burma.

The fisheries of Burma are important financially and otherwise. From time immemorial the exclusive right of fishing in certain classes of inland waters has belonged to the Government, and this right has been perpetuated in various fishery enactments, the latest of which is the Burma Fisheries Act of 1905 Fishing is also carried on along the coast, but the sea fisheries absorb but a small portion of industry Most of the fishermen labour in the streams and pools, which abound particularly in the delta Districts The right to work these fisheries, mentioned in the enactments alluded to above, is usually sold at auction, and productive inland waters of this kind often fetch very considerable sums River fishing is largely carried on by means of nets and generally yields revenue in the shape of licence fees for each net or other fishing implement used. Here and there along the coast are turtle banks which yield a profit to Government In the extreme south the waters of the Mergui Archipelago afford a rich harvest of fish and prawns, mother-of-pearl shells and their substitutes, green snails and trochas, shark-fins, fish-maws, and beche-de-mer Pearling with diving apparatus was introduced by Australians with Filipino and Japanese divers in 1893 They worked mainly for the shell, it being impossible for them to keep an effective check on the divers as regards the pearls After about five years, when the yield of shell had decreased, they all left The industry was then carried on by the Burmese

Bombay.

The Bombay sea fisheries are important and give employment to numerous castes, chief of which are the Kolis Pomfret, sole, stone, and lady-fish are sold fresh, while others, such as the bombil, are salted and dried Large quantities of small fry are sold as manure The palla, found in the Indus, and the maral and mahseer are the principal fresh-water fish.

Sea-fishing is carried on by the Muhana tribe of Musalmans, who reside for the most part in hamlets near Karachi. The principal fish caught on the coast are sharks, rays, and skates. The pearl oyster is found at several

places, and the Mirs conducted pearl operations on their own account Under British rule, the right has been let for a small sum, but the pearls are very inferior in size and quality, so that the industry has greatly declined during the last thirty years At present practically no pearl fishing is carried on Considerable fisheries also exist in the river Indus, chiefly for the fish known as palla, which are annually leased out by Government for about 20,000

But for a province with such a length of sea board and with the estuary of the Indus within its borders the fishing population is singularly small The fishing boats and appliances generally are very small and the fishermen do not go out in rough weather The best fishing season is the cold weather months of December, January and February, and it is probable that with such a very brief season the harvest of the sea is not sufficient to support a larger population The fishing castes frequently desert their caste occupation for others, according to the 1911 census report When the two groups, fishermen and fish dealers, are amalgamated there is a decrease of 9,000 in the aggregate, which can only be explained by their deserting their ancestral occupation

The Government of Baroda, a State lying within the borders of the Bombay Presidency being desirous of introducing oyster culture into the coast districts of their State, have delegated a student to Pulicat, where the Madras Fisheries Department are engaged in similar work, and he is receiving practical instruction

Madras.

The Madras irrigation tanks usually contain coarse fish, the right of netting which is disposed of annually The sea-fisheries along the coast employ thousands of persons, and the salting of the catches is a very considerable industry The development of the fisheries of the Presidency is now under investigation by Government Fish-curing is carried on in special yards under Government supervision, and is an important industry The report of the Madras Fishery Department for 1913-14 states that the principal operations in hand during the year were the West Coast station at Tanur for experimental curing, canning and the production of fish oil and guano, the oyster farm at Pulicat, the Sunkesula fish farm, the stocking of certain tanks, the preparation of important pisciculture projects, including the Tuticorin marine fish farm, the Nellore carp and murrel farm, the Colair Lake hilsa hatchery and murrel farm, the acclimatisation of tench on the plains, etc , pearl and chank fishery, work in anti-malarial operations such as the breeding and distribution of larvicidal fish, the conservation of the upper waters of the Bhavani and Moyar on the lower slopes of the Nilgiris, the conservation and development of the trout in the Upper Nilgiris, and work by the newly appointed Oil Chemist

At Tanur the percentage of first-class yellow oil now obtained averages above 50 per cent of the outturn. This oil was recently described by a European buying firm as "unique" by reason of its purity, colour and slight odour The Oil Chemist attached to the department has also given it a high technical value The profits ordinarily obtainable may be gauged by the fact that as against the single factory of 1908-09 there were at the close of the year no less than 211 private factories in Malabar and South Canara, the former district having two-thirds of the number

The quantity of fish guano (that is, the dried product obtained from the boiled fish) from this part exported by sea alone increased—notwithstanding the shortness, etc , of the season—to 4,726 tons, as against 1,872 in the previous year The exports by road and rail are not known The above weight of guano represent at least 25,000 tons of raw fish, so that the new method, due entirely to the work of the Department, is now taking an appreciable share in the fish manure trade, while the oils represents a gain hitherto lost The oil export by sea were 1,511 tons, of which above half went to Germany The guano is so greatly in demand in Ceylon, Japan, etc , that unfortunately it does not remain in the country to fertilise Indian crops It is for the Agricultural Department to assist in retaining this valuable fertiliser for Indian fields

Fish meal or scrap is very largely used in western countries as food for cattle, poultry, etc Correspondence ensued in 1913 with the College of Agriculture at Coimbatore and a half-ton parcel of lightly salted and dried lean sardine was sent to the College in April, 1913 The experiments conducted there are said to have been very successful The success or otherwise of the food turns largely on the question of price, which is very variable

In 1912-13 instructions were sent out from Cornwall to treat fat sardines as pilchards, *viz* , to cure and harden the ungutted fish by several weeks in heavy salt (1 lb salt to 3 of fish) and then to submit them to pressure in barrels when much of the oil is extracted, and the fish remain as a hard mass in the barrels. These are largely exported to Italy It was found that the method was successful and a very good oil was obtained

An inspection of the Palk Bay waters (between India and Ceylon) near Tondi resulted in the discovery of a fairly mature bed of oysters, estimated at twenty millions in number The fact is remarkable because no pearl fishery or pearl oyster bed has ever been known before in the Palk Bay, which is north of the Pamban channel, all fisheries having hitherto taken place to the south in the Gulf of Manaar, where alone pearl oyster beds have been worked from time immemorial There was drawn up during the year a scheme for cultivating the pearl oyster under controllable conditions in a regular farm, and for inducing the growth of pearls, both attached and free, in these controlled oysters From Japanese facts it is almost certain that the farm will be very lucrative, even if only "attached" pearls are grown, but the Department are sanguine of success in inducing the growth of the more valuable "free" pearls, and have already forwarded a paper to the Linnœan Society with specimens of first results in this direction.

Tata Iron and Steel Co., Ltd.

The Tata Iron and Steel undertaking is the greatest of the modern industrial enterprises in India and will rank with the large concerns of the kind in Europe and America. This gigantic project owed its inception to the genius and enterprise of the late Mr Jamsetjee Tata of the firm of Messrs Tata Sons & Co Before the formation of the Company the best brains of Europe and America were utilised in examining into the possibility of establishing in India a great iron and steel industry on a paying basis, and no efforts were spared to render the investigation as thorough as possible No less than Rs 5,50,009 were spent in the investigation before Messrs Tata Sons & Co established to their satisfaction that such works could be erected in India with every reasonable prospect of success The site eventually fixed upon was at Sakchi, a village in the Singhbhum District of Chota Nagpur, some two miles from the station of Kalimati, on the Bengal-Nagpur Railway

Within reasonable distance of Sakchi, which bids fair to become the Pittsburg of India, very large deposits of high grade iron ore were discovered in proximity to coal of a suitable coking character for the manufacture of pig iron at a very low figure Two rich fields containing very large supplies of this ore were secured on suitable leases by Messrs Tata Sons & Co, one situated in the state of Mourbhanj and the other in the Raipur district, the intention being to limit operations for the present to the Mourbhanj hills, in which 7,000,000 tons of ore had been proved to exist on the lower ridges alone Numerous analyses have proved this ore to contain on an average over 60 per cent of metallic iron The royalties payable under the leases, based on an annual output of 200,000 tons, average 2 625 annas per ton for the first 30 years, and 5 annas per ton for the succeeding 30 years These ore beds are some 40 miles by rail from the site of the company's works, and the ore is delivered at the rate of about Rs 2–4–0 per ton

Messrs Tata Sons & Co received from the Company in full settlement for the transfer of all mining rights, concessions, leases, etc, which they had acquired, and in full settlement of all expenses of investigation incurred by them prior to the formation of the Company, 20,000 fully paid-up Ordinary shares of Rs 75 each, equivalent to a payment of Rs 15,00,000 and in addition a lump sum payment of Rs 5,25,000 in cash In addition to these payments the syndicate of gentlemen who were instrumental in the actual formation of the Company received as remuneration for their services 1,300 fully paid-up Ordinary shares, equivalent to a payment of Rs 99,750

Sakchi Works.

The Company's works are designed for an annual output of 120,000 tons of pig iron, and the conversion of 85,000 tons thereof into 72,000 tons of finished steel The average imports into India of iron and steel of the classes which it is intended to produce amount at the present time to approximately 450,000 tons per annum, so that the company has at its doors a market largely in excess of its present productive capacity In addition to the sale of its manufactured products, it is hoped that a further source of revenue may be found in the export of a portion of the company's extensive deposits of high grade ore, which can be placed f o b at Calcutta at the very moderate cost of Rs 4–2–0 per ton approximately On all ore sold as ore or exported, Messrs Tata Sons & Co are entitled to a royalty of 4 annas a ton The company further possesses considerable manganese properties at Ramnama in the Central Provinces, which will shortly be connected up by rail with the Bengal-Nagpur Railway, from which it is hoped to secure a considerable revenue

The following concessions were granted by the Government of India to the Company —

(1) The purchase by the State of 20,000 tons of steel rails annually for a period of ten years, subject to the condition that the rails comply with the Government specification and that the prices be not more than the prices at which similar rails could be delivered c i f if imported into India

(2) A reduced rate of 1–25 of a pie per maund per mile, equivalent to ·15 of an anna per ton mile, on all materials and plant required for construction, and on all raw material to the works, subject to a minimum mileage charge and to revision at the end of ten years The reduced rate has also been made applicable to all finished products and bye-products despatched for shipment from Calcutta

The entire cost of the works, inclusive of the purchase of mining rights, collieries, and all charges incurred in the construction of the town of Sakchi, for the housing of the small army of the Company's employees, was put down at Rs 2,40,00,000, and it was estimated that on the average prices ruling during the ten years 1896 to 1905 the manufacturing profit, assuming a sale of 35,000 tons of pig iron and 72,000 tons of finished steel, would, after meeting working expenses, depreciations, etc, amount to Rs 24,15,000 This sum, it was calculated, would, after meeting interest on debentures and commission payable to the Managing Agents, enable the Company to pay the stipulated dividends of 6 per cent on the preference capital, 8 per cent on the ordinary capital, and 25 per cent on the deferred capital, and leave a surplus of approximately Rs 7,15,000 for distribution in equal shares between the ordinary and the deferred capital.

Early Operations.

The Company started operations in August, 1907, and the construction and equipment of the work were regarded as practically completed by the end of January, 1913, at a total capital outlay on that date of Rs 21,00,000

The blast furnaces worked well from the start and turned out pig iron of excellent quality, The steel furnaces gave a considerable amount of initial trouble, but these difficulties have been completely overcome, and the directors anticipate that there will be no difficulty

in producing an output of 7,000 tons a month of steel, which will bear comparison with good British steel Numerous orders for the Company's manufactured products were early reported to be coming in from all parts of the East, the largest customer being Japan

The Company was registered on 26th August 1907 The Directors are Sir D J Tata, Kt (Tata Sons & Co) Special Director, *Chairman*, Sir Sassoon David, Bart (Sassoon J David & Co), Sir Cowasjee Jehangir, Bart (Sir J Cowasjee Jehangir & Co), Sir Vithaldas Damodhar Thackersey, Kt (Thackersey Moolji & Co) Mr Gordhandas Khattau (Khattau Muckanji & Co), The Hon'ble Sir Fazulbhoy Currimbhoy Ebrahim, Kt (Currimbhoy Ebrahim & Co), Mr Narottum Morarjee Goculdas (Morarjee Goculdas & Co), Mr M A Tana (of Bhavnagar State), Mr C V Mehta, (Vijbhucandas Atmaram & Co), Sir Shapurji B Broacha Kt (Tullockchand and Shapurji) (Debenture Director), Mr R D Tata (Tata Sons & Co), Mr. A J Pilmoria (Tata Sons & Co) (Special Director) Managing Agents—Messrs Tata Sons & Co

The following figures explain the financial arrangements of the Company —

Capital authorised and issued—Rs 2 31,75 000 Ordinary capital—Rs 1,50,00 000 Preference capital—Rs 75,00,000 Deferred capital—Rs 6,75,000 Capital subscribed on the 30th June, 1914 —Rs 2,15 57,700 Ordinary capital —Rs 1 34,00,250 Preference capital—Rs 72,82 450 Deferred capital—Rs 6,75 000 Amount called up Rs 2,30 80,575 Ordinary shares, Rs 1,49,46,675 Preference shares, Rs 74,58 900 Deferred shares, Rs 6,75,000 In addition Debenture capital to the extent of Rs 60,00,000 was issued

Present Position.

The eight report of the Tata Iron and Steel Company, issued in November 1914 showed a net profit during the year ending 30th June, 1914, amounting to Rs 22,63,779-12-3, which with the sum of Rs 71,298-8-10 brought forward from the preceding year's account, made a total sum of Rs 23,35,078-5-1 Dividend was paid on Preference shares for the twelve months ending 30th June, 1914, at the rate of six per cent per annum less income-tax, and on Ordinary shares at the rate of 6% per annum The report stated that arrangements have been made for the erection of bye-product recovery coke ovens for the production of additional coke, and for certain very necessary additions and alterations in some departments of the Works Improvements were effected in the quality and out-put of steel during the year Owing to the outbreak of War between Great Britain and Germany, it was at first feared that the German crew employed at the Steel Works of the company at Sakchi, would leave their posts to return to their country But it was possible to retain the entire German crew at the Works by permission of the Government of India

During the year exploration work has been carried on in various parts of India with the view of making the company independent of European supplies

An area containing magnesite and chromite in Mysore State has been taken up and it is anticipated that the company will be able to have magnesite bricks for the open hearth steel furnaces manufactured in India An engineering party has been engaged during the year in the completion of the Mourbhanj iron ore surveys and in a calculation of the tonnage available in the first three deposits owned by the company Additional test pits have been sunk and revised figures at Gurumahisini alone indicate the existence of 50% more iron ore than was originally calculated

Between three and four hundred tons of Fluorspar are used annually in the manufacture of steel Heretofore this material has come from Europe The company are now investigating deposits in Rajputana which give promise of supplying our requirements of this material

The annual consumption of fire-bricks imported from Europe has been approximately 1½ million Efforts have been directed to increase the consumption of local bricks and decrease imported bricks Quite recently the company secured favourable prices from Japan on silica bricks and are hopeful of material economy in this direction Deposits of fire-clay and of silica have been examined and analysed with the view of assisting local manufacturers in making the desired quality and it is probable that in the near future the company will enter into the manufacture of their own fire-bricks The company are preparing to utilize blast furnace, a waste product, in the manufacture of slag-bricks by mixing granulated slag with lime These bricks are estimated to cost about half of the present price of red brick and can be used for all ordinary purposes The utilization of another bye-product of the Company has been under investigation, *viz*, the basic slag of the open hearth furnaces Owing to the low percentage of phosphorus in the company's pig iron, their basic slags do not contain the usual high percentage of phosphorus, but they contain enough to be of some value as a fertilizer when properly ground and prepared for the soil

During the past year there has been very great depression in both European and American markets, but more particularly has this been the case in Japan, which is one of the company's largest consumers of pig iron The price of pig iron was fair at the commencement of the year, but constantly dropped until November, reaching its low point and practically keeping at this level until the end of the fiscal year The company have added Scotland, Italy, and the Philippine Islands to the list of countries to which their products are being shipped

The Chairman of the company stated at the annual meeting in November 1914 "So far the war has not affected us prejudicially, on the contrary to a certain extent it might be said that the stoppage of imports of iron and steel goods from Europe has given an impetus to our products which are being more actively inquired for from many remote parts of this country The war has taught us one lesson, namely, to endeavour to be self-contained as much as possible and to be independent of imported foreign material . . Altogether we are on the way to make our works more self-reliant than hitherto. Fortunately the war

has so upset the ocean freight situation that it is not possible for our buyers abroad to make fresh purchases of our products, seeing that we are unable to promise regular shipments even against existing orders but we are trying in various directions to minimise the interruption to the regular movement of our products"

The daily average number of employees, men and women, was—during the 1st half year, 9,507, during the 2nd half year, 7,642. The number of European covenanted hands is 135, and the number of local European employees is 50 The balance of the labour is Indian In addition to the labour employed at Sakchi mentioned above, the Company gives employment to approximately 2,200 labourers at Gurumaishmi, 1,900 at Panposh 1,000 at Chaitodih and Bhelatand

Bombay Hydro-Electric Scheme.

The Tata Hydro-Electric Power Supply Company, Limited, was founded in November, 1910, with the friendly encouragement of the Bombay Government, to exploit the possibilities of the Western Ghats, 50 miles distant from Bombay, with their heavy and unfailing monsoon rainfall, in order to provide a great supply of electric energy to the City of Bombay, where the great and increasing industrial developments offer a large field for its use The company was formed primarily to acquire and work the concession and license for the supply of electricity in Bombay conferred upon Messrs Dorabji Jamsetji Tata and Ruttonji Jamsetji Tata by the Government of Bombay in March, 1907 The license applies to the town and Island generally, but excludes every cantonment, fortress, arsenal, factory, dockyard, camp, building or other place in the occupation of Government for naval or military purposes The license, including all rights and concession incidental to it, was transferred to the company for the sum of Rs 12 50,000 in 1,250 fully paid up ordinary shares of the company

Capital authorised—Rs 2 00,00 000 (Ordinary shares—Rs 1 00,00 000 Preference shares—Rs 1,00,00,000) Capital issued—Rs 1,60,67,000 (Ordinary shares—Rs 87,48 000 Preference shares—Rs 73,19,000) In addition, debenture capital to the extent of Rs 60,00,000 has been issued

The qualification of every Director of the company, the Special Directors and the debenture Director is the holding of shares in the company to the nominal value of Rs 30,000 Messrs Tata Sons & Co, the Managing Agents of the company, are appointed as such for a term of 18 years, from the date of the registration of the company, and it is provided that during such time as they are Managing Agents, one member of their firm shall be *ex-officio*, a Director of the company and shall also be *ex-officio* the Chairman of the Directors Further, so long as Messrs Tata hold shares in the capital of the company to the nominal value of Rs. 10,00,000, they have the right to appoint a second Special Director, whether a member of their firm or not Further, every shareholder of the company holding in his own right shares to the nominal value of Rs 10,00,000 has the right to appoint a Special Director, to remove such Director and to appoint another in his place. Similarly, the debenture holders have the right to appoint a Director, or remove such Director, or to appoint another in his place. A Director who is out of India may, with the approval of the Directors, appoint any qualified person to be an alternate Director during his absence out of India

The following are the present Directors — Sir D J Tata, Kt (Tata Sons & Co), *Chairman*, Sir Sassoon David, Bart (Sassoon J David & Co), Sir Shapurji B Broacha, Kt (Tullockchand & Shapurji), The Hon'ble Mr Lalubhai Samaldas, C I E, Mr M A Tana (of Bhavnagar State), Mr A N Datar (of Baroda State), Mr H J Bhabha (late of Mysore State), Mr Ratan Tata (Tata Sons & Co), Mr R D Tata (Tata Sons & Co), Sir Vithaldas Damodar Thackersey, Kt (Thackersey Mooljee Sons & Co), Mr Narottam Morarjee Goculdas (Morarjee Goculdas & Co), Mr A J Bilimoria Tata Sons & Co)

The company's works are approaching completion as is shown in the detailed report published below The hydro-electric engineering works in connection with the project are situated at Lanovla, above the Bhor Ghat, and near Karjat, below Khandala, where the turbine house and generating station have been built The water storage works involved the building of two great dams—the Walwhan and Shirawta respectively—with extensive tunnelling and aqueducts, and a pipe line down the precipitous side of the Ghats The company received applications for some 3,000 h p outside the limits of the Island of Bombay and accordingly decided to extend their operations so as to meet this demand, and have applied for a license for the purpose In order to provide funds for the additional expenditure involved, the capital of the company was in 1912 increased by Rs 25,00,000 to its present figure by the issue of 1,000 additional Ordinary shares of Rs 1,000 each, 1,000 additional Preference shares of Rs 1,000 each, and 500 additional debentures of Rs 1,000 each The Ordinary shares were issued at a premium of Rs 100 each and the preference at a premium of Rs 50 each, the total premium received, amounting to Rs 1,50,000, being placed to reserve Interest at the rate of 4 per cent per annum is being paid, with the consent of Government, by way of dividend to shareholders of both Ordinary and Preference shares during the construction of the company's works, as a charge against capital (This payment may not extend beyond the close of the half-year next after the half-year during which the works of the company are actually completed)

The following is the state of progress as shown by the official reports of the Company

up to December, 1914 The dam and other works of the Lonavla Lake are sufficiently forward for practically full storage and use The dam at Walwhan Lake is also nearly completed The sluices have been erected Both lakes are now being used for storage and whereas it was originally estimated that 62 per cent of the rainfall in the catchment area would be collected, the experience of the past two monsoons shows that the proportion of rainfall running off is 80 per cent It appears that the cool surface of the lakes, condensing the damp air, causes much heavier rain to fall from them than formerly fell on the area they occupy The general conditions of the lakes and dams have proved completely satisfactory

Throughout the scheme, the company have now practically finished the first portion of the construction period and they are about to enter on a period of operation The scheme has passed the critical stage and is emerging from the ordeal with every prospect of success The whole of the Company's available supply of power has been disposed of The total amount of i h p sold from the original installation and the Shirawta extensions amounts to approximately 50,000 Thirty-five cotton mills and three flour mills have contracted to take power from the company for a period of ten years Cables underground to the mills have been laid for those consumers who are to take power from the original installation The mill equipment work is also well forward Complete motor equipments have been delivered for nineteen mills and partial deliveries have been made for several others There will be no difficulty in utilizing current when the supply begins

There remain many prospective buyers of electrical energy and the completion of the company's full scheme, calculating the Shirawta Lake even up to its full height, will barely suffice to meet all such demands Besides the Bombay cotton mills, which alone would require about 100,000 horse power, there are the tramways with possibilities of suburban extensions Then there is the Port Trust with its docks and railways in addition to the two large main line railway companies with difficult traction problems and their workshops requiring power Modern practice has so conclusively proved the benefits of the electric drive that before long it is a safe thing to predict a large demand for electrification in Bombay amongst these consumers This total demand is roughly estimated at about 160 000 h p

The full capacity of the company's present lakes cannot possibly meet such a large demand, and if they look to supplying it at some future date, it is necessary for them to go further afield and find fresh sources of power which could supplement their present capacity and also serve as a "standby" in case of need The Board having accepted this view, it was resolved to ask a responsible officer to carry out investigations with a view to finding a suitable site in the vicinity of Bombay possessing advantages similar to their present scheme The work was entrusted to Mr Gibbs, the General Manager of the company, and he has been successful in discovering other valleys in the Ghauts which are highly promising With the sanction of Government, survey parties have been at work making careful investigations and the whole problem is being carefully considered by expert advisers

FACTORIES INSPECTED UNDER THE FACTORY ACT.

Province	Number of Factories working and liable to be inspected	Average Number of Hands employed daily	Number of Persons convicted for breach of Act	Number of Accidents Reported			
				Fatal	Serious	Minor	Total
Bengal	320	643,983	16	38	40	541	982
Bihar and Orissa	25	16,634		6	65	110	181
United Provinces	169	48,052	5	7	97	194	298
Punjab	205	28,184	1	8	46	204	258
North-West Frontier Province	5	235		1	1	1	3
Burma	280	43,784	2	9	129	247	385
Central Provinces and Berar	429	41,838	15	12	50	105	167
Madras	203	57,309	2	4	48	256	308
Bombay	585	237,344	25	20	126	1,353	1,499
Assam	18	2,971		3		2	5
Ajmer-Merwara	9	11,610			20	116	136
Total in 1911	2,248	791,944	66	108	985	3 129	4,222

The Opium Trade.

Two descriptions of opium must be distinguished *Bengal* opium which is manufactured from poppy grown in the United Provinces, and *Malwa* opium which is almost entirely produced in certain Native States in Central India and Rajputana

Bengal Opium—Cultivation of poppy is only permitted under licence The cultivator to whom advances are made by Government free of interest is required to sell the whole of his production to the Opium Factory at Ghazipur at a rate fixed by Government, now Rs 6 per seer of 70° consistency The area licensed for cultivation has in recent years been much reduced as a consequence of the agreement between the Government of India and the Chinese Government, and is now restricted to the United Provinces The following are the figures of the area under cultivation and of production

—	*Average under cultivation*	*Maunds of opium produced*	*Number of chests made*
1910–11	362,868	44,926	23,611
1909–10	354,577	67,666	36,172
1908– 9	361,832	61,803	33,895
1907– 8	488,518	71,340	51 230
1906– 7	564,585	93,154	44,389

At the Factory two classes of opium are manufactured

(1) "Provision" opium intended for export to foreign countries This opium is made up in balls or cakes each weighing 3 5 lbs., 70 cakes weighing 140½ lbs being packed in a chest

(2) "Excise" opium intended for consumption in British India This is made up in cubic packets each weighing one seer, 60 packets being packed in one chest It is of higher consistency than "provision" opium

"Provision" opium is sold by public auction in Calcutta, the quantity to be sold being fixed by Government This quantity has been reduced in recent years in accordance with the agreement with China, the figures being 15,440 chests in 1911 and 6,700 chests in 1912

Statistics of Trade.

The difference between the cost of manufacture and the price realised at these sales may be regarded as the duty levied by Government —

—	*Number of chests sold*	*Average price realised at auction sales per chest*	*Average cost of manufacture per chest*
1910–11	37,560	2,890	525
1909–10	42,300	1,612	515
1908– 9	45,900	1,383	525
1907– 8	48,900	1,350	503
1906– 7	52,800	1,390	538

The exports of Bengal opium to foreign countries have been in recent years —

	Number of chests	*Value*
		Rs
1912–13	19,824	56,956,940
1911–12..	24,162	67,148,206
1910–11 .	37,121	106,139,828

Malwa Opium—The poppy from which Malwa opium is manufactured is grown chiefly in the Native States of Indore, Gwalior, Bhopal, Jaora, Dhar, Rutlam, Mewar and Kotah The British Government has no concern with the cultivation of the poppy or the manufacture of the opium but it regulates, under the system explained below, the import of Malwa opium into, and the transport through, its territories As the chief market for Malwa opium is China, and as the States in which the drug is produced have no access to the sea, except through British territory, the British Government are able to impose a duty on the importation of the drug on its way to Bombay for exportation by sea

No statistics of cultivation or production are available The poppy is sown in November, the plants flower in February, and by the end of March the whole of the opium has been collected by the cultivators who sell the raw opium to the village bankers It is then bought up by the large dealers who make it up into balls of about twelve ounces and store it until it is ready for export, usually in September or October The opium is of 90° to 95° consistency and is packed in half chests considerable drying takes place in the case of new opium while transported to Bombay

To enable Malwa opium to reach Bombay a pass from the Opium Agent, or his Deputies, is required This pass is not granted until the duty imposed by the Government of India has been paid This duty was until 1912 at the rate of Rs 600 per chest but was raised to Rs 1,200 in that year consequent on the introduction of a system similar to that applicable to Bengal opium Under this system the Collector of Customs, Bombay, sells the right of exporting opium to the highest bidder at monthly auction sales On payment of the price bid and of duty at the enhanced rate the bidder is given a certificate authorising him to import opium from Malwa The importation of Malwa opium into British India is now practically restricted to the quantity which may be exported to China This quantity is fixed by Government in pursuance of its agreement with China, the figures being 12,100, 15,580 and 14,560 chests respectively in the calendar years 1910, 1911 and 1912

Practically the whole of the Malwa opium exported from Bombay goes to China. There is no market for it in the Straits Settlements. A few chests annually are shipped to Zanzibar. The quantity and value of exports from Bombay in the last three years were as follows —

	Quantity.	*Value.*
		Rs
1912–13..	11,205½ chests	5,36,11,292
1911–12..	14,039½ „	6,37,99,491
1910–11..	6,721½ „	2,12,51,703

Revenue—The revenue derived by the Government of India from opium in the last three years is as follows —

	£
1910–11	7,521,962
1911–12	5,961,278
1912–13	5,062,800 (Revised Estimate)
1913–14	1,445,000 (Budget Estimate)

Agreement with China—The fluctuations in the revenue derived from opium in the last three years are directly attributable to the trade conditions arising out of the limitation of opium exports In 1907 being satisfied of the genuineness of the efforts of the Chinese Government to suppress the habit of consuming opium in China, the Government of India agreed to co-operate by gradually restricting the amount of opium exported from India to China In 1908 an arrangement was concluded by which the total quantity of opium exported from India was to be reduced annually by 5,100 chests from an assumed standard of 67,000 chests Under a further agreement, signed in May 1911, the cessation of the trade was to be accelerated on evidence being shown of the suppression of the native production of opium in China, and in accordance with this agreement a further limitation was placed on exports to Chinese ports The reduction of exports led to an increase in the price of the drug in China and a corresponding rise in the price obtained in India at the auction sales For some considerable time, however, in 1912 the trade in China was paralysed by the imposition by Provincial Governors in defiance of instructions from the Central Government of restrictions on the importation and sale of Indian opium Stocks accumulated rapidly at Shanghai and Hongkong and the position in December 1912 had become so acute that a strong and influential demand was made on the Government of India to relieve the situation by the suspension of sales Sales were accordingly postponed both of Bengal and Malwa opium and in order to afford the Malwa trade the most complete relief, the Government of India undertook to purchase for its own use 11,253 chests of Malwa opium which remained to be exported in 1913 The present position is that the export trade to China is to cease in 1915 Exports of Malwa opium to China ceased at the end of 1913 Exports to countries other than China will, of course, not be directly affected

HIDES, SKINS, AND LEATHER.

India's local manufactures of skins and cather have steadily increased in recent years Thus the exports of raw hides and skins has risen from £5,559,103 in 1908-09 to £7,845,484 in 1912-13 and the exports of leather from £2,761,169 to £3,082,498 in 1912-13

The trade in hides and skins, as also the craft in leather manufacture, are in the hands either of Mahomedans or of low caste Hindus, and are on that account participated in by a comparatively small community The traffic is subject to considerable fluctuations concomitant with the vicissitudes of the seasons In famine years for instance the exports of untanned hides rise to an abnormal figure The traffic is also peculiarly affected by the difficulty of obtaining capital and by the religious objection which assigns it to a position of degradation and neglect it has thus become a monopoly within a restricted community and suffers from the loss of competition and popular interest and favour

No large industry has changed more rapidly and completely than that of leather By the **crome process**, for example, superior leather may be produced from the strongest buffalo hides in seven days, from cowhide in twenty-four hours, and from sheep and goat skins in six to eight hours, and these operations formerly took thirty days or as much as eighteen months Of these changes the native tanners of India were slow to take advantage, but in spite of general backwardness the leather produced by some of the tanneries, especially those under European management, is in certain respects equal to the best imported articles But as a result of India being slow to adopt up-to-date methods, there has been a decline in the demand for Indian dressed skins, while the demand for raw skins has increased considerably The chief tanneries are situated at Cawnpore, Calcutta and Bombay

Indigenous methods—India possesses a large selection of excellent tanning materials such as Acacia pods and bark, Indian sumach, the Tanner's cassia, Mangroves, and Myrabolans By these and such like materials and by various methods and contrivances, hides and skins are extensively cured and tanned and the leather worked up in response to an immense, though purely local, demand But the inferior quality of the leather so used by effete methods may be illustrated by the fact that the articles produced rarely fetch much more than one-fourth the value of the corresponding articles made of imported or Cawnpore (European factory) leather

BREWERIES.

Statistics compiled from official returns show that there were, in 1912, 22 **breweries** in British India, of which one did not work during the year Fifteen of these are private property and seven are owned by six joint-stock companies with a nominal capital of Rs 26,71,000, of which Rs 22,26,260 was paid up at the end of 1912-13 Eight of the breweries are located at stations in the Himalayas from Murree to Darjeeling The largest brewery is the one at Murree, the Bangalore, Solon, Rawalpindi, Kasauli, Poona, and Mandalay, breweries standing next in the order shown **Production** was largest in 1902, since when it has tended to decline, while imports of foreign beer have increased proportionately, in the year 1907, the process was reversed, internal production having advanced slightly and imports decreased.

Since then there has been a steady decrease in the production, while the imports, after declining up to 1911 (with a small set-back in 1910) recovered appreciably in 1912 The quantity in gallons of beer brewed in India and imported compare as follows —

	Brewed in India	Imported
1907	5,610,121	4,805,640
1908	5,185 619	4, 384,938
1909	4,824,050	1,286,811
1910	4,191,493	4,354,402
1911	4,083,806	4,180 837
1912	3,849,060	4,521,260

A substantial quantity of beer produced locally is consumed by the British troops in India In 1907 the Army Commissariat purchased some 38 per cent of the total production and the average purchases in the five years 1903-1907 amounted to 2,633,616 gallons yearly From the 1st January, 1908, the contracts with Indian breweries for the supply of malt liquor to British troops have been discontinued, each British regiment being left free to make its own arrangements to obtain the necessary supply, as a result, the figures of Army consumption are no longer readily available

WILD BIRDS' PLUMAGE.

The Bill for prohibiting the importation into England of wild birds' plumage, which was introduced into Parliament in 1913, was the occasion of a fierce controversy on the nature of the plumage traffic But organised opposition to the Bill failed to convince the public that the plumage trade was not one of great cruelty Among well-authenticated cases from India that proves its cruelty was one from Karachi, in 1913, in which two men were fined for sewing up the eyes of birds so that they should not fight in their cages It was stated that this was a common practice of fishermen in Sind, who breed birds and export their feathers to England This according to *The Times*, is not only another apparent example of the way in which the prohibition on the export of plumage from India is notoriously evaded by smuggling into the open market of England, but shows how easily abuses might arise under any system which gave a general sanction to feather-farming All legitimate methods of breeding birds for their plumage can be safeguarded as definite exceptions under an Act prohibiting importation, and only the exclusion by law of all plumage not so specified can put England abreast of the United States and of her own daughter Dominions in the suppression of a barbarous industry

Plumage birds —The birds most killed on account of their plumage in India are paddy birds, kingfishers, bustards, junglefowl, egrets, pheasants, paroquets, peafowl, and hoopoes Perhaps the most extensively killed in the past has been the Blue Jay (Coracias Indica) The smaller Egret is met with throughout India and Northern Burma It is a pure white slim heron which develops during the breeding season a dorsal train of feathers, which elongates and becomes "decomposed" as it is expressed, that is to say, the barbs are separate and distinct from each other, thus forming the ornamental plume or aigrette for which these birds are much sought after and ruthlessly destroyed Thirty years ago the exports were valued at over six lakhs in one year, but since 1895 the export trade has steadily diminished until now it is almost non-existent

Legislation —Indian legislation on the subject will be studied with interest by those who have followed the course of legislation on this subject in other countries Until 1887 no legislation was considered necessary in India An Act of that year enabled local governments and municipal and cantonment authorities to make rules prohibiting under penalties the sale or possession of wild birds recently killed or taken during their breeding seasons, and the importation into any municipal or cantonment area of the plumage of any wild birds during those seasons, and local governments were empowered to apply these provisions to animals other than birds

Afterwards in 1902 action was taken under the Sea Customs Act to prohibit the exportation of the skins and feathers of birds, except feathers of ostriches and skins and feathers exported *bona fide* as specimens illustrative of natural history Act VIII of 1912 goes much further than the previous law It schedules a list of wild birds and animals to which the Act is to apply in the first instance, enables local governments to extend this list, empowers local governments to establish "close times," presumably during the breeding seasons, in the whole of their territories or in specified areas, for wild birds and animals to which the Act applies, and imposes penalties for the capture, sale, and purchase of birds and animals in contravention of the "close time" regulations, and for the sale, purchase and possession of plumage taken from birds during the close time There is power to grant exemptions in the interests of scientific research, and there are savings for the capture or killing by any person of a wild animal in defence of himself or of any other person, and for the capture or killing of any wild bird or animal in *bona fide* defence of property

GRAIN ELEVATORS.

The question of adopting elevators for the handling of Indian grain has engaged attention for some time and has assumed increased importance in the light of the railway congestion experienced in recent years and more particularly in the grain season In the last three years great strides have been made by other countries in the adoption or perfecting of the elevator system, and a large mass of contemporary data on the subject has been brought together by the Commercial Intelligence Department Since the subject is one that cannot receive adequate consideration in India till the facts are before the public, these have been embodied in a pamphlet entitled *Indian Wheat and Grain Elevators*, by the late Mr F

Noel-Paton, Director General of Commercial Intelligence to the Government of India. The work gives full particulars regarding India's production of wheat, and shows that less than one-eighth of the crop is exported. It describes the conditions under which the grain is held and the risks that it runs. It is pointed out that the cultivator has no adequate means of preserving his wheat and that he is constrained to sell at harvest time, also that the prices then obtained by him are considerably lower than those usually current in later months. The constant nature of the European demand is explained and an attempt is made to gauge the probability that the enormously increased quantities of wheat to be expected when new irrigation tracts come into bearing would be accepted by Europe at one time and at a good price, or could be economically transported under a system in which a few months of congestion alternated with a longer period of stagnation. Figures are given which suggest that in practice the effect of equipping railways to do this is to intensify the evil and so to engage in a vicious circle. The author explains the structural nature of elevators and their functions as constituted in other countries. Particulars are given as to the laws that govern their operations in such countries.

TRADE MARKS.

The **Indian Merchandise Marks Act** (IV of 1889) was passed in 1889, but its operation in the earlier years was restricted, especially in Calcutta, in consequence of the lack of adequate Customs machinery for the examination of goods. In 1894, with the introduction of the present tariff, the Customs staff was strengthened for the examination of goods for assessment to duty, and this increase enabled examination to be made at the same time for the purposes of the Merchandise Marks Act. The Act was intended originally to prevent the fraudulent sale of goods bearing false trade marks or false trade descriptions (as of origin, quality, weight, or quantity). While the Act was before the Legislature a provision was added to require that all piece-goods should be stamped with their length in yards. In this respect these goods are an exception, for the Act does not require that other descriptions of goods should be stamped or marked, though it requires that when goods are marked the marks must be a correct description. **The number of detentions** under the Act during the twenty years ending 1912-13 has been —

Average of the five years ending		
	1897-98	1,386
" " " " "	1902-03	1,411
" " " " "	1907-08	1,198
" " " " "	1912-13	1,960

Detention is but rarely followed by confiscation, and there have been only 109 such cases during the stated twenty years. Usually, detained goods are released with a fine, and this procedure was followed in 19,282 cases out of the 29,774 detentions ordered in the same period. In 10,364 cases the detained goods were released without the infliction of a fine. In this period of twenty years 42 per cent of the detentions were on account of the application of false trade marks or false trade descriptions. In 36 per cent of the cases detention was ordered because the country of origin was either not stated or was falsely stated, and in 21 per cent because the provisions of the Act for the stamping of piece-goods had been infringed.

INDIAN COMMERCIAL CONGRESS.

A proposal was recently made by the Hon'ble Sir Fazulbhoy Currimbhoy for the holding of periodical conferences of representatives of the several Chambers of Commerce in India. The suggestion was taken up by the Indian Merchants' Chamber and Bureau in Bombay and that body forwarded to the several Chambers of Commerce and Commercial Associations a Draft Constitution of the proposed Indian Commercial Congress. The **objects of the Congress** are stated as follows —(1) The Indian Commercial Congress is founded for the purpose of promoting by all legitimate and constitutional methods the best interests of trade, commerce and manufactures of the country and all cognate matters connected therewith. (2) For the fulfilment of the objects aforesaid, the Congress shall hold its session from time to time as occasion may demand, but at least once every three years, at such place and at such date as may be determined, discuss all mercantile and industrial affairs, prepare and submit representations thereon to the Provincial Governments, or the Government of India or the Secretary of State or the British Parliament or other authorities for the removal and prevention of injurious commercial measures and the introduction of others which may be calculated to promote the general commercial and other cognate interests of the country, and otherwise to take such action as may be conducive to the accomplishment of the objects in view. The Congress is to consist of delegates from such Chambers, Associations, etc., throughout India as may be recognised in that behalf by "the Congress in open session" and these delegates shall elect a Committee of Management on which proportional representation (not yet specified) shall be assigned to principal commercial centres enumerated. The President and Vice-President are to be appointed by a Special Committee appointed by the Congress in open session.

Weights and Measures.

Indian weights and measures have never been settled upon an organised basis suitable for the widespread fluidity of commerce and trade characteristic of the modern age They vary from town to town and village to village in a way that could only work satisfactorily so long as the dealings of towns and villages were self-contained and before roads and railways opened up trade between one and the other It is pointed out that in England a hogshead of wine contains 63 gallons and a hogshead of beer only 54 gallons, that a bushel of corn weighs 46lbs in Sunderland and 240lbs in Cornwall, that the English stone weight represents 14lbs in popular estimation, but only 5lbs, if we are weighing glass, and eight for meat, but 6 lbs for cheese Similar Universities are multiplied in India by at least as many times as India is bigger than England If we take, for instance, the maund 4 denomination of weight common all over India, we shall find that in a given city there are nearly as many maunds as there are articles to weight If we consider the maund as between district and district the state of affairs is worse Thus in the United Provinces alone, the maund of sugar weighs 48½ seers in Cawnpore, 40 in Muttra, 72½ in Gorakhpur, 40 in Agra, 50 in Moradabad, 13¼ in Saharanpur, 50 in Bareilly, 16 in Fyzabad, 48½ in Shahjehanpur, 51 in Goshangunge The maund varies throughout all India from the Bengal or railway maund of 82-2/7lbs to the Factory maund of 74lbs 10oz 11drs, the Bombay maund of 28lbs, which apparently answers to the Forest Department maund in use at the Fuel Depot, and the Madras maund, which some authorities estimate at 25lbs and others at 24lbs and so on

Committees of Inquiry —These are merely typical instances which are multiplied indefinitely There are variations of every detail of weights and measures in every part of India The losses to trade arising from the confusion and the trouble which this state of things causes are heavy Municipal and commercial bodies are continually returning to the problem with a view to devising a practical scheme of reform The Supreme and Provincial Governments have made various attempts during 40 years past to solve the problem of universal units of weights and measures and commerce and trade have agitated about the question for the past century The Indian railways and Government departments adopted a standard tola (180 grains), seer (80 tolas) and maund (40 seers) and it was hoped that this would act as a successful "lead" which would gradually be followed by trade throughout the empire, but the expectation has not been realised

The Government of India considered the whole question in consultation with the provincial Governments in 1890-1894 and various special steps have at different times been taken in different parts of India The Government of Bombay appointed a committee in 1911 to make proposals for reform for the Bombay Presidency Their final report has not been published, but they presented in 1912 an ad interim report which has been issued for public discussion In brief, it points out the practical impossibility of proceeding by compulsory measures affecting the whole of India The Committee stated that over the greater part of the Bombay Presidency a standard of weights and measures would be heartily welcome by the people They thought that legislation compulsorily applied over large areas subject to many diverse conditions of trade and social life would not result in bringing about the desired reform so successfully as a "lead" supplied by local legislation based on practical experience The want of coherence, *savoir faire*, or the means of co-operation among the people at large pointed to this conclusion The Committee pointed out that a good example of the results that will follow a good lead is apparent in the East Khandesh District of the Presidency, where the District Officer, Mr Simcox gradually, during the course of three years, induced the people to adopt throughout the district uniform weights and measures, the unit of weight in this case being a tola of 180 grains But the committee abstained from recommending that the same weights and measures should be adopted over the whole Presidency, preferring that a new system started in any area should be as nearly as possible similar to the best system already prevailing there

Proposals from England —Suggestions have been made by the British Weights and Measures Association and the Decimal Association, respectively, at different times that British weights and measures and the decimal system should be introduced Both proposals fail to meet the special requirements set forth by the Bombay Committee Variations of them which have been put forward by different bodies in India in recent years are that the English pound weight and the English hundredweight should be adopted as the unit of weight for all India The argument in favour of the importation of an outside unit in this manner is that people in India will always associate with a given, familiar denomination of weight or measure the value they have been accustomed to consider in regard to it, but that if a new weight were introduced they would learn to use it in dealing with their neighbours, without the interference of anything resembling prejudice at what they might regard as an attempt to tamper with their old, traditional standards of dealing

Committee of 1913 —The whole problem was again brought under special consideration by the Government of India in October, 1913, when the following committee was appointed to inquire into the entire subject anew —

The Hon Mr S R Arthur, (*President*)
Mr C A Silberrad
Mr A Y G Campbell
Mr Rustomji Farddoonji

The Committee assembled at Bombay on November 10th afterwards proceeding to other places to obtain the opinions of the Chambers of Commerce and leading merchants and others The Committee are understood to have submitted their report which was to be be referred to local Governments and Administrations before action was taken upon it Nothing further has been published in regard to the matter.

Legislation and Inspection.

The conditions of factory labour until 1913 were regulated by the Indian Factories Act of 1881, as amended in 1891. The chief provisions of the amended Act were Local Governments were empowered to appoint inspectors of factories, and certifying surgeons to certify as to the age of children A mid-day stoppage of work was prescribed in all factories, except those worked on an approved system of shifts, and Sunday labour was prohibited, subject to certain exceptions The hours of employment for women were limited to 11, with intervals of rest amounting to at least an hour and a half, their employment between 8 p m and 5 a m was prohibited, as a general rule, except in factories worked by shifts The hours of work for children (defined as persons below the age of 14) were limited to seven, and their employment at night time was forbidden, children below the age of nine were not to be employed Provision was made for the fencing of machinery and for the promulgation of rules as to water supply, ventilation, the prevention of overcrowding, etc

Act of 1911.

The decision to undertake further legislation was arrived at after comprehensive inquiries An important factor in the case was the increasing use of electric light in the Bombay Mills, which radically changed the conditions prevailing when the Act of 1891 was passed and had abolished the security that operatives would not be employed for more than 12 hours a day on the average The question of the hours of employment in textile factories was brought into prominence by the period of prosperity that the cotton industry began to enjoy in the cold weather of 1904-05, a large number of persons operatives being regularly worked for 15 hours a day or even longer

Owing to complaints regarding the long hours worked in many mills, the Government of India in 1906 appointed a small Committee with Commander Sir H P Freer-Smith, R N, late Superintending Inspector for Dangerous Trades in England, as chairman, to conduct a preliminary inquiry into the conditions of labour in textile factories The Committee recommended that the working hours of adult males should be limited to 12 hours a day, that certificates of age and physical fitness should be required prior to half-time employment and prior to employment as an adult, that night work of women should be prohibited, and that whole-time Medical Inspectors should be appointed

The conclusions of this Committee formed the basis of an investigation, extending to all factories in India, by a representative Commission This report disclosed the existence of abuses, particularly in connection with the employment of children, and the excessive hours worked by operatives generally in textile factories. The majority of the Commission deprecated a statutory limitation of the working hours of male adults But they recommended the formation of a class of "young persons" between 14 and 17 years of age, whose hours should be limited to 12, and considered that this would indirectly secure a 12 hours' day for male adults They also recommended that the hours of work for children should be reduced from 7 to 6 hours and that the hours for women should be assimilated to those for "young persons," night work being prohibited for both classes They recommended that children should be certified as to age and physical fitness

Hours fixed.

The recommendations of the Committee and of the Commission having been considered by the Government of India and the Local Governments, a Bill was introduced in July 1908 to amend and consolidate the law relating to factories, and was finally passed into law as Act XII of 1911

The new Act extended the definition of "factory" so as to include seasonal factories working for less than four months in the year, shortened the hours within which children (and, as a general rule, women) may be employed, and further restricted the employment of women by night by allowing it only in the case of cotton-ginning and pressing factories It also contained a number of new provisions for securing the health and safety of the operatives, making inspection more effective, and securing generally the better administration of the Act The most important feature of the Act, however, was the introduction of a number of special provisions applicable only to textile factories The report of the Factory Commission showed that excessive hours were not worked except in textile factories The Act for the first time applied a statutory restriction to the hours of employment of adult males by laying down that, subject to certain exceptions, "no person shall be employed in any textile factory for more than twelve hours in any one day" It is also provided in the case of textile factories that no child may be employed for more than six hours in any one day, and that (subject to certain exceptions, among which are factories worked in accordance with an approved system of shifts) no person may be employed before 5-30 a m or after 7 p m (the new limits laid down generally for the employment of women and children) Corresponding limitations are placed on the period for which mechanical or electrical power may be used.

Factory Inspection.

The inquiries of the Factory Commission showed that the then existing system of factory inspection had not sufficed to prevent widespread evasion of the provisions of the factory law. This result was attributed to the fact that the number of full-time factory inspectors was very small, the work of inspection being to a large extent in the hands of ex-officio inspectors (District Magistrates Civil Surgeons, etc) who, as the Commission reported, had neither the time nor the special knowledge necessary for the work. In Bombay Presidency, where there were three special inspectors, it was reported that the Act was on the whole, well enforced. Steps have been taken since to reorganise the staff of whole-time inspectors of factories in India and to

increase it to a strength sufficient to cope with the work of inspecting all the factories in India The total strength of the staff is now 14, as compared with 6 at the time of the Factory Commission's report Each of the larger provinces has at least one inspector Bombay having five Except that in a few cases these officers have duties also in connection with boiler inspection, their whole time is given to factory inspection The District Magistrate remains an inspector, ex-officio, under the new Act, and other officers may be appointed additional inspectors, but it is contemplated that inspection by ex-officio inspectors will be to a large extent discontinued, or limited to special cases (For Statistics of Factories inspected see p 307)

CURRENCY WEIGHTS AND MEASURES.

As the currency of India is based upon the rupee, statements with regard to money are generally expressed in rupees, nor has it been found possible in all cases to add a conversion into sterling Down to about 1873 the gold value of the rupee (containing 165 grains of pure silver) was approximately equal to 2s, or one-tenth of a £, and for that period it is easy to convert rupees into sterling by striking off the final cipher (Rs 1,000=£100) But after 1873, owing to the depreciation of silver as compared with gold throughout the world, there came a serious and progressive fall in the exchange, until at one time the gold value of the rupee dropped as low as 1s In order to provide a remedy for the heavy loss caused to the Government of India in respect of its gold payments to be made in England, and also to relieve foreign trade and finance from the inconvenience due to constant and unforeseen fluctuations in exchange, it was resolved in 1893 to close the mints to the free coinage of silver, and thus force up the value of the rupee by restricting the circulation The intention was to raise the exchange value of the rupee to 1s 4d, and then introduce a gold standard at the rate of Rs 15=£1 From 1899 onwards the value of the rupee has been maintained, with insignificant fluctuations, at the proposed rate of 1s 4d, and consquently since that date three rupees have been equivalent to two rupees before 1873 For the intermediate period, between 1873 and 1899, it is manifestly impossible to adopt any fixed sterling value for a constantly changing rupee But since 1899, if it is desired to convert rupees into sterling, not only must the final cipher be struck off (as before 1873), but also one-third must be subtracted from the result Thus Rs 1,000=£100—⅓=(about) £67

Notation—Another matter in connection with the expression of money statements in terms of rupees requires to be explained The method of numerical notation in India differs from that which prevails throughout Europe Large numbers are not punctuated in hundreds of thousands and millions, but in lakhs and crores A **lakh** is one hundred thousand (written out as 1,00,000), and a **crore** is one hundred lakh or ten millions (written out as 1,00,00,000) Consequently, according to the exchange value of the rupee, a lakh of rupees (Rs 1,00,000) may be read as the equivalent of £10,000 before 1873, and as the equivalent of (about) £6 667 after 1899 while a crore of rupees (Rs 1,00,00,000) may similarly be read as the equivalent of £1,000,000 before 1873, and as the equivalent of (about) £666,667 after 1899

Coinage—Finally, it should be mentioned that the rupee is divided into 16 annas, a fraction commonly used for many purposes by both Natives and Europeans The anna was formerly reckoned as 1½d, it may now be considered as exactly corresponding to 1d The anna is again sub-divided into 12 pies

Weights—The various systems of weights used in India combine uniformity of scale with immense variations in the weight of units The scale used generally throughout Northern India, and less commonly in Madras and Bombay, may be thus expressed one maund 40 seers, one seer=16 chittaks or 80 tolas The actual weight of a seer varies greatly from District to District, and even from village to village, but in the standard system the tola is 180 grains Troy (the exact weight of the rupee), and the seer thus weighs 2 057 lb, and the maund 82 28 lb The standard is used in official reports

Retail—For calculating retail prices, the universal custom in India is to express them in terms of seers to the rupee Thus, when prices change what varies is not the amount of money to be paid for the same quantity, but the quantity to be obtained for the same amount of money In other words, prices in India are quantity prices, not money prices When the figure of quantity goes up, this of course means that the price has gone down, which is at first sight perplexing to an English reader It may, however, be mentioned that quantity prices are not altogether unknown in England, especially at small shops, where pennyworths of many groceries can be bought Eggs, likewise, are commonly sold at a varying number for the shilling If it be desired to convert quantity prices from Indian into English denominations without having recourse to money prices (which would often be misleading), the following scale may be adopted—based upon the assumption that a seer is exactly 2 lb, and that the value of the rupee remains constant at 1s 4d, 1 seer per rupee=(about) 3 lb for 2s, 2 seers per rupee=(about) 6 lb for 2s, and so on

The name of the unit for square measurement in India generally is the *bigha*, which varies greatly in different parts of the country But areas have been expressed in this work either in square miles or in acres

Life Insurance.

There are no publications from which a complete statistical survey of the various branches of insurance work in India can be obtained, but the official "Statements of Accounts and Abstracts of Actuarial Reports in respect of Life Assurance Companies doing business in British India," published by the Government of India, give information in regard to 73 Life Assurance Companies of which 50 are subject to all the provisions of the Indian Life Assurance Companies Act, 1912, and 23 which are partially exempt from the Indian Act on the ground that they carry on business in the United Kingdom and comply with the provisions of the British Assurance Companies Act of 1909 It should be noticed that the various pension funds connected with Government services are exempt from the compliance with the Indian Act

The oldest of the Indian Companies were established in Madras about 80 years ago Bombay has none older than the Bombay Mutual, the Oriental and the Bombay Widows' Pension Fund which were established about 40 years ago Life Assurance seems not to have been started in Bengal until much later, and it was not until 1906 that many Companies were established either in that Presidency or elsewhere in India

In his introductory note to the official publication already mentioned, Mr H G W Meikle, Actuary to the Government of India states that the total amount of the investments and other **realisable assests** of Indian Companies is worth nearly 6 crores of rupees, more than two-thirds of this, however, represent the investments of one Company, namely the Oriental of Bombay

During the period to which the accounts now published relate, ordinary Life Assurance policies for nearly 3¼ crores of rupees were issued by Indian Life Assurance Companies and the **total sum assured** under policies remaining in force at the end of the period was about 21 crores of rupees Over three quarters of this sum was under Endowment Assurance policies which provide for payment of the sum assured at the end of a stipulated period or at the death of the Life Assured if it occur previously—thereby making provision against old age as well as against early death A comparison of the figures with those of the previous year, so far as they are available, indicate a considerable increase both in the amount of insurances granted each year as well as in the total sums assured remaining in force at the end of the period

In addition to the above mentioned sums a considerable number of Life Assurance Policies of the **dividing society** type were issued Life Assurance business of this nature, where the sum assured is not fixed but depends on the division of a portion of each year's premium income amongst the claims in that period, either equally or in proportion to the total of such premiums paid under each, is unsound But it is hoped that the information to be published in the future will convince all those interested of the undesirability of continuing to issue such policies 20 Indian Companies are known to transact other business, in addition to Life Assurance Mr Meikle in his report points out various defects in the accounts of Indian Companies, and gives various explanation and suggestions in connection with the proper keeping of accounts

The following is the list of British, Colonial and Foreign Companies doing business both in the United Kingdom and in India partially exempted from the Indian Act, and the classes of business, in addition to Life Assurance, transacted by them —

Name	Place of head office	Sinking Fund or Capital redemption	Fire.	Marine	Accident	Employers' Liability	Miscellaneous
1 Alliance	London	1	1	1	1	1	
2. Atlas	London	1	1		1	1	1
3 City of Glasgow (*a*)	Glasgow	1					
4. Commercial Union	London	1	1	1	1	1	
5 Gresham	London	1					
6 Law Union and Rock	London	1	1		1	1	1
7 Liverpool, London and Globe	Liverpool		1		1	1	1
8 Liverpool Victoria (*b*)	London	1					
9 London Assurance Corporation	London	1	1	1	1		
10 National Mutual	London	1					
11. North British and Mercantile	Edinburgh	1	1				
12 Northern	Aberdeen	1	1		1	1	1
13 Norwich Union	Norwich	1					
14 Phœnix	London	1	1	1	1	1	
15 Royal	Liverpool	1	1	1	1	1	1
16 Scottish Union and National	Edinburgh	1	1		1	1	1
17 Standard	Edinburgh	1					
18 Royal Exchange	London	1	1	1	1	1	1
19 Manufactures	Canada	These Companies do not transact any business in addition to Life Assurance.					
20 Sun of Canada	Canada						
21 National Mutual of Australasia	Australia						
22 New York	United States						
23 China Mutual	Shanghai						

(*a*) Now incorporated in the Scottish Union and National.
(*b*) Now incorporated in the Commercial Union.

In the following list the names of the existing Indian Life Assurance Companies have been arranged according to the date of establishment under the Province in which they were established —

Years	Madras	Bombay	Bengal	Punjab	United Provinces, Assam Ajmer-Merwara.
1829	Madras Equitable (exempted under Section 41 of the Act)				
1833	Madras Widows' and Orphans' Funds.				
1847				Christian Mutual	
1849	Tinnevelly C M S Widows' Fund				
1871		Bombay Mutual			
1874		Oriental			
1876		Bombay Widows' Pension Fund			
1885		Goanese Mutual			
1886					
1887					
1888	Mangalore Roman Catholic	P B & C I Zoroastrian			
1889		Bombay Zoroastrian			
1890					
1891			Hindu Provident Fund		
1892		Indian Life			
1893					Indian Empire Branch of Rechabites (United Provinces)
1894					
1895					

In the following list the names of the existing Indian Life Assurance Companies have been arranged according to the date of establishment under the Province in which they were established :--

Years	Madras	Bombay	Bengal	Punjab	United Provinces, Assam Ajmer-Merwara
1896		Empire of India		Bharat	
1897					
1898					
1899					
1900					
1901					
1902					
1903	Northern Circars				
1904					
1905					
1906	Coromandel, United India	All India United	National Indian, National Insurance	Co-Operative Assurance	
1907	Aswini		Hindusthan Co-Operative	National Insurance and Banking	
1908		Bombay Life	Eastern, India Equitable	Hindustan (Gujranwala)	General (Ajmer Merwara).
1909			Chittagong		
1910		New Bombay Presidency	Capital, Bengal Provident	Popular	Aryya (Assam)
1911		Asian Commercial	Star of India Universal Imperial Guaranteed		
1912			Unique, Victoria		
1913		Industrial & Prudential, Crown Western India; East and West	Light of Asia, Provincial Life Horse and Cattle		

Chambers of Commerce.

Modern commerce in India was built up by merchants from the west and was for a long time entirely in their hands Chambers of Commerce and numerous kindred Associations were formed by them for its protection and assistance But Indians have in recent years, taken a large and growing part in this commercial life The extent of their participation varies greatly in different parts of India, according to the natural proclivities and genius of different races Bombay, for instance, has led the way in the industrial and commercial regeneration of the new India, while Bengal, very active in other fields of activity, lags behind in this one Arising from these circumstances we find Chambers of Commerce in Bombay, Karachi, Calcutta, Madras and other important centres, with a membership both European and Indian, but alongside these have sprung up in recent years certain Associations, such as the Bombay Indian Merchants' Chamber and Bureau, of which the membership is exclusively Indian These different classes of bodies are in no sense hostile to one another and constantly work in association

The London Chamber of Commerce in 1912, realising the increasing attention demanded by the economic development of India, took steps to form an "East India Section" of their organization The Indian Chambers work harmoniously with this body, but are in no sense affiliated to it, nor is there at present any inclination on their part to enter into such close relationship, because it is generally felt that the Indian Chambers can themselves achieve their objects better and more effectively than a London body could do it for them, and on various occasions the London Chamber, or the East India Section of it have shown themselves out of touch with what seemed locally to be immediate requirements in particular matters

A new movement was started in 1913 by the Hon Sir Fazulbhoy Karimbhoy Ibrahim, a leading millowner and public citizen of Bombay, which promises to lead to great improvement in strengthening Indian commercial organization Sir Fazulbhoy's plan is for the formation of an Indian Commercial Congress, which would meet once in every two or three years, each time in a different centre of activity, and enable those who are chiefly concerned in commercial and industrial developments in India to exchange views on current questions and associate themselves in the pursuit of a scientifically co-ordinated commercial policy The proposal has met with approval in all parts of India and the next step will be the summoning of the first session of the Congress

The Indian Merchants' Chamber and Bureau in Bombay (November, 1913) a draft constitution of a proposed Indian Congress of Commerce, which was simultaneously circulated to other commercial associations for their opinions The proposed constitution provided for a session of the Congress "from time to time as occasion may demand, but at least once every three years" Other provisions were as follow The Congress shall consist of delegates elected by different commercial bodies in India, an electorate of recognised and well known public bodies "such as Chambers of Commerce, Leagues, Associations and so forth" being formed in each province Each of such bodies shall be an electorate by itself or in combination with others The delegates assembled in congress shall among themselves elect a committee of management representative of various parts of India and the Committee of Management shall elect its own chairman, The President, Vice-President and Honorary Secretary, or General Secretary, to be elected by the Congress For the purpose of continuous work, the head office of the Committee of Management shall, unless otherwise determined by the Congress, be in Bombay, where the Secretary shall also reside The electorates of any Province where the Congress is to meet shall form a Reception Committee six months before the date fixed for the meeting of the Congress, the duty of the Reception Committee being to raise funds for the defrayal of all expenses incidental to the holding of the Congress, the proper boarding and lodging of delegates, the hire of the place of assembly, or the erection of a convenient pandal for the purpose The Reception Committee will be entitled to charge a reasonable fee from those who avail themselves of the boarding and lodging, provided the head office of the Congress shall be in Bombay until otherwise resolved by the Congress

All the Indian Chambers and Commercial Associations approved the foregoing scheme, and promised their support and cooperation. The European Chambers, with one exception, approved the scheme, but expressed their inability to join After the receipt of these opinions the Committee decided to convene a Commercial Congress in the second week of November, 1914, and to appoint a Reception Committee Owing, however, to the war, the Committee subsequently decided to postpone sine die the holding of the Congress

The following are details of the principal Chambers of Commerce and kindred bodies in India at the present time —

BENGAL.

The Bengal Chamber of Commerce was founded in 1834 Its head-quarters are in Calcutta Other societies connected with the trade and commerce of the city are the Royal Exchange, the Bengal Bonded Warehouse Association, the Calcutta Trades Association and the Bengal National Chamber of Commerce. The Bengal Chamber is registered with a declaration of membership of 200 Its objects are the usual purposes connected with the protection of trade " in particular in Calcutta " There are two classes of members, Permanent and Honorary.

Merchants, bankers, shipowners, representatives of commercial, railway and insurance companies, brokers, persons and firms engaged in commerce, agriculture, mining or manufacture, and joint stock companies or other corporations, formed for any purpose or object connected with commerce, agriculture, mining or manufacture, and persons engaged in or connected with art, science or literature, may be elected as permanent members of the Chamber.

A candidate for election as a permanent member, whether an individual, a firm or a joint stock company or other corporation, must be proposed by one and seconded by another permanent member, and may be elected provisionally by the Committee, but that election is subject to confirmation at the next annual general meeting The subscription to the funds of the Chamber of permanent members residing or carrying on business in Calcutta is Rs 20 per mensem, and that of permanent members residing or carrying on business elsewhere than in Calcutta Rs 32 per annum No entrance fee is charged Honorary members are not required to subscribe to the funds of the Chamber Officials and others indirectly connected with the trade, commerce or manufactures of Bengal, or who may have rendered distinguished service to the interests represented by the Chamber, may be elected honorary members by the Committee upon the proposal of any two permanent members whether members of the Committee or not Strangers visiting the Presidency may be admitted by the Committee as honorary members for a period not exceeding two months on the proposal of any permanent member whether a member of the Committee or not Honorary members are entitled to receive the last published report of the Committee, and to attend and speak but not to vote at any general meeting held during their membership, and may upon the invitation of the President, Vice-President or Chairman, as the case may be, attend under the like conditions any meeting of Committee or of any departmental committee or sub-committee

The affairs of the Chamber are conducted by the following officers, namely, a President, Vice-President, seven ordinary members of Committee, a Secretary and Assistant Secretary and an Auditor The officers of the Chamber, with the exception of the Secretary, Assistant Secretary and Auditor, act without remuneration The following are the President and his Committee appointed for the year 1914-1915 —

President—Hon Mr R G Monteath, (Mackinnon, Mackenzie & Co)

Vice-President—Mr F H Stewart, CIE, (Gladstone, Wylie & Co)

Committee—Messrs M J Calvocoressi, (Ralli Bros), W E Crum (Graham & Co), H Harris, (Chartered Bank of India, Australia and China), F R S Charles (Geo Henderson & Co), W Girard (Bird & Co), G C Godfrey (Bengal-Nagpur Railway) and C Radclife (Turner, Morrison & Co)

The Secretary of the Chamber is Mr H M Haywood

The following are the public bodies to which the Chamber has the right of returning representatives, and the representatives returned for the current year —

Viceroy's Legislative Council—The Hon'ble Mr R G Monteath

Bengal Legislative Council—The Vice-President of the Chamber and the Hon'ble Mr Norman McLeod

Calcutta Port Commission—Messrs M J Calvocoressi, W E Crum, C J Kerr (Mackinnon, Mackenzie & Co), A C Patterson, (Becker, Gray & Co), S Eustace (Kilburn & Co) Mr J C Shorlock (Geo Henderson & Co)

Calcutta Municipal Corporation—Messrs A C Patterson, T R Piatt, W R Rae, (Sun Insurance Office), and Shirley Tremeame, (W H Targett & Co)

Bengal Boiler Commission—Messrs T Burns, (Barnagore Jute Factory Co, Ltd), G F Scott, (Bengal Coal Co, Ltd) and T Wilson, (Jessop & Co, Ltd)

Board of Trustees of the Indian Museum—Mr J B Lloyd, (Shaw, Wallace & Co)

Bengal Smoke Nuisances Commission—Messrs John Taylor, (Clive Jute Mills Co, Ltd) and W R Steele, (Burn & Co, Ltd)

Calcutta Improvement Trust—Mr W K Dods, (Agent, Hongkong and Shanghai Banking Corporation)

The Chamber elects representatives to various other bodies of less importance, such as the committee of the Calcutta Sailors' Home, and to numerous subsidiary associations The following are the recognised associations of the Bengal Chamber of Commerce —

Calcutta Wheat and Seed Trade Association Indian Jute Mills' Association, Indian Tea Association, Calcutta Tea Traders' Association, Calcutta Fire Insurance Agents' Association, Calcutta Import Trade Association, Calcutta Marine Insurance Agents' Association The Wine, Spirit and Beer Association of India Indian Mining Association, Calcutta Baled Jute Association, Indian Paper Makers' Association, Indian Engineering Association, Jute Fabrics Shippers' Association, Calcutta Hydraulic Press Association, Jute Fabric Brokers' Association and Baled Jute Shippers' Association

The Chamber maintains a tribunal of arbitration for the determination, settlement and adjustment of disputes and differences relating to trade, business, manufactures, and to customs of trade, between parties, all or any of whom reside or carry on business personally or by agent or otherwise in Calcutta, or elsewhere in India or Burmah, by whomsoever of such parties the said disputes and differences be submitted The Secretary of the Chamber acts as the Registrar of the Tribunal, which consists of such members or assistants to members as may, from time to time, annually or otherwise be selected by the Registrar and willing to serve on the Tribunal The Registrar from time to time makes a list of such members and assistants

The Chamber also maintains a Licensed Measurers Department controlled by a special committee It includes a Superintendent, Deputy Superintendent and Assistant Superintendent and the staff at the time of the last official returns consisted of 125 officers The usual system of work for the benefit of the trade of the port is followed The Department has its own provident fund and compassionate fund and Measurers' Club The Chamber does not assist in the preparation of official statistical returns. It publishes weekly the *Calcutta Price Current* and also publishes a large number of statistical circulars of various descriptions in addition to a monthly abstract of proceedings and many other circulars on matters under discussion

BOMBAY.

The object and duties of the Bombay Chamber, as set forth in their rules and regulations, are to encourage a friendly feeling and unanimity among commercial men on all subjects involving their common good, to promote and protect the general mercantile interests of this Presidency, to collect and classify information on all matters of general commercial interest, to obtain the removal, as far as such a Society can of all acknowledged grievances affecting merchants as a body, or mercantile interests in general to receive and decide references on matters of usage and custom in dispute, recording such decisions for future guidance, and by this and such other means, as the Committee for the time being may think fit, assisting to form a code of practice for simplifying and facilitating business, to communicate with the public authorities, with similar Associations in other places and with individuals, on all subjects of general mercantile interests, and to arbitrate between parties willing to refer to, and abide by, the judgment of the Chamber

The Bombay Chamber was established in 1836, under the auspices of Sir Robert Grant who was then Governor of the Presidency, and the programme described above was embodied in their first set of rules There are now affiliated with the Chamber the Bombay Millowners' Association, which exists to carry out the same general objects as the Chamber in the special interests of "millowners and users of steam and water power," and the Bombay Cotton Trade Association, which similarly exists for the special benefit of persons engaged in the cotton trade According to the latest returns, the number of members of the Chamber is 122 Of these 16 represent banking institutions, 7 shipping agencies and companies, 3 firms of solicitors, 3 railway companies, 3 insurance companies, 6 engineers and contractors, 84 firms engaged in general mercantile business

All persons engaged or interested in mercantile pursuits desirous of joining the Chamber and disposed to aid in carrying its objects into effect are eligible to election to membership by ballot The member's subscription is Rs 15 per month and an additional charge of Rs 200 per annum is made to firms as subscription to the trade returns published by the Chamber Gentlemen distinguished for public services, or "eminent in commerce and manufactures," may be elected honorary members and as such are exempt from paying subscriptions Any stranger engaged or interested in mercantile pursuits and visiting the Presidency may be introduced as a visitor by any Member of the Chamber inserting his name in a book to be kept for the purpose, but a residence of two months shall subject him to the rule for the admission of members.

Officers of the Year.

The affairs and funds of the Chamber are managed by a committee of nine ordinary members, consisting of the chairman and deputy-chairman and seven members The committee must, as a rule, meet at least once a week and the minutes of its proceedings are open to inspection by all members of the Chamber subject to such regulations as the committee may make in regard to the matter A general meeting of the Chamber must be held once a year and ten or more members may requisition through the officers of the Chamber, a special meeting at any time, for a specific purpose

The Chamber elects representatives as follow to various public bodies —

Legislative Council of the Governor-General, one representative The Chamber may elect anyone but in practice they have hitherto returned their chairman

Legislative Council of the Governor of Bombay, one representative, who may also be anyone, but is, in practice, always the deputy chairman

Bombay Municipal Corporation, two members, elected for three years

Board of Trustees for the Improvement of the City of Bombay, one member, elected for two years

Board of Trustees of the Port of Bombay, five members, two and three being elected in alternate years

Representatives on the Legislative Councils become ex-officio members of the committee of the Chamber, during their terms of office, if they are not already members

The following are the officers of the Chamber for the year 1914-15 and their representatives on the various public bodies —

Chairman, The Hon Mr Marshall Reid CIE, (Bombay Co, Ltd)

Deputy-Chairman, The Hon Mr T W Birkett (Killick, Nixon & Co)

Committee, Hon Mr W L Graham (W & A. Graham & Co), Messrs. A Cameron (Mackinnon, Mackenzie & Co), L McIlwrick (Forbes, Forbes, Campbell & Co, Ltd), J N Metaxa (Ralli Bros), A Scott Smith (Mercantile Bank of India, Ltd), L Volkart (Volkart Bros) and R Woollcombe (Agent, B B & C I Railway).

Secretary, Mr R. E Gregor-Pearse

Assistant Secretary, Mr. Noel Wilkinson, B.A.

Representatives on—

Viceregal Legislative Council. The Chairman

Bombay Legislative Council· The Deputy Chairman.

Bombay Municipality Messrs J S Wardlaw Milne (Turner, Morrison & Co) and D. M Inglis

Bombay Improvement Trust, Major H A. L. Hepper, R E

Bombay Port Trust, The Chairman, the Hon Mr T W Birkett, Mr A H Froom (P & O S N Co) and Mr W - L. Graham, Mr J N Metaxa.

Special Work

One of the most important functions performed by the Chamber is that of arbitration in commercial disputes Rules for this have been in existence for many years and have worked most satisfactorily The decisions are in all cases given by competent arbitrators appointed by the General Committee of the Chamber and the system avoids the great expense of resort to the Law Courts.

A special department of the Bombay Chamber is its statistical Department, which prepares a large amount of statistical returns connected with the trade of the port and of great importance to the conduct of commerce The department consists of eleven Indian clerks who, by the authority of Government, work in the Customs House and have every facility placed at their disposal by the Customs authorities They compile all the statistical information in connection with the trade of the port, in both export and import divisions, which it is desirable to record No other Chamber in India does similar work

The Bombay Chamber publish a Daily Arrival Return which shows the receipts into Bombay of cotton, wheat and seeds, and a Daily Trade Return, which deals with trade by sea and shows in great detail imports of various kinds of merchandise and of treasure, while the same return contains particulars of the movements of merchant vessels

The Chamber publishes twice a week detailed reports known as Import and Export manifests, which give particulars of the cargo carried by each steamer to and from Bombay

Three statements are issued once a month One shows the quantity of exports of cotton, seeds and wheat from the principal ports of the whole of India The second gives in detail imports from Europe, more particularly in regard to grey cloths, bleached cloths, Turkey red and scarlet cloths, printed and dyed goods, fancy cloth of various descriptions, woollens, yarns, metals, kerosine oil, coal, aniline dyes, sugar, matches, wines and other sundry goods The third statement is headed, "Movements of Piece Goods and Yarn by Rail," and show the despatches of imported and local manufactured piece-goods and yarn from Bombay to other centres of trade served by the railways

The "Weekly Return" issued by the Chamber shows clearances of a large number of important descriptions of merchandise A return of "Current Quotations" is issued once a week, on the day of the departure of the English mail, and shows the rates of exchange for Bank and Mercantile Bills on England and Paris, and a large quantity of general banking and trade information

The annual reports of the Chamber are substantial tomes in which the whole of the affairs of the Chamber and the trade of the port during the past year are reviewed.

The Chamber has also a Measurement Department with a staff of twelve, whose business is that of actual measurement of exports in the docks before loading in steamers Certificates are issued by these officers with the authority of the Chamber to shippers and ship agents as to the measurement of cotton and other goods in bales or packages The measurers are in attendance on the quays whenever there are goods to be measured and during the busy season are on duty early and late The certificates granted show the following details —

(*a*) the date, hour and place of measurement,
(*b*) the name of the shipper,
(*c*) the name of the vessel,
(*d*) the port of destination,
(*e*) the number and description of packages,
(*f*) the marks,
(*g*) the measurement, and, in the case of goods shipped by boats,
(*h*) the registered number of the boat,
(*i*) the name of the tindal

Bombay Millowners' Association.

The Bombay Millowners' Association was established in 1875 and its objects are as follow —

(*a*) The protection of the interests of millowners and users of steam, water and/or electric power in India,
(*b*) The promotion of good relations between the persons and bodies using such power,
(*c*) The doing of all those acts and things by which these objects may be furthered

Any individual partnership or company, owning one or more mill or one or more press or presses, one or more ginning or other factory or factories actuated by steam, water, electric or other power is eligible for membership, members being elected by ballot Every member is entitled to one vote for each mill which is—

(*a*) owned by such member,
(*b*) subscribed for according to the rules of the Association by such member and
(*c*) worked by motive power separate and distinct from the motive power by which any other mill is worked.

If two or more mills are owned by any one member but are worked by one motive power, the member in question shall be entitled to one vote only in respect of the two mills.

The membership of the Association in 1914 numbered 78

The following is the Committee for 1914 —

Mr Narottam M Goculdas, (*Chairman*), Mr Jehangir B Petit, (*Deputy Chairman*), The Hon'ble Sir Sassoon David, Bart, Sir Dinshaw M. Petit, Bart, The Hon'ble Sir Fazulbhoy Currimbhoy, Kt, Sir Vithaldas Damoder Thackersey, Kt., The Hon'ble Mr Manmohandas Ramji; The Hon'ble Mr T W Birkett, Mr. J F.

Bradbury, Mr. B. Brown, Mr. Rahimtoola Currimbhoy Ebrahim, Mr N G Hunt, Mr Cowasjee Jehangir (Junr), Mr L. McIlwrick, Mr C V Mehta, Mr S. A Nathan, Mr N B Saklatwala, Mr Dinshaw E Wacha, Mr C N Wadia, Mr N N Wadia

Mr R E Gregor-Pearse, *Secretary*

The following are the Association's Representatives on public bodies —

Bombay Port Trust, Sir Vithaldas D Thackersey, Kt

City of Bombay Improvement Trust, Sir Sassoon David, Bart.

Victoria Jubilee Technical Institute, Mr Jehangir Bomanjee Petit

Bombay Smoke Nuisances Commission, Messrs. J F. Bradbury & W A Sutherland

Indian Merchants' Chamber.

The Bombay Indian Merchants' Chamber and Bureau was established in 1907 with the following objects —"To encourage a friendly feeling and unanimity among commercial men on all subjects involving their common good, to promote and protect the trade, commerce and manufactures of India and in particular to promote the general commercial interests of the Presidency of Bombay, to consider and deliberate on all questions affecting the rights of Indian Merchants, to represent to the Government their grievances, if any, and to obtain by constitutional methods the removal of such grievances, to collect and compile and distribute in such manner as may be most expedient for purposes of disseminating commercial and economic knowledge all statistics and other information relating to trade, commerce and finance, specially Indian as well as to form and maintain a library, and generally to do all such matters as may promote the above objects in view, to arbitrate between parties willing to refer to and abide by the judgment of the Chamber, to receive and decide references of matters of usage and custom in dispute, recording such decisions for future guidance and assisting by this and such other means, as the committee for the time being may think fit, to form a code of practice so as to simplify and facilitate the transaction of business"

The Chamber has not yet taken up the work of arbitration, measurements, etc

The following bodies are connected directly and indirectly with the Chamber, though no public body is directly affiliated to it —

The Bombay Native Piece-goods Merchants' Association (which sends a large number of representatives)

The Grain Merchants' Association (which is a member); and

The Hindustani Native Merchants' Association (which is a member)

The Chamber elects a representative jointly with the Bombay Native Piece-goods Merchants' Association to the Bombay Legislative Council and a representative to the Board of Trustees for the Port of Bombay, whenever it is so notified by the Government (*vide* Act No 1 of 1909) The Chamber also has the right to elect a representative on the Board of the Bombay Commercial College

Any person engaged in mercantile pursuits or interested in trade and commerce desirous of joining the Chamber is eligible for membership, there being two classes of members, *viz*, Ordinary and Honorary Ordinary members shall be (1) Resident members who pay Rs 30 annual fee and (2) Mofussil members who pay Rs 5 as annual fee An ordinary member also pays an entrance fee of Rs 50 on being elected

Gentlemen distinguished for public services or eminent in commerce and manufactures or otherwise interested in the aims and objects of the Chamber may be elected as Honorary members by a General Meeting of the Chamber on the recommendation of the Committee and as such are exempted from paying subscriptions They are not entitled to vote at any meeting of the Chamber nor are they eligible to serve on the Committee They are, however, supplied with all the publications of the Chamber free of charge

The following are the Officers of the Chamber for the year 1914-15 —

Chairman —The Hon Sir Fazalbhoy Currimbhoy Ebrahim

Vice-Chairman —Mr Dinshaw Edulji Watcha

Committee —The Hon Mr Manmohandas Ramji, Mr Purshottamdas Thakoredas, Mr Devidas Madhowji Thakersey, Mr Narottam Morarji Gokuldas, Mr Ratansey Mulji, Sir Shapurji B Bharucha Hon Mr Lallubhai Samaldas, Mr Chaturbhuj Shivji, Mr Jethabhai Walji, Sir Vithaldas Damodar Thackersey, Mr Phiroz J Billimoria, Mr Ravashanker Jagjiwan, Hon Sir Ebrahim Rahimtula, Mr Motilal Vallabhji, Mr Gopalji Valji Sunderji, Mr Motilal Kanji, Mr Mathuradas Vasanji Khimji, Mr Sorabji Edulji Warden, Mr Mulji Haridas, Mr Morarji Velji, Mr Naranji Haribhai, Mr Jamnadayan Hindumal Dani and the Hon Mr Fazulbhoy N Chinoy

Representative to the Bombay Legislative Council—Hon Mr Manmohandas Ramji

Secretary—Mr J K Mehta, M A

Assistant Secretary—Mr M M Munshi, B A

Hon Auditor—Mr Ardeshir Edulji Cama, of Messrs A C Rice & Co, Chartered Accountant

Solicitors—Messrs Edgelow, Gulabchand, Wadia & Co

The Chamber publishes every month a Journal in Gujarati giving information on commercial and industrial subjects and publishing all statistics considered important relating to the trade and commerce of India

Cotton Trade Association.

The Bombay Cotton Trade Association was founded in 1876 The objects for which it was established were, *inter alia*, "to adjust disputes between persons engaged in the cotton trade, to establish just and equitable principles in the trade, to maintain uniformity in rules, regulations and usages in the trade, to adopt standards of classification in the trade, to

acquire, preserve and disseminate useful information connected with the cotton interests throughout all markets and generally to promote the cotton trade of the City of Bombay and India and augment the facilities with which it may be conducted" The Association had in 1914 50 shareholders and 50 associate members Its affairs are managed by a Board of Directors, consisting of eight members,

Chairman—Mr T D Moore (New Mofussil Company)

Deputy Chairman—Mr J P Crystal (Crystal & Co).

Members—Messrs C W Breul (Breul & Co), H F Busch(Bombay Co , Ltd), H R Greaves, (Greaves Cotton & Co), M N Hogg (Forbes, Forbes, Campbell & Co),O Marshall (Drenman & Co), E Schoen (Gaddum & Co), and T. J Ward (Ralli Bros)

Secretary—Mr R E Gregor-Pearse

Native Piece-Goods Association.

The objects of the Association are as follow —

(*a*) To promote by creating friendly feelings and unity amongst the Merchants, the business of the piece-goods trade in general at Bombay, and to protect the interest thereof, (*b*) to remove, as far as it will be within the powers of the Association to do so, all the trade difficulties of the piece-goods business and to frame such line of conduct as will facilitate the trade , (*c*) to collect and assort statistics relating to piece-goods and to correspond with public bodies on matters affecting trade, and which may be deemed advisable for the protection and advancement of objects of the Association or any of them , and (*d*) to hear and decide disputes that may be referred to for arbitration

The following are the office-bearers for the current year —

Chairman—The Hon. Mr Manmohandas Ramji

Deputy Chairman—Mr Gopalji Valji Sunderji.
Hon Joint Secretaries—Messrs Purshotam Kanji and Vithaldas Damodar Govindji

Hon Treasurer—Mr Kalhanji Damodar.

Grain Merchants' Association.

The object of this body is "to promote the interests of the merchants and to put the grain and seeds trade on a sound footing" It is an influential body of large membership The office holders for the current year are as follow —

Chairman—Mr Mulji Hirji.
Vice-Chairman—Mr Velji Lakhamsi, B.A., LL B

Hon. Secretary—Mr Shamji Shivji.

Secretary—Mr. Lalshanker Harprasad.

KARACHI.

The objects and duties of the Karachi Chamber are set forth in terms similar to those of Bombay Qualifications for membership are also similar Honorary membership is conferred upon "any gentlemen interested in the affairs and objects of the Chamber", subject to election by the majority of the votes of members All new members joining the Chamber pay Rs 100 entrance fee and the monthly subscriptions is Rs 6 for any member contributing Rs 600 to the Chamber Fund, in addition to entrance fee, and Rs 12 without such contribution The subscription for the Chamber's periodical returns is Rs 5 per month The affairs of the Chamber are managed by a committee of ten members, consisting of a Chairman, Vice-Chairman and eight members, elected at the annual meeting of the Chamber in January or immediately after The Chamber elects a representative on the Bombay Legislative Council and three representatives on the Karachi Port Trust There were last year 54 members of the Chamber, and 7 Honorary Members

The following are the officers of the Chamber for the current year —

Chairman—The Hon Mr M de P Webb, C I E, (Forbes, Forbes, Campbell & Co)

Vice-Chairman—Mr H. F. Pfister (Ralli Bros)

Managing Committee—Messrs J H Fyfe (Mackinnon Mackenzie & Co), J I Murray (Ewart, Ryrie & Co), J Ellinger (Ellinger, Mohatta & Co), James Kenyon (Sanday Patrick & Co), H C. Sparke (N W Railway), T. J Stephen (National Bank of India, Ld), L B Stephens (Bombay Co , Ld), S. C. Woodward (Clements, Robson & Co)

Representative on the Bombay Legislative Council—The Hon Mr. M de P. Webb

Representative on the Karachi Port Trust—The Hon Mr M de P Webb, Mr James Kenyon Mr J H Fyfe

Secretary—Mr E L Rogers
Public Treasurer—Captain S. Mylcrist.

The following are the principal ways in which the Chamber gives a special assistance to members The Committee take into consideration and give an opinion upon questions submitted by members regarding the custom of the trade or of the Port of Karachi The Committee undertake to nominate European surveyors for the settlements of disputes "as to the quality or condition of merchandise as to the quality in which both parties desire the Chamber to do so" When two members of the Chamber or when one member and a party who is not a member have agreed to refer disputes to the arbitration of the Chamber or of an arbitrator or arbitrators nominated by the Chamber, the Committee will undertake to nominate an arbitrator or arbitrators, under certain regulations A public measurer is appointed under the authority of the Chamber to measure pressed bales of cotton, wool, hemp, hides and other merchandise in Karachi.

MADRAS.

The Madras Chamber of Commerce was founded in 1886 All merchants and other persons engaged or interested in the general trade, commerce and manufactures of Madras are eligible for membership Any assistant signing a firm or signing *per pro* for a firm is eligible Members who are absent from Madras but pay their subscriptions may be represented in the Chamber by their powers-of-attorney, as honorary members, subject to ballot Honorary members thus elected are entitled to the full privilege of ordinary members Election for membership is by ballot at a general meeting, a majority of two-thirds of the recorded votes being necessary to secure election Every member pays an entrance fee of Rs 100, provided that banks, corporate bodies and mercantile firms may be represented on the Chamber by one or more members and are liable for an entrance fee of Rs 100 once in ten years each The subscription shall not exceed Rs 160 per annum, payable quarterly in advance, subject to reduction from time to time in accordance with the state of the Chamber's finances Absentees in Europe pay no subscription and members temporarily absent from Madras pay one rupee per month. Honorary members are admissible to the Chamber on the usual conditions Members becoming insolvent cease to be members but are eligible for re-election without repayment of the entrance donation

The Chamber undertakes arbitrations and surveys, the granting of certificates of origin and the registration of trade marks One of the rules for the last named is "that no trade mark on ticket shall be registered on behalf of an Indian firm trading under a European name"

The following publications are issued by the Chamber —Madras Price Current and Market Report, Tonnage Schedule and Madras Landing Charges and Harbour Dues Schedule

There are 43 members and two honorary members of the Chamber in the Current year and the officers and committee for the year are as follows —

Chairman—The Hon Mr A D Jackson
Vice-Chairman—Mr W. B Hunter (Bank of Madras).

Committee—Sir Hugh Fraser, Mr. Gordon Fraser, Mr A J Leech, Capt. C. L Magniac and Mr. C B Simpson, R E

Secretary—Mr. A. E. Lawson.

The following are bodies to which the Chamber are entitled to elect representatives, and the representatives elected last year —

Madras Legislative Council—The Hon'ble Mr A D. Jackson

Madras Port Trust—Messrs Gordon Fraser, J A Boyson, (Binny & Co , Ltd), A H Deane, (Dymes & Co , Ld), and R Greenhall, (M and S M Railway)

Madras Municipal Corporation—Messrs W B Hunter, C H Straker (Alfred Young & Co), and H H Chettle (Holland and Moss)

British Imperial Council of Commerce, London—Mr A J Yorke (in Europe)

Indian Tea Cess Committee—The Hon'ble Mr A D Jackson

Southern India Chamber.

The Southern India Chamber of Commerce has its Registered Office in Madras The objects of the Chamber are those usual for such bodies, concerning the promotion of trade, especially in the Madras Presidency, and the interests of members Special objects are stated to be —

"To maintain a Library of books and publications of commercial interest, so as to diffuse commercial information and knowledge amongst its members.

"To establish Museums of commercial products or organise exhibitions, either on behalf of the Chamber or in co-operative with others"

There are two classes of members, permanent and honorary The usual conditions as to eligibility for election prevail.

There are no bodies affiliated to the Chamber The Chamber does not enjoy the right of electing representatives to any public bodies, though its members hold seats in the Madras Legislative Council, Port Trust and Municipal Corporation

President, Rao Bahadur P Theagaroya Chettiar, B A

Honorary Secretaries, M R.Ry. P N. Muthusami Naidu Garu, B A , and Moulana Abdus Subhan Sahib

Asst. Secretary, C Duraiswami Aiyangar, B A

UPPER INDIA CHAMBER.

The Upper India Chamber of Commerce s concerned with trade, commerce and manufactures in the United Provinces and has its registered office at Cawnpore Members are elected by the Committee, subject to confirmation by the next general meeting of the Chamber. Honorary members are elected on the usual qualifications, but can neither serve in the Committee nor vote at meetings of the Chamber There is no entrance fee for membership, but subscriptions are payable as follows —A firm, company or association having its place of business in Cawnpore, Rs 200 a year, An individual member resident or carrying on business in Cawnpore, Rs 100, Firms or individuals having their places of business or residence outside Cawnpore pay half the above rates, but the maintenance of a branch office in Cawnpore necessitates payment of full rates

The affairs and funds of the Chamber are managed by a Committee of from five to ten members, which has power to constitute Local Committees, of from four to seven members each, at trade centres where membership is sufficiently numerous to justify the step. Such Local Committees have power to communicate only with the Central Committee.

The Chamber appoints arbitration Tribunals for the settlement and adjustment of disputes when invited to do so, members of the Tribunals being selected from a regular printed list of arbitrators

The Chamber has in the present year 62 members, and four honorary members

The following are the officers —

President—The Hon Mr H Ledgard (Cooper, Allen & Co)

Vice-President—Mr R B Biscoe (Elgin Mills Co, Ltd)

Members—Mr A B Shakespear, C I E (Begg, Sutherland & Co), Mr B R Briscoe, Mr C O'Malley, Mr N A S Bond, Babu Ram Narain and Mr T D Edelston (Allen Bros & Co, Ld)

Secretary—Mr J G Ryan

PUNJAB.

The Punjab Chamber of Commerce has its headquarters at Delhi and exists for the care of mercantile interests on the usual lines in the Punjab, the North-West Frontier Province and Kashmir There are affiliated branches of the Chamber at Lahore, Amritsar, Rawalpindi and Srinagar Members are elected by ballot, the only necessary qualification being interest in mercantile pursuits There is no entrance fee The rate of subscription is Rs 10 per month The following are the Officers, Committee and Representatives on public bodies for the current year —

President—The Hon'ble Mr James Currie, (James Currie & Co, Delhi)

Vice-President—Mr W A Phillip, (National Bank of India, Ltd, Delhi Branch)

Committee—Mr E Y Barnard (Bank of Bengal), Haji Baksh Ellahie Sahib, C I F (Baksh Ellahie & Co), Mr H A Levy (H A Levy & Co), Mr J G Griffin (Delhi Elec. T & L Co, Ld), Mr C Bickley Roe (The Punjab Banking Co, Ltd), Mr. J C Roberts (Gutmann & Co), Mr M Thomas (Kahn & Kahn), Mr W L LaTouche (B B & C I Railway), and Mr N A S Bond (East Indian Railway)

Representative on Punjab Legislative Council—The Hon'ble Mr James Currie & Co

Secretary—Mr J. Renton Denning

UNITED PROVINCES.

A meeting of Indians engaged or interested in the trade and industry of the United Provinces was held at Cawnpore in February, 1914, to inaugurate an Indian Chamber of Commerce for the United Provinces Representatives of firms in Cawnpore Benares, Allahabad, Lucknow, Fyzabad and other places were present It was unanimously resolved to establish a United Provinces Chamber of Commerce with its headquarters at Cawnpore, and the following committee was appointed —

President—Rai Bahadur Lala Prayag Narain Bhargava (Couper Paper Mills, &c)

Vice-Presidents—The Hon Babu Bishambhar Nath (Sri Krishna Ginning Mills) and Hafiz Mohammad Halim (Cawnpore Tannery)

Committee—The Hon Lala Motichanda (Benares), C G Chintamani (Newspapers, Limited, Allahabad), B Alakhdhari (Oudh Commercial Bank, Limited, Fyzabad), Babu Behari Lal (Sri Gangar Cotton Mills, Mirzapore), Lala Munnalal Dina Nath (Mirlidhar), B Behari Lal and M Abdul Gafoor (Cawnpore)

Secretary—Mr B Vikermajit Sixty-five members of the Chamber were enrolled

BURMA.

The Burma Chamber of Commerce, with headquarters at Rangoon, exists to encourage friendly feeling and unanimity among commercial men on all subjects involving their common good, to promote and protect the general mercantile interests of the province, to communicate with public authorities, associations and individuals on all matters, directly or indirectly affecting these interests, and to arbitrate between parties willing to refer to, and abide by, the judgment of the Chamber The following are affiliated bodies —

Burma Fire Insurance Association,

Burma Marine Insurance Agents' Association,

Rangoon Import Association.

The Chamber elects representatives to the following Public Bodies —

Burma Legislative Council,

Rangoon Port Trust Board,

Rangoon Municipal Committee,

Victoria Memorial Park Trustees,

Pasteur Institute Committee

All merchants, bankers and persons engaged or interested in mercantile pursuits desirous of joining the Chamber are eligible for membership Officials and others indirectly connected with the trade of the province, or who may have rendered distinguished service to the interests represented by the Chamber, may be elected by the Committee, either on their own motion or on the suggestion of two Members as Honorary Members of the Chamber. The subscription is Rs 20 per month.

The Chamber undertakes arbitrations in addition to its ordinary work It does not publish any statistical returns

The following are the Officers, Committee

and Representatives on public bodies for the current year —

Chairman—The Hon'ble Mr B J B Stephens (Bombay-Burma Trading Corporation, Ltd)

Vice-Chairman—Mr Jas. Wood (Bullock Brothers & Co, Ltd)

Committee—Messrs J A Polson, E O Anderson, C P Hill, A W Binning (Binning & Co), J W Anderson, (Steel Brothers & Co Ltd), H E Smith (J & F Graham & Co), W Macdonald (Harperink, Smith & Co), Hon Mr B J B Stephens, Mr W Smidt (Mohr Bros & Co, Ltd) and Mr B E. G. Eddis

Secretary—Mr C A Cuttriss

Representative on the Burma Legislative Council—The Hon'ble Mr B J B Stephens.

Representatives on the Rangoon Port Trust Board—Messrs J R Halliday, (Arracan Co, Ltd), The Hon'ble Mr B J B Stephens, Mr J C Mackendrick, Mr J. A Polson, Mr H E Smith and Mr W. Macdonald

Representative on the Rangoon Municipal Committee—Mr M Joachim

COCANADA.

The following are the office holders of the Cocanada Chamber of Commerce, which has its head-quarters at Cocanada, the chief port on the Coromandel Coast, north of Madras —

Messrs P J Rose (Bank of Madras), *Chairman*, A Gardiner and B Eddington (Coromandel Co, Ltd), E H D'Cruz (Wilson & Co), A E Todd (Simson Bros), M R Ry Rao Bahadur K Suryanarayanamurty Naidu Garu and G. M Lake (Innes & Co), W Mackintosh (Shaw Wallace & Co), R J Hunter (Ripley & Co) and E Wurster (Volkart Bros)

Secretary, Mr H Muller

The rules of the Chamber provide "that by the term 'member' be understood a mercantile firm or establishment, or the permanent agency of a mercantile firm or establishment, or a society of merchants carrying on business in Cocanada, or other place in the Districts of Kistna, Godavari, Vizagapatam, and Ganjam, and duly electing according to the Rules of the Chamber, and that all such be eligible, but only members resident in Cocanada can hold office" Members are elected by ballot The Committee, when called upon by disputing members or non-members of the Chamber, give their decision upon all questions of mercantile usage and arbitrate upon any commercial matter referred to them for final judgment In the former case a fee of Rs 16 and in the latter a fee of Rs 32 must accompany the reference

The Committee consist of 4 members, including the Chairman, and 2 supplementary members, the Chairman to be elected by ballot at the general meeting of January in each year, for a term of 12 months, and the Committee, with 2 supplementary members, at the general meetings of January and July in each year, for the term of 6 months The entrance fee for each member whose place of business is in Cocanada is Rs 50 and for each member whose place of business is elsewhere be Rs 25 The subscription for each member whose place of business is in Cocanada is Rs 120 per annum, and for each member whose place of business is elsewhere be Rs 60 per annum, payable quarterly in advance

A weekly slip of current rates of produce, freights, and exchange is drawn up by the Committee

CEYLON.

The Ceylon Chamber of Commerce was incorporated in 1895 and has its head-quarters at Colombo All firms and persons engaged in the general trade of Ceylon are admissible as members and every person or firm desirous of joining the Chamber must be proposed by one member, seconded by another and balloted for by the whole Chamber The affairs of the Chamber are conducted by a Board of Directors consisting of Chairman and Vice-Chairman and from five to 10 members

The following is the membership of this Committee at the present time —

Mr Wm Moir of Louis Brown & Co, (*Chairman*), Mr E R Waldock, (*Vice Chairman*), Mr R S Philpott, (*P & O S N Co*), Sir H G Bois, Mr W. G. Macvicar, (*Chartered Bank*), Mr A J Martin, Mr H Goodwyn, Mr R S Wright, Mr C S Burns, Mr J Thomson Broom

Secretary—Mr F M Simpson

The Chamber maintains an official Committee from whom members are appointed to conduct surveys and arbitrations The Chambers are not affiliated bodies The following are the public bodies to which the Chamber elects representatives and the representatives elected for the current year —

Ceylon Legislative Council—Sir Stanley Bois

Colombo Port Commission—Messrs J Cochoie (Carson & Co), Mr. H Goodwyn, A J Martin (Delmege Forsyth & Co), J A Ridge (Ceylon Wharfage Co), and R S Philpott (P & O S N Co)

Colombo Municipality—Mr G Lionel Cox

Planters' Association of Ceylon—(General Coast Agency and Labour) Messrs W Moir (Louis Brown & Co), E Turner (Geo. Steuart & Co), E R Waldock, F N Mackie, F L Clements, H. W Crabbe, J Thomson Broom, G L Cox (Carson & Co) and F M Mackwood (Mackwood & Co), one seat being vacant; (Thirty Committee) Messrs W Moir, E R. Waldock, E Turner and G L Cox, two seats being vacant.

* The Peoples of India.

It is essential to bear in mind, when dealing with the people of India, that it is a continent rather than a country Nowhere is the complex character of Indians more clearly exemplified than in the physical type of its inhabitants No-one would confuse the main types, such as Gurkhas, Pathans, Sikhs, Rajputs, Burmans, Nagas, Tamils, etc , nor does it take long to carry the differentiation much farther The typical inhabitants of India–the Dravidians–differ altogether from those of Northern Asia, and more nearly resemble the tribes of Malaya, Sumatra and Madagascar Whatever may be their origin, it is certain that they have settled in the country for countless ages and that their present physical characteristics have been evolved locally They have been displaced in the North-West by successive hordes of invaders, including Aryans, Scythians, Pathans and Moghals, and in the North-East by Mongoloid tribes allied to those of Burma, which is India only in a modern political sense Between these foreign elements and the pure Dravidians is borderland where the contiguous races have intermingled

The people of the Indian Empire are divided by Sir Henry Risley (Caste, Tribe and Race, Indian Census Report, 1901, the Gazetteer of India, Ethnology and Caste, Volume I, Chapter 6) into seven main physical types There would be eight if the Andamanese were included, but this tiny group of Negritos may be disregarded

The Turko-Iranian, represented by the Baloch, Brahui and Afghans of Baluchistan and the North-West Frontier Province Probably formed by a fusion of Turki and Persian elements, in which the former predominate Stature above mean, complexion fair, eyes mostly dark, but occasionally grey, hair on face plentiful, head broad, nose moderately narrow, prominent, and very long The feature in these people that strikes one most prominently is the portentions length of their noses, and it is probably this peculiarity that has given rise to the tradition of the Jewish origin of the Afghans

The Indo-Aryan occupying the Punjab, Rajputana, and Kashmir, and having as its characteristics members the Rajputs, Khattris, and Jats This type, which is readily distinguishable from the Turko-Iranian, approaches most closely to that ascribed to the traditional Aryan colonists of India The stature is mostly tall, complexion fair, eyes dark, hair on face plentiful, head long, nose narrow, and prominent, but not specially long

The Scytho-Dravidian, comprising the Maratha Brahmans, the Kunbis, and the Coorgs of Western India Probably formed by a mixture of Scythian and Dravidian elements This type is clearly distinguished from the Turko-Iranian by a lower stature, a greater length of head, a higher nasal index, a shorter nose, and a lower orbito-nasal index All of these characters, except perhaps the last, may be due to a varying degree of intermixture with the Dravidians In the higher groups the amount of crossing seems to have been slight, in the lower the Dravidian elements are more pronounced.

The Aryo-Dravidian or Hindustani, found in the United Provinces, in parts of Rajputana, and in Bihar and represented in its upper strata by the Hindustani Brahman and in its lower by the Chamar Probably the result of the intermixture, in varying proportions, of the Indo-Aryan and Dravidian types The head-form is long with a tendency to medium, the complexion varies from lightish brown to black, the nose ranges from medium to broad, being always broader than among the Indo-Aryans, the stature is lower than in the latter group, and usually below the average according to the scale The higher representatives of this type approach the Indo-Aryans, while the lower members are in many respects not very far removed from the Dravidians The type is essentially a mixed one, yet its characteristics are readily definable, and no one would take even an upper class Hindustani for a pure Indo-Aryan or a Chamar for a genuine Dravidian The distinctive feature of the type, the character which gives the real clue to its origin and stamps the Aryo-Dravidian as racially different from the Indo-Aryan is to be found in the proportions of the nose

The Mongolo-Dravidian, or Bengali type of Lower Bengal and Orissa, comprising the Bengal Brahmans and Kayasthas, the Mahomedans of Eastern Bengal, and other groups peculiar to this part of India Probably a blend of Dravidian and Mongoloid elements, with a strain of Indo-Aryan blood in the higher groups The head is broad, complexion dark, hair on face usually plentiful, stature medium, nose medium, with a tendency to broad This is one of the most distinctive types in India, and its members may be recognised at a glance throughout the wide area where their remarkable aptitude for clerical pursuits has procured them employment Within its own habitat the type extends to the Himalayas on the north and to Assam on the east, and probably includes the bulk of the population of Orissa, the western limit coincides approximately with the hilly country of Chota Nagpur and Western Bengal

The Mongoloid, type of the Himalayas, Nepal, Assam, and Burma, represented by the Kanets of Lahul and Kulu, the Lepchas of Darjeeling and Sikkim, the Limbus, Murmis and Gurungs of Nepal, the Bodo of Assam, and the Burmese The head is broad, complexion dark, with a yellow tinge, hair on face scanty, stature short or below average, nose fine to broad, face characteristically flat, eyelids often oblique

The Dravidian type extending from Ceylon to the valley of the Ganges, and pervading Madras, Hyderabad, the Central Provinces, most of Central India and Chota Nagpur Its most characteristics representatives are the Paniyans of Malabar and the Santals of Chota Nagpur Probably the original type of the population of India, now modified to a varying extent by the admixture of Aryan, Scythian, and Mongoloid elements In typical specimens the stature is short or below mean, the complexion very dark, approaching black, hair plentiful, with an occasional tendency to curl, eyes dark, head long, nose very broad, sometimes depressed at the root, but not so as to make the face appear

* The material in this section is almost entirely taken from the Report on the Census of India, 1911, by Mr. E. A. Gait, C.S.I., C.I.E., I C S , Fellow of the Royal Statistical Society.

flat This race, the most primitive of the Indian types, occupies the oldest geological formation in India, the medley of forest-clad ranges, terraced plateau, and undulating plains which stretches roughly speaking, from the Vindhyas to Cape Comorin. On the east and the west of the peninsular area the domain of the Dravidian is conterminous with the Ghats, while further north it reaches on one side to the Aravallis, and on the other to the Rajmahal Hills Where the original characteristics have been unchanged by contact with Indo-Aryan or Mongoloid people, the type is remarkably uniform and distinctive Labour is the birthright of the pure Dravidian whether hoeing tea in Assam, the Duars, of Ceylon, cutting rice in the swamps of Eastern Bengal or doing scavenger's work in the streets of Calcutta, Rangoon and Singapore, he is recognizable at a glance by his black skin, his squat figure, and the negro-like proportions of his nose In the upper strata of the vast social deposit which is here treated as Dravidian these typical characteristics tend to thin and disappear, but even among them traces of the original stock survive in varying degrees

It must, however, be clearly understood that the areas occupied by these various types do not admit of being defined as sharply as they must be shown on an ethnographic map They melt into each other insensibly, and, although at the close of a day's journey from one ethnic tract to another, an observer whose attention had been directed to the subject would realise clearly enough that the physical characteristics of the people had undergone an appreciable change, he would certainly be unable to say at what particular stage in his progress the transformation had taken place.

Contrasts —The linguistic survey has distinguished in India about a hundred and thirty indigenous dialects belonging to six distinct families of speech In the domain of religion, though the bulk of the people call themselves Hindus, there are millions of Mahomedans, Animists, Buddhists, Jains, Sikhs, and Christians So also in respect of social customs In the north near relatives are forbidden to marry, but in the the south cousin marriage is prescribed and even closer alliances are sometimes permitted. As a rule, female chastity is highly valued, but some communities set little store by it, at any rate prior to marriage, and others make it a rule to dedicate one daughter to a life of religious prostitution In some parts the women move about freely, in others they are kept secluded. In some parts they wear skirts, in others trousers In some parts again wheat is the staple food, in others rice, and in others millets of various kinds All stages of civilisation are found in India At one extreme are the land-holding and professional classes, many of whom are highly educated and refined, at the other various primitive aboriginal tribes, such as the head-hunting Nagas of Assam and the leaf-clad savages of the southern hills who subsist on vermin and jungle products

MAIN STATISTICS OF THE INDIAN EMPIRE.

According to the revised areas adopted in the Census of 1911, the Indian Empire contains 1,802,657 square miles, or some 36,000 more than in 1901 About 23,000 square miles have been added owing to the enumeration for the first time of the Agency tracts attached to the North-West Frontier Province A further 6,500 represent the area of the Sunderbans, or swampy littoral of the Ganges delta, which was left out of account at previous enumerations Finally the Frontier State of Manipur has been found to contain about 5,000 square miles more than the estimate made in 1901

Population Divisions —The provinces under British administration comprise 1,093,074 square miles, or 60 6 per cent of the total The remainder is included in the Native States The total population is 315,156,396, of which British territory contains 244,267,542, or 77 5 per cent and the Native States 70,888 854 or 22 5 per cent

Comparisons with Europe —These stupendous figures can be grasped only by contrast The Indian Empire is equal to the whole of Europe, except Russia Burma is about the same size as Austria-Hungary, Bombay is comparable in point of area with Spain, Madras, the Punjab, Baluchistan, the Central Provinces and Berar and Rajputana are all larger than the British Islands, the United Provinces and Bihar and Orissa than Italy, and Hyderabad and Kashmir than Great Britain excluding Yorkshire

The population of India exceeds that of Europe without Russia, and is considerably more than three times that of the United States of America The United Provinces and Bengal, with the States attached to them, both have as many inhabitants as the British Islands, Bihar and Orissa as France, Bombay as Austria, and the Punjab as Spain and Portugal combined The population of the Central Provinces and Berar approaches that of Brazil, Hyderabad and Burma have as many inhabitants as Egypt, Central India and Rajputana as Scotland and Ireland combined, and Assam as Belgium

Density.—In the whole Empire there are on the average 175 persons to the square mile, or much the same as Europe outside Russia In British territory the number to the square mile is 223 and in the Native States 100, the former figure exceeds by 34 the density ratio in France and the latter is identical with that in Spain

There are great local variations in density. In nearly two-thirds of the districts, and States, the number of persons to the square mile is less than 200, and in about a quarter it ranges from 200 to 500 The units with less than 100 persons to the square mile covers two-fifths of the total area, but contains only one-eleventh of the population

Causes of Density.—The productiveness of the soil is the main factor in determining the density of the Indian people. The most thickly peopled tracts are the level plains where practically every inch of the land is fit for tillage. This is notably the case in Bengal and Bihar and the United Provinces East The next most densely peopled tracts are the low-lying plains along the sea coast in the southern part of the peninsula. In the United Provinces West and the Punjab East the configuration of the surface is equally favourable, the rainfall is more scanty and less

GROWTH OF THE INDIAN POPULATION.

	1911	1901	1891	1881	1872
INDIA	315,156,396	294,361,056	287,314,671	253,896,330	206,162,360
PROVINCES .	244,267,542	231,605,940	221,240,836	198,882,817	185,163,435
Ajmer-Merwara .	501,395	476,912	542,358	460,722	396,331
Andamans and Nicobars	26,459	24,649	15,609	14,628	.
Assam ..	6,713,635	5,841,878	5,477,302	4,907,792	4,150,769
Baluchistan	414,412	382,106	..		. ..
Bengal .. .	45,483,077	42,141,477	39,089,632	36,316,728	34,119,465
Bihar and Orissa	34,490,084	33,242,783	32,876,557	30,988,320	26,486,482
Bihar .	23,752,969	23,360,212	23,581,538	22,418,367	19,735,627
Orissa	5,131,753	4,982 142	4,666.227	4,343,964	3,603,156
Chota Nagpur	5,605,362	4,900,429	4,628,792	4,225,989	3,147,699
Bombay (Presidency) .	19,672,642	18,559,650	18,878,471	16,494,538	16,301,362
Bombay .	16,113,042	15,304,766	15,959,292	14,042,621	14,075,508
Sind ..	3,513,435	3,210,910	2,875,100	2,875,100	2,206,565
Aden .. .	46,165	43,974	44,079	34,860	19,289
Burma .. .	12,115,217	10,490,624	7,722,053	3,736,771	2,747,148
Central Provinces and Berar	13,916,308	11,971,452	13,048,972	11,943,363	9,951,268
Central Provinces	10,859,146	9,217,436	10.151,481	9,270,690	7,723,614
Berar ..	3,057,162	2,754,016	2,897,491	2,672,673	2,227,654
Coorg .. .	174,976	180,607	173,055	178,302	168,312
Madras .. .	41,405,404	38,229,654	35,644,428	30,841,154	31,230,622
North-West Frontier Province (Districts and Administered Territories).	2,196,933	2,041,534	1,857,519	1,575,943	17,609,672
Punjab	19,974,956	20,330,337	19,009,368	17,274,597	17,609,672
United Provinces of Agra and Oudh	47,182,044	47,692,277	46,905,512	44,149,959	42,002,004
Agra	34,624,040	34,859,109	34,254,588	32,762,127	30,780,961
Oudh	12,558,004	12,833,168	12,650,924	11,287,832	11,221,043

regular, but it is supplemented in many parts by water from the canals The natural divisions which contain the coast districts of Orissa and north Madras, with a rainfall of 50 inches, has a relatively low mean density, but this is because it includes on the west a considerable hilly area, while on the east near the sea the ground is swampy and impregnated with salt In the intermediate strip, between the littoral and the hills, the density is as great as in parts of the lower Gangetic Plain Want of water is the main explanation of the comparatively sparse population in several more or less level tracts such as Gujarat, Rajputana East and Central India West, and the North-West dry area In Assam there are extensive tracts of hill and jungle and sandy stretches in the strath of the Brahmaputra River, where permanent cultivation is out of question The agricultural returns show that three-quarters of the whole area is cultivable but this simply means that crops of some kind can occasionally be grown The proportion of the area fit for permanent cultivation must be less than half that shown in the returns

TOWNS AND VILLAGES.

The definition of a town in the Indian census statistics includes every municipality, all Civil Lines not included within municipal limits, every cantonment, every other continuous collections of houses inhabited by not less than 5,000 persons, which may be treated as a town for census purposes Only 9 5 per cent of the population of India are found in towns as defined above, compared with 78 1 per cent in England and Wales and 45 6 per cent in Germany Rather more than half the urban population of India is found in towns containing upwards of 20,000 inhabitants, about one-fifth in towns with from ten to twenty thousand, and the same proportion in those with from five to ten thousand, the remainder, about one-fifteenth, live in towns with less than five thousand The tendency to urban aggregation is most marked in the west of India and least so in the north-east The proportion of the urban to the total population in the main provinces ranges from 18 per cent in Bombay to only 3 per cent in Assam The urban population of Upper India is much larger than it otherwise would be, because of the numerous old capitals which are found there In the future the main factors will be the expansion of trade and industrial development

Sex in Towns —In respect of the distribution by sex, the urban population in India presents a striking contrast to that of European countries In Europe the proportion of females is larger in towns than in the general population, but in India it is considerably smaller, and the number of females per thousand males is only 847, compared with 953 in the population as a whole The reason is that in this country the great majority of the domestic servants, shop hands and factory employes are males The disproportion is most marked in large trading and industrial centres where the number of immigrants is large In Calcutta, for example, the foreign-born population contains only 357 females per thousand males

Religion in Towns. Of the Parsis no fewer than six out of every seven are resident in towns, of the Jains, the proportion is nearly one-third, and of the Christians more than one-fifth There is a marked contrast between these proportions and those for Hindus and Mahomedans who form the bulk of the population Of the Mahomedans less than one-eighth, and of the Hindus less than one-eleventh, reside in towns In the case of the former the proportion rises to one-sixth if we exclude the figures for Bengal, where the majority of the Mahomedans are the descendants of local converts Amongst the Hindus the higher castes have hitherto shown a greater predilection for town-life than the lower, but the disproportion is gradually disappearing, modern industrial developments are attracting the lower castes to towns in ever-increasing numbers

Urban and Rural —The proportion of the urban to the total population has fallen during the decade from 9 9 to 9 5 per cent The main explanation of this is undoubtedly the fact that plague has been far more prevalent in towns than in rural areas This scourge has now spread to all parts of the Empire except the east and south At the time of the census an epidemic was raging in many towns, especially in those of the United Provinces Central India and the Central Provinces and Berar, and a large number of the regular inhabitants had gone away. In addition, however, to driving people away, plague has been responsible in many towns for a terribly heavy mortality It is impossible to make any estimate of the direct and indirect effects of plague on the growth of towns, but it is quite certain that they have been enormous

Urban Tendencies —We cannot draw any conclusions as to the tendency to urban aggregation from a comparison of the statistics of the present census with those of the previous one, when plague was still a new and more or less local visitation but there can be no doubt that there is a growing tendency for people to congregate in towns of a certain kind The introduction of machinery is rapidly causing the old cottage industries to be replaced by mills and factories; and these are necessarily located at those places where there are the best facilities for collecting the raw material and distributing the manufactured article The jute industry is practically confined to the banks of the Hooghly near the port of Calcutta Cotton mills are found chiefly in Western India and woollen and leather factories at Cawnpore and Delhi The increasing trade of the country and the improvements in railway communications also encourage the growth of towns Not only are the great seaports attracting an ever-growing population, but various inland towns are benefiting from the same cause The extent to which modern conditions of trade and industry are causing the growth of towns is obscured not only by plague which is generally far more prevalent in towns than in rural areas, but also by the decay of old centres of population, which owed their importance to past political and economic conditions Throughout India there are many former capitals of defunct dynasties whose population is steadily dwindling During the last ten years, Mandalay, the last capital of the kings of Ava, has lost a quarter of its population

GROWTH OF THE INDIAN POPULATION—*contd*

	1911	1901	1891	1881	1872
STATES AND AGENCIES	70,888,854	62,755,116	66 073 835	55,013,513	20,998,925
Assam State (Manipur)	346,222	284,465		221,070	. .
Baluchistan States	420 291	428,640		.	.
Baroda State	2,032,798	1 952,692	2,415,396	2,182,158	1,997,598
Bengal States . .	822,565	740,299	716,310	698,261	567,827
Bihar and Orissa States .	3 945 209	3,314,474	3,028 018	2,410,611	1,723,900
Bombay States . . .	7,411 675	6 908,559	8,081 950	6,937,893	6,797,970
Central India Agency . ..	9,356,980	8,497,805	10,136,403	9,261,907	.. .
Central Provinces States	2,117 002	1 631,140	1,712,562	1,387,294	928,116
Hyderabad State	13,374,676	11,141 142	11,537,040	9,845,594	
Kashmir State	3,158,126	2,905,578	2 543,952		. .
Madras States . . .	4,811,841	4,188,086	3,700,622	3,341 849	3 289,392
Mysore State . . .	5 806,193	5,539,399	4,943 604	4,186,188	5,055,402
N -W F Province (Agencies and Tribal areas)	1,622,094	83,962		.	. .
Punjab States . . .	4,212,794	4,424,398	4,263,280	3,861,683	..
Rajputana Agency	10,530 432	9,853,366	12,171,749	9,934,255	...
Sikkim State	87,920	59,014	30,458		....
United Provinces States	832 036	802 097	792 491	741,750	638,720

CITIES.

The general practice of statisticians is to treat as cities only those places which have a population of more than 100,000 According to this standard there are in India only 30 cities, with a population of 7,075,782, or 2 2 per cent of the population Here there is an extraordinary difference between the Indian conditions and those of Western countries In England the cities contain 45 per cent of the total population, in Germany 21, and in France 14 per cent But even in these countries the growth of cities is comparatively recent In 1871 England had only 27 cities with 9 5 million inhabitants and Germany only 8 with 2 millions There are signs that in India the growth will be more rapid in the future than it has been The population of cities has risen since 1872 by 64 per cent and the net increase, comparing like with like, is 43 per cent The most rapid growth during this period is shown by Rangoon which has trebled its population Next comes Karachi with an increase of 168 percent and then Madura and Howrah with 158 and 113 per cent respectively Since 1901, two new places, Jubbulpore and Dacca, have entered the list of cities, while Baroda has disappeared from it Eighteen cities have gained, and twelve have lost population Of the latter, a few like Mandalay are really decadent but in most, such as Nagpur and Cawnpore, the loss was due wholly to the temporary influence of plague The progressive cities are differentiated from those which are decadent by their large immigrant population In Bombay, Calcutta and Howrah this exceeds 70 per cent of the total and in Rangoon and Karachi it is close on 60 per cent In Patna, Mandalay and Bareilly, on the other hand, it is barely 10 per cent

Calcutta—In speaking of Calcutta we may mean Calcutta proper, or the area administered by the Calcutta Municipal Corporation with the port, fort and canals, the population of which is 896,067, or this area plus the suburban municipalities of Cossipur-Chitpore, Maniktola and Garden Reach with 1,043,307 inhabitants,or lastly Greater Calcutta, which also includes Howrah, with an aggregate population of 1,222,313 The suburban municipalities differ from Calcutta only in respect of their Municipal Government From a structural point of view they cannot be distinguished The buildings are continuous throughout, and there is nothing to show where one municipality begins and the other ends A striking feature of the statistics is the large number of immigrants Less than 29 per cent of the inhabitants of Calcutta proper claim it has as their birthplace. The vast majority are immigrants, of whom 204,000 come from Bihar and Orissa and 90,000 from the United Provinces. Of the Bengal districts, the largest contributions are those from the 24 Parganas (88,000), Hooghly (48,000) and Midnapur (29,000) The volume of immigration is equally great in the suburbs and Howrah.

The first regular census of Calcutta proper taken in 1872 showed a population of 6,33,009 In 1881 there was practically no change, but in 1891 a gain of 11 4 per cent. was recorded In 1901 here was a further increase of 24 3 per cent., but part of this was due to improved enumeration At the present census the rate of increase in Calcutta proper has dropped to 5 7 per cent The falling off is due largely to the growing tendency of the inhabitants to make their home in the suburbs or even further afield The suburban municipalities have grown during the decade by 45 3 per cent

Bombay.—which has now a population of 979,445 was a petty town with about ten thousand inhabitants when it passed into the possession of the British in 1661 The population was estimated to be 100,000 in 1780, 180,000 in 1814 and 236,000 in 1836 At the first regular census in 1872 it had risen to 644,405, and nineteen years later, in 1891, it was 821, 764 In the next decade plague, which first appeared in September 1896, caused a serious set back, and it is estimated that by 1901 this disease had already been responsible for 114,000 deaths The census of that year showed a decrease of about 6 per cent, but this was not wholly due to deaths At the time when the census was taken, a virulent epidemic was in progress, and large numbers of the permanent residents had sought safety in flight A fresh enumeration taken in 1906 by the Health Department of the Municipality gave a population of 959,537 The number now returned exceeds that of 1901 by 26 per cent but it is only 2 per cent more than it was at the time of the local enumeration of 1906 It is said that the census of 1911 was taken at a time when many of the immigrants from neighbouring districts had gone to their permanent homes for the Holi holidays, and that many of the cotton mills had closed down temporarily owing to the prohibitive price of the raw material Like other large trading and industrial centres, Bombay is peopled mainly by immigrants, and more than 80 per cent of its inhabitants were born elsewhere. Most of them come from the neighbouring districts, more than one-fourth of the total number are from Ratnagiri, while four other districts together supply more than a third There are 30,000 Goanese, most of whom are in domestic service Of the immigrants from outside the province, some 50,000, chiefly mill hands, are from the United Provinces, and 12,000 mainly shopkeepers, from Rajputana Of the immigrants from outside India the largest number (6,000) come from the United Kingdom

Madras—Unlike Calcutta and Bombay, Madras, which is handicapped by its distance from the coal-fields, has but few large industries The indigenous handicrafts are decaying and their place is not being taken by factories of the modern type Apart from its being the headquarters of the Local Government, Madras owes whatever importance it possesses to its position as a distributing centre Of its total population (518,660), only one-third are immigrants, and of these only 12 per cent have come from places beyond the limits of the Madras Presidency The great majority are natives of the four districts in the immediate vicinity of the city.

The population grew fairly rapidly during the twenty years prior to 1901, but since then it has been almost stationary There has been an increase of about one per cent in the number of persons born in the city, but fewer of them

SUMMARISED GROWTH OF THE INDIAN POPULATION

	1901 to 1911	1891 to 1901	1881 to 1891	1872 to 1881	Net variation in period 1872 to 1911. Increase (+) Decrease (—)
INDIA	+20,795 340	+7,046,285	+ 33,418,341	+47,733,970	+108,994,036
PROVINCES	+12,661,602	+10,365 104	+22,358,019	+13,719,382	+59,104,107
Ajmer-Merwara	+24,483	—65,446	+81,636	+64,391	+105,064
Andamans and Nicobars	+1 810	+9,040	+ 981		
Assam	+871,757	+364 576	+569,510	+757,023	+2,562,866
Baluchistan	+32 306				
Bengal	+3,341,600	+3,051,845	+2,772,904	+2,197,263	+11,363,612
Bihar and Orissa	+1,247,301	+366,226	+1 888 237	+4 501,838	+8,003,602
Bihar	+392,757	—221,326	+1,163 171	+2,682,740	+4,017,342
Orissa	+149,611	+315,915	+322 263	+740,808	+1,528,597
Chota Nagpur	+704,933	+271 637	+402,803	+1,078,290	+2,457,663
Bombay (Presidency)	+1,112 992	—318,821	+2 383 933	+193,176	+3,371,280
Bombay	+808 276	—654,526	+1,916,671	—32,887	+2,037,534
Sind	+302,525	+335,810	+458,043	+210,492	+1,306,870
Aden	+2,191	—105	+9,219	+15 571	+26,876
Burma	+1,624,593	+2,768,571	+3,985,282	+989,623	9,368,069
Central Provinces and Berar	+1,944 856	—1,077 520	+1,105,609	+1,992,095	+3,965,040
Central Provinces	+1 641 710	—934 045	+880,791	+1,547,076	+3,135,532
Berar	+303,146	—143,475	+224,818	+445.019	+829,508
Coorg	—5 631	+7,552	—5,247	+9,990	+6,664
Madras	+3,175,750	+2,585,226	+4,803,274	—389,468	+10,174,782
North-West Frontier Province (Districts and Administered Territories).	+155,399	+184,015	+281,576	+1,240,868	+4,562,217
Punjab	—355,381	+1,320,969	+1,734,771		
United Provinces of Agra and Oudh	—510,233	+786,765	+2,755 553	+2,147,955	+5,180,040
Agra	—235,069	+604,521	+1,492 461	+1,981,166	+3,843,079
Oudh	—275,164	+182 244	+1,263,092	+166,789	+1,336,961

have been enumerated within the city limits As compared with 1901 the net gain due to migration is less than 9,000 It is possible that the great demand for labour in Burma, where wages are very high, has attracted many of the labouring classes who would otherwise have sought their living in Madras

Hyderabad—Next to the three Presidency towns, the largest city in India is Hyderabad, the capital of the Nizam's Dominions Its population is shown in the local Census Report as 500,623 Hyderabad has hitherto made very little industrial progress, and less than a quarter of its population is drawn from outside

HOUSES AND FAMILIES.

Generally speaking it may be said that the labouring classes in India live in one, or at the most two, single room huts The home of a well-to-do peasant consists of a public sitting room and a cook room and several apartments which are arranged round and open on to a courtyard In spite of the joint family system the number of houses corresponds very closely to the number of families in the European sense. The total number of houses is 63 7 million, and there are 64 6 million married females aged 15 and over Except amongst the higher castes who form but a small fraction of the total population the joint family system is not nearly so common as is frequently supposed Where it is in vogue, there is often a strong disruptive tendency In the towns and cities, owing to the high rents, the unit for all below the middle class is the room, not the house

	Average population per house
1881	5 8
1891	5 4
1901	.. 5.2
1911	.. 4.9

MOVEMENT OF THE POPULATION.

According to the census returns, the total population of India has increased by 7 1 per cent during the last decade, and by 52 9 per cent since 1872, but the real gain since the latter date is very much less than this Large tracts of country, including the Central India and Rajputana Agencies, Hyderabad and the Punjab States, which were omitted from the census returns of 1872, were included in those of 1881 In 1891 the greater part of Upper Burma and Kashmir and several smaller units were enumerated for the first time In 1901 the most important additions were a portion of Upper Burma and the greater part of Baluchistan In 1911 the Agencies and tribal areas in the North-West Frontier Province, together with a few smaller areas, were included within the scope of the enumeration The real increase in the population in the last 39 years is estimated at about 50 millions, or 19 per cent This is less than half the increase which has taken place in the same period amongst the Teutonic nations of Europe, but it considerably exceeds that of the Latin nations In France the population has grown by less than 7 per cent since 1870, but this is because of its exceptionally low birth-rate In India the birth-rate is far higher than in any European country, and it is the heavy mortality especially amongst infants, which checks the rate of increase

Famine and Disease.—In addition to the causes which ordinarily govern the movement of the population, India is subject to two special factors—famine and epidemic disease The decade preceding the census of 1911 was free from widespread famines such as those of the preceding ten years In 1907 there was a partial failure of the monsoon which was felt over a wide area, extending from Bihar to the Punjab and Bombay, and causing actual famine in the United Provinces and in a few districts elsewhere Prices ruled high in most years and there was an extension of special crops, such as jute and cotton, which are more profitable to the cultivator than food grains It was on the whole a period of moderate agricultural prosperity From the point of view of public health, the censal period would have been an average one, but for the ravages of plague Breaking out in Bombay in 1896, it has by March 1901 caused a recorded mortality of half a million Since then it has continued its ravages, especially in Bombay and Upper India The mortality from it rose from about a quarter of a million in 1901 to 1 3 millions in 1907 It fell below a quarter of a million in each of the next two years, but in 1910 it exceeded half a million The total number of deaths from plague during the decade was nearly 6 5 millions of which over one-third occurred in the Punjab and two-fifths in the United Provinces and Bombay, taken together The disease fortunately has failed to establish itself in Bengal, Assam, and on the East Coast and in the extreme south of the Peninsula This however is only the recorded mortality, in time of epidemic the reporting agency breaks down and large numbers of deaths escape registration Plague attacks women more than men, and people in the prime of life more than the young and old If plague is omitted, and it is assumed that the mortality of the decade would otherwise have remained normal, the population of the census of 1911 would have been greater than it was by at least 6 5 millions In other words, the population would have increased by 9 3 instead of 7 1 per cent

General Conclusions—The most noticeable feature is the continuous rapid growth in Burma Lower Burma has grown by 135 per cent since 1872 and the whole Province including Upper Burma, which was annexed in 1886, by 37 per cent since 1891 In Assam including Manipur the increase since 1872 amounts to 70 and in the Central Provinces and Berar to 47 per cent In the other main provinces the rate of growth has been much slower In some provinces, such as Burma, Assam and Bengal there has been continuous progress but others, at some time or another, have sustained a set-back In the larger provinces at least, the internal variations are also frequently considerable In Bengal one district has at the present time a smaller population than it had in 1872, while four others have more than doubled their population since that date

In British territory there has been a gain of 9 1 per cent over about nine-tenths of the area,

SUMMARISED GROWTH OF THE INDIAN POPULATION—*contd*

	1901 to 1911	1891 to 1901	1881 to 1891	1872 to 1881	Net variation in period 1872 to 1911. Increase (+). Decrease (—).
STATES AND AGENCIES	+8,133,738	—3,318,719	+11,060 322	+34,014,588	+49,889,929
Assam State (Manipur)	+61 757		. .	.	.
Baluchistan States	—8,349		.		..
Baroda State	+80 106	—462,704	+233,238	+184,560	+35,200
Bengal States	+82,266	+23 989	+18,049	+130,434	+254,738
Bihar and Orissa States	+630,735	+286 456	+617,407	+686,711	+2,221,309
Bombay States	+503,116	—1 173,391	+1.144,057	+139,923	+613,705
Central India Agency	+859,175	—1,638,598	+874,496		. .
Central Provinces States	+485,862	—81,422	+325,268	+459,178	+1 188,886
Hyderabad State	+2 233,534	—395,898	+1 691,446		.
Kashmir State	+252,5[illegible]	+361,626		.	
Madras States	+623 735	+487,464	+355,773	+55,457	+1,522,449
Mysore State	+266 794	+595,795	+757,416	—869 214	+750,791
N.-W. F Province (Agencies and Tribal areas)	+1,538,132	.	.	. ..	....
Punjab States	—211,604	+161,118	+401,597	. ..	.. .
Rajputana Agency	+677,066	—2,318,383	+2,227,494	..	....
Sikkim State	+28,906	+28,556	....	. ..	. ..
United Provinces States	+29,939	+9,606	+50,741	+103,030	+193,316

with three quarters of the total population, and a loss of 5 3 per cent in the remaining one-tenth of the area and one-fourth of the population The contrast in different parts of the Native States is still more striking The net increase of 10 3 per cent is the outcome of a gain of 14 3 per cent, in four-fifths of the total area and population, coupled with a loss of 6 2 per cent elsewhere The relatively greater net increase in the Native States as compared with British territory is explained by the fact that many of the States suffered severely from famine in the previous decade when they sustained a net loss of 5 per cent, while British territory gained 4 7 per cent Apart from this, in ordinary circumstances a comparatively high rate of increase is to be expected in the Native States, as they are, on the whole, more undeveloped than British territory, and contain a much larger proportion of cultivable waste land The net increase in India as a whole during the last decade is the resultant of a gain of 10 3 per cent in an area of 1,517,000 square miles, with a population of 245 millions and a present density of 162 to the square mile, and a loss of 5 5 per cent in an area of 218,000 square miles with a population of 68 millions and a density of 312 to the square mile

MIGRATION.

In India there are two currents of migration—minor and major The chief of the minor movements is the custom, almost universal amongst Hindus, whereby parents seek wives for their sons in a different village from their own Of the 26 5 million natives of India who were enumerated in a district other than that in which they were born, 16 5 millions, or 62 per cent were born in a district adjoining that in which they were enumerated The major currents of migration are governed by economic conditions The most noticeable movements are the large streams of emigration from Bihar and Orissa, Madras, the United Provinces and Rajputana, and of immigration into Bengal, Assam and Burma Owing to its fertile soil, Bengal is able to support practically the whole of its dense indigenous population by agriculture It is necessary therefore to man the jute mills by imported labour, as also the tea gardens of Darjiling and Jalpaiguri and to draw the general labour supply from outside In Bengal the net excess of immigrants over emigrants is close on 1,400,000 Of these about 236,000 are Natives of a district in Bihar and Orissa, or Assam, contiguous to the Bengal district in which they were enumerated Assam and Burma are sparsely populated and the land available for cultivation being ample, very few of the indigenous inhabitants find it necessary to work for hire The tea gardens of Assam and the rice mills and oil wells of Burma have to obtain their coolies elsewhere In Assam 12 5 per cent and in Burma 5 per cent of the population are immigrants On an average 51,000 labourers and dependants go each year to the tea gardens of Assam In Burma, Madras supplies labourers for the rice-milling, oil and other industries, whilst many coolies flock into the province from Chittagong, chiefly for the rice harvest The net loss to Bihar and Orissa on account of migration is about 1 5 millions The United Provinces sustain a net loss of about 800,000 from migration, chiefly in the direction of Bengal Madras being very backward from an industrial point of view, there is no great local demand for labour At the same time there is an exceptionally large population of the "untouchable" castes, who have no scruples about seeking their livelihood oversea It provides Ceylon with labour for its plantations, Burma with labour for its industries, and the Federated Malay States with labour for their rubber plantations. The enterprising Marwari traders of Rajputana have penetrated to all parts of India and are to be found in very important bazars throughout Bengal and even in Assam. Bombay is industrially more advanced than Bengal, but as its soil is less productive there is a large local supply of labourers, chiefly from the southern coast strip called the Konkan The United Provinces give more than four times as many labourers to Bengal as to Bombay As for the migration between British India and Native territory, it involves a loss of 135,000 to the Native States

Asiatic Immigration—Of the 504,000 persons born in other Asiatic countries who were resident in India at the time of the census, more than half were natives of Nepal Of the 92,000 immigrants from Afghanistan all but 11,000 were enumerated in Northern India The rest were cold weather visitors who travel about the country peddling piece-goods and other articles of clothing These Cabuli pedlars cause great trouble in Bengal by their truculence The number of Chinese is 80,000 Most of these are found in Burma, but the Chinaman is making his way into Bengal, where he is appreciated as a shoemaker and carpenter From Arabia come 23,000 immigrants, chiefly to Bombay

Non-Asiatic Immigration—The total number of immigrants from countries outside Asia is 146,265 Of these 131,968 come from Europe The United Kingdom sends 122,919, Germany comes next with only 1,860 and then France with 1,478 As compared with 1901 there is an increase of about 26,000 in the number of immigrants from the United Kingdom Of the British-born 77,626 were serving in the army as compared with 60,965 at the time of the previous census, when a strong contingent had been sent from India to reinforce the British garrison in South Africa The rest of the increase is accounted for by the industrial development which has taken place, the extension of railways, and the growing extent to which Englishmen in India marry The number of females born in the British Islands and enumerated in India has risen during the decade from 14,663 to 19,494. The figures for other European countries do not call for any special comment

Emigration from India.—The Indian census statistics naturally tell us nothing of the emigration from India to other countries This emigration is of two kinds, the movement across the border which separates India from contiguous countries, such as China, Nepal, Afghanistan and Persia, much of which is of the casual type, and emigration to distant countries No statistics are available regarding the emigration from India to the countries on its borders There is probably, very little movement from Burma into China

VARIATION IN POPULATION OF THE 30 CHIEF TOWNS.

——	1911.	1901	1891	1881	1872.
CALCUTTA AND FORT * ..	896,067	847,796	682,305	612,307	633,009
BOMBAY	979 445	776 006	821,764	773,196	644,405
MADRAS AND CANTONMENT	518,660	509,346	452,518	405,848	397 552
Agra and Cantonment .. .	185,449	188,022	168,662	160,203	149,008
Ahmedabad and Cantonment	216,777	185,889	148,412	127,621	119,672
Allahabad and Cantonment . ..	171,697	172,032	175,246	160,118	143,693
Amritsar and Cantonment..	152,756	162,429	136,766	151,896	135,813
Bangalore Civil and Military Station †	100,834	89,599	100,081	93,540	81,810
Bareilly and Cantonment .	129 462	133 167	122,837	115,138	104,533
Benares and Cantonment .	203 804	213,079	223,375	218 573	178,300
Cawnpore and Cantonment	178,557	202 797	194 048	155,369	125,877
Dacca	108,551	89,733	81,585	78,369	68,595
Delhi and Cantonment	232 837	208,575	192,579	173,393	154,417
Howrah	179,006	157 594	116 606	90,813	84,069
Hyderabad and Cantonment .	500,623	448,466	415,039	367 417	.
Jaipur .	137,098	160,167	158,787	142,578	. .
Jubbulpore and Cantonment	100,651	90,533	84 682	76,023	55,469
Karachi and Cantonment	151,903	116,663	105 199	73 560	56,753
Lahore and Cantonment . ..	228,687	202 964	176 854	157,287	125,413
Lucknow and Cantonment .	259 798	264,049	273,028	261,303	284,779
Madura .. .	134,130	105 984	87,428	73,807	51,987
Mandalay and Cantonment .	138,299	183,816	188,815		
Meerut and Cantonment . .	116,227	118 129	119 300	99,565	81,386
Nagpur	101,415	127,734	117,014	98,299	84,441
Patna	136,153	134,785	165,192	170,654	158,900
Poona and Cantonment	158,856	153,320	161,390	129,751	118,886
Rangoon and Cantonment	293 316	245 430	182 080	134,176	98,745
Srinagar and Cantonment	126,344	122,618	118,960		
Surat and Cantonment .	114,868	119 306	109,229	109 844	107,855
Trichinopoly and Cantonment	123,512	104,721	90,609	84,449	76,530

* The above figures for Calcutta exclude the population of Cossipore-Chitpur, Manicktola and Garden Reach These places have a separate Municipal administration, but for all practical purposes they form an integral part of Calcutta So also does Howrah except that it lies on the opposite bank of the Hoogly If the first-mentioned Municipalities be added, the population of Calcutta rises to 1,043,307 If Howrah also be included, it comes to 1,222,313

† Bangalore City and Bangalore Civil and Military Station are structurally a single unit, but for the purpose of the census they have been treated as separate places.

but, on the other hand, it is believed that the emigration into the somewhat sparsely peopled Nepal terai from some of the adjacent British districts, where the population is much congested, exceeds the countervailing immigration. Very few people go from British territory to settle permanently in Afghanistan or Persia, but at the time when the last census was taken owing to drought in Baluchistan, a considerable number of Nomad Brahuis from Chagai, and of Baloch from Mekran had passed over temporarily into Afghanistan and Persia. At a rough guess the number of emigrants across the Indian Frontier may be taken to be about a fifth of a million.

Emigration to Distant Countries.—Of the emigrants to distant countries a certain number find their way to French or Dutch Colonies, such as Surinam, Martinique and Guadeloupe. But the majority go to other parts of the British Empire. The total number of emigrants from India to other parts of the British Empire slightly exceeds a million, of whom about two-thirds are males, more than four-fifths of the aggregate are Hindus and only one-tenth are Mahomedans. Of the total number, about 474,000 were enumerated in Ceylon, 231,000 in the Straits Settlements and the Malay States, 88,000 in British Guiana, 73,000 in Natal, 51,000 in Trinidad, 35,000 in Mauritius, 29,000 in Fiji and 8,000 each in Jamaica and Zanzibar. About one-fifth of these emigrants failed to specify their province of birth, of the remainder no less than 693,000 or 85 per cent were from Madras, 32,000 from Bengal, about 20,000 each from the United Provinces and Bombay, 16,000 from Bihar and Orissa, 13,000 from the Punjab and 8,000 from the Mysore State. The number who emigrated from other parts of India was inconsiderable. Most of these emigrants to the colonies went as ordinary labourers in sugar, tea, coffee, rubber and other plantations, but a large number of those from Bombay and Bengal are lascars on ships, while many of the natives of the Punjab are employed in the army or military police.

Ceylon.—The movement to Ceylon is of long-standing. Owing to the rapid expansion of tea cultivation, the number of natives of India enumerated in that Island increased by 65 per cent in the decade ending in 1901. Since then there has been a further increase of nearly 10 per cent chiefly on account of the new rubber plantations. The great majority of these emigrants are from the southern districts of Madras. Mysore sends about 8,000, Travancore 7,000 and Cochin and Bombay 3,000 each. Most of them are temporary emigrants, who return after a time to their homes in Southern India. The total number of Tamils enumerated in Ceylon exceeds a million, but about half of them have been domiciled in the Island for many centuries and barely 100,000 are the offspring of recent settlers.

Malaya.—The emigration to the Straits Settlements and the Malay States is of quite recent growth, and is due almost entirely to the demand for labour on the rubber plantations. Most of the emigrants are temporary settlers, who return to their homes when they have saved a little money, and the total number of Indians enumerated there exceeds by only 12 per cent the number who returned to India as their birthplace. Almost four-fifths of the total number are males. Here also Madras is the principal source of supply the Punjab (8,754) being the only other province which sends an appreciable number.

South Africa.—In Natal, there has been a great deal of permanent settlement, and of the total number of Indians enumerated there, nearly half were born in the colony. Many of these have forgotten their native language and now talk only English. But it is in Mauritius that the process of colonisation has made most headway. The introduction of Indian coolies to work the sugar plantations dates from the emancipation of the slaves, three quarters of a century ago and from that time onwards many of the coolies who have gone there have made the island their permanent home. Though it now contains only 35,000 persons who were born in India, the total number of Indians is 258,000, or about 70 per cent of the whole population. A large part of the island is now owned by Indians, and they are dominant in commercial, agricultural and domestic callings.

RELIGIONS.

India is a land of many religions. All the great religious faiths of mankind are represented in its population by communities, whose origin carries us back to the early history of their respective creeds. Hinduism and its offshoots, Buddhism and Jainism, are autochthonous. The Jews of Cochin have traditions which carry back their arrival on the coast to the time of their escape from servitude under Cyrus in the sixth century B.C. The Syrian Christians of Malabar ascribe the introduction of Christianity and the establishment of their original Church to the Apostle St. Thomas, in the year 52 A.D. Nearly two centuries before the followers of Mahomed obtained a footing in India as conquerors, a peaceful trading colony of Arabs had settled on the Malabar coast. The Parsi settlement in Gujarat dates from about the same period. These facts are recalled here because not only Europeans, but even educated Indians, speak as if the first foreign settlement in India was that which followed the Mahomedan conquest, and that Christianity was first brought to the country by the Portuguese. They also dispose of another erroneous idea that up to the time of the Mahomedan conquest, Hinduism absorbed all the foreign elements which found their way into the country. No doubt Greeks, Bactrians and Scythians were so absorbed into the structure of Hinduism, but the fact that the Jews, the Syrian Christians and the Parsis have remained distinct from Hinduism, shows that this was not the case universally. If we may hazard a conjecture, it would seem that the ancient Hindu policy towards immigrants who came by land differed from that observed in the case of immigrants by sea. The Indo-Aryan himself entered the country through the mountain passes in the North-West, and knew something of the land which lay beyond. But the sea was always something of a mystery and a terror to him, and those

STATISTICS OF RELIGIONS

Religion	India	British Provinces	Native States
INDIA	315,156,396	244,267,542	70 888,854
Hindu	217,586,892	163,621,431	53,965,461
Brahmanic	217,337,943	163,381,380	53,956,563
Arya	243,445	234,841	8,604
Brahmo	5,504	5,210	294
Sikh	3,014 466	2,171,908	842,558
Jain	1,248,182	458,578	789,604
Buddhist	10,721,453	10,644,409	77,044
Zoroastrian (Parsi)	100,096	86,155	13,941
Musalman	66,647,299	57 423,889	9,223,410
Christian	3,876,203	2,492,284	1,383,919
Jew	20,980	18,524	2,456
Animistic	10,295,168	7,348,024	2,947,144
Minor Religions and Religion not returned	37,101	2,340	34,761
Not enumerated by Religion	1,608,556		1,608,556

POPULATION ACCORDING TO RELIGION AND EDUCATION (CENSUS OF 1911)

Religions	Total Population	Illiterate	Literate	Literate in English
	Males			
Hindu	110,865,731	99,642,597	11,223,134	1,013,596
Sikh	1,734,773	1,550,610	184,163	11,490
Jain	643,553	324,968	318,585	13,030
Buddhist	5,286 142	3,151,761	2.134,381	21,767
Parsi	51,123	11,128	39,995	25,334
Muhammadan	34,709,365	32,319,599	2,389,766	176,051
Christian	2,010,724	1,422,154	588,570	252,591
Animistic	5 088,241	5,034,408	53,833	1,521
Minor and Unspecified	28,818	22,430	6,388	2,981
Total Males	160,418,470	143,479,655	16,938,815	1,518,361
	Females			
Hindu	106,720,714	105,905,904	814,810	23,659
Sikh	1,279,667	1,262,387	17,280	238
Jain	604,629	580,509	24,120	209
Buddhist	5,435,086	5,117,748	317,338	1,383
Parsi	48,973	17,755	31,218	8,347
Muhammadan	31,883,812	31,746,005	137,807	3,940
Christian	1,865,472	1,613,177	252,295	112,643
Animistic	5,129,303	5,126,316	2,987	74
Minor and Unspecified	29,263	26,355	2,908	1,533
Total Females	152,996,919	151,396,156	1,600,763	152,026
Total Population	313,415,389	294,875,811	18,539,578	1,670,387

who came from beyond the sea were looked upon as beings of a different clay. They were treated hospitably, and in course of time they assimilated much of the influences of their Hindu environment But they remained all the same separate communities, and no attempt was made to incorporate them in the great mass of Hinduism The prohition of seavoyage to members of the higher castes is another proof of the peculiar prejudice which ancient Indians cherished against inhabitants of countries divided from India by intervening seas.

Origin of Hinduism.—We have spoken alone of Hinduism as being autochthonous The opinion generally held is that the ancestors of the Vedic Indians were immigrants from Central Asia An Indian scholar of some repute has recently endeavoured to show that the received opinion is not borne out by the evidence available in the ancient literatures of India Whatever may be the value attaching to his contention that the Vedic Indians were not immigrants or descendants of immigrants, but only a section of the indigenous population addicted to the cult of fire-worship it is true, as he says, that there is no expression in the Vedas of a longing, lingering remembrance of a foreign homeland, such as one might expect to find in the literature of an immigrant race This is all the more remarkable as an intense attachment to the land they lived in is manifest in all their compositions A Sanskrit couplet in which the names of the seven great rivers of India, the Ganges, the Jumna, the Godavari, the Saraswati, the Nerbudda, the Indus and the Cauvery, are strung together in pious praise, is recited daily by millions of Hindus at their daily devotions, and helps to keep them in mind of the sanctity of the Indian Continent in Hindu eyes If the ancient Hindus were immigrants, they not only took exceptional care to blot out all memories of the land from which they came from their own minds, but they also strove by every means in their power to bind the reverence and love of their posterity to India as the land *par excellence* of religion and morality, so much so that the name Hindu, in the orthodox acceptance of the term, is not applicable to anyone who is not born in India If the ancestors of the Hindus were foreigners in India, they must have set themselves, as a matter of deliberate policy, to intertwine the deepest affections and the highest aspirations of their race with the land in which they had settled, to the entire exclusion of the land whence they had come

Evolution of Hinduism.—Following from the theory that the ancestors of the Hindus were immigrants from Central Asia, is the explanation generally given of the varieties of religious beliefs and social practices to be found within the pale of Hinduism Hinduism, it is the common idea, was originally a pure and simple creed which has had to compromise with the Animism of the population, amongst whom it spread, by accepting several of its godlings and superstitions The greatest obstacle in the way of this explanation is that there is no evidence whatsoever of any organised missionary activity among the Hindus at any time The immense distances and the absence of means of communication, would of themselves have made such activity difficult Moreover, a compromise implies selection and rejection and the existence of some agency entrusted with the duty of selection As a fact, however, we find that Hinduism has exercised very little selection, and that it covers practically all the beliefs and customs which prevail amongst the tribes who are included within its pale Such a state of things is more consonant with the view that the purer forms of Hinduism are highly evolved stages of the cruder forms which are still observed by the less educated and prosperous sections of the community This view, namely, that the higher forms of Hinduism are evolved from lower ones, rather than that the latter are corruptions of the former, gains support from what is now generally accepted as being the true explanation of the origin of certain social customs Twenty years ago, it was generally held that the custom of child marriages, for instance, was of sacerdotal origin and was most largely prevalent amongst the higher castes from whom it spread to the lower Recently, however, it has been proved that child marriages are prevalent far more largely and in a far grosser form amongst the lowest castes than amongst the higher castes, and that amongst the latter, it is a survival from the times when the caste system was less rigid and intermarriages, that is to say, the taking of wives by the higher castes from the lower, were common It may be added that the two most characteristic beliefs of Hinduism, namely, that in the transmigration of souls and in the law of *Karma* or retribution, are held with, if anything, more tenacity by the lower than by the higher castes

Scope of Hinduism —From this point of view, the varying beliefs and customs which go under the name of Hinduism not only offer no difficulties, but furnish the right clue to the understanding of this unique socio-religious system They explain why the term "religion" as applied to Hinduism does not adequately express its scope and method Hinduism has no settled creeds which are obligatory on every Hindu It enforces no fixed and uniform moral standards on the innumerable sects and castes which bear its name It extends its suffrages to monogamous, polygamous and even polyandrous unions between the sexes and, in the case of the so-called *devadasis*, countenances a life of open irregularity An Indian newspaper recently instituted an interesting discussion on the question "Who is a Hindu" An eminent Hindu lawyer, who subsequently rose to be a judge of one of the Indian High Courts, laid down that a Hindu was one to whom the Indian Courts would apply the Hindu law The learned lawyer, however, forgot that there are Mahomedan castes which follow the Hindu law in regard to the inheritance of and succession to property.

And yet, though Hinduism refuses to conform to almost every one of the ideas which we usually associate with the term "religion," it is impossible to deny that it occupies a unique and highly important place amongst the religious systems of the world The reason why it does not fit into our definition of religion is that it represents a fundamentally different line of evolution in the history of religious

OCCUPATIONS OF THE INDIAN PEOPLES.

INDIA	313,470,014
—PRODUCTION OF RAW MATERIALS	227,030,092
I.—Exploitation of the Surface of the Earth	226,550,483
Pasture and agriculture	224,695,900
(*a*) Ordinary cultivation	216,787,137
(*b*) Growing of special products and market gardening	2,012,503
(*c*) Forestry	672,093
(*d*) Raising of farm stock	5,176,104
(*e*) Raising of small animals	48,063
Fishing and hunting	1,854,583
II.—Extraction of Minerals	529,609
Mines	375,927
Quarries of hard rocks	75,424
Salt, etc	78,258
—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES	58,191,121
III.—Industry	35,323,041
Textiles	8,306,501
Hides, skins and hard materials from the animal kingdom	698,741
Wood	3,799,892
Metals	1,861,445
Ceramics	2,240,210
Chemical products properly so called, and analogous	1,241,587
Food industries	3,711,675
Industries of dress and the toilet	7,750,609
Furniture industries	39,268
Building industries	2,062,493
Construction of means of transport	66,056
Production and transmission of physical forces (heat, light, electricity, motive power, etc.)	14,384
Industries of luxury and those pertaining to literature and to arts and sciences	2,141,665
Industries concerned with refuse matter	1,388,515
IV.—Transport	5,028,900
Transport by water	982,766
Transport by road	2,781,938
Transport by rail	1,062,493
Post Office, telegraph and telephone services	201,781
V.—Trade	17,839,102
Banks, establishments of credit, exchange and insurance	1,220,187
Brokerage, commission and export	240,858
Trade in textiles	1,277,469
Trade in skins, leather and furs	296,712
Trade in wood	224,838
Trade in metals	59,766
Trade in pottery	101,981
Trade in chemical products	171,927
Hotels, cafes, restaurants, etc.	719,052
Other trade in food stuffs	9,478,868
Trade in clothing and toilet articles	306,701
Trade in furniture	173,413

thought In other races the line of evolution was from polytheism to monotheism, but in India it was from polytheism to the higher pantheism Contrasting the development of the Judaic idea of God with that of the Hindus, Dr Harold Hafding observes "With the Hindus there was no God who claimed sole sway, they went back to the power which makes all gods what they are, to the inner aspirations and needs which find vent for themselves in prayer and sacrifice Following an extremely remarkable line of thought that which drives men to worship gods was itself regarded as the true divine power Brahma meant originally the magical, creative word of prayer, but it afterwards came to denote the principle of existence itself, so that we have a transition from the idea of motion towards to that of its goal, from prayer to the object addressed in prayer" The Indian philosopher saw the whole universe transfused and overspread with Deity He perceived how evil was being perpetually transformed to good in the cosmic process spreading out before the poet and the philosopher, endless and timeless, to whom the evil and the good seemed but different stages in a great common process of which the secret was known only to the Supreme Being No European writer has caught the innermost essence of the Hindu philosopher's idea of the Supreme, so faithfully and expressed it so righteously as Sir Edwin Arnold in his "Light of Asia"

Before beginning, and without an end,
As space eternal and as surety sure,
Is fixed a Power divine which moves to good,

Only its laws endure
It is not marred nor stayed in any use,
All liketh it, the sweet white milk it brings
To mothers' breasts, it brings the white drops too,

Wherewith the young snake stings
It slayeth and it saveth, nowise moved
Except unto the working out of doom,
Its threads are Love and Life, Death and Pain

The shuttles of its loom
It maketh and unmaketh, mending all,
What it hath wrought is better than had been,

Slow grows the splendid pattern that it plans

Its wistful hands between

The ethical values of Hinduism are not different from those of other great religions Like them it attaches little importance to the qualities which make for wordly success and most importance to self-sacrifice, humility and kindliness to all Only its methods differ On the whole, however, the Hindu socio-religious scheme owing to its tendency to make the individual human being a passive instrument in the hands of a Higher Power instead of an active co-operator with it has favoured stability at the expense of progress

Hindu sects—Hinduism is made up of many sects and cults It is usual to speak of Hinduism as it was before Buddhism, as a single creed, but this is because the literature that has come down to us is the literature of the sect that came to supersede all others But even in it, we can, by reading between the lines, discover the existence of rival sects Even the Vedas themselves are the literature probably of one of several sects which happened to be gifted with a talent for letters The rapid multiplication of sects, however, was undoubtedly encouraged by the introduction of idol worship in imitation of the practice of decadent Buddhism Hindu religious philosophers recognised three ways of salvation namely, the way of knowledge, the way of faith and the way of service Every sect of Hinduism recognises the value of all these three ways, but it differs as to the relative importance to be attached to each The sect of the great philosopher, Sankaracharya, who maintained that the Supreme Being was the only Reality and that all the phenomenal universe was Maya or illusion, and that salvation came from the realisation of this fact, did not discard faith and service altogether, but only gave these a subordinate position in his scheme of religion Ramanuja, Madhva and Vallabhacharya who followed him and, in more or less degree, refuted his doctrine of the non-reality of the phenomenal universe, laid more stress on faith and service than on knowledge, but they did not discard the path of knowledge altogether It should be mentioned here that it has been the great misfortune of Hinduism that the path of service has come to mean the path not of altruistic service to mankind but the path of service conceived in a ceremonial sense to priests, religious recluses and mendicants and to idols It is the great aim of the modern religious reform movements such as the Arya Samaj and the Brahma Samaj to rescue the path of service from this spurious interpretation and to make altruistic social service an integral part of religion The question of sect, however, does not play a very important part in Hinduism Except in Southern and to a much smaller extent, in Western India, the great mass of the Hindus are not sectaries In Southern India, the Vaishnavas and Madhvas will on no account, worship Shiva or visit a temple dedicated to him The Lingayaths are a Shiva sect found in the Karnatak districts of the Bombay and Madras Presidencies, and in Mysore, and they have an invincible repugnance to the worship of Vishnu But these are exceptional instances But so far as the bulk of the Hindus are concerned, they resort to the nearest shrine whether it be dedicated to Shiva or Vishnu The attitude of Hinduism to other religions is that they are each of them the most suitable path to salvation for the people who are born in them—that they are all several roads which lead to Heaven For this reason Hinduism has never been a proselytising religion This has proved a disadvantage to it face to face with such religions as Mahomedanism and Christianity which not only admit converts, but are actively engaged in seeking them The proportion of Hindus to the total population has steadily diminished during the last forty years, partly owing to conversions to other religions particularly from amongst the lower classes Conversions from among members of the higher and literate classes have practically ceased

Hinduism—The Hindus number 217,586,892 or 69 4 per cent of the total population of

OCCUPATIONS OF THE INDIAN PEOPLES—*ctd*

Trade in building materials	84,613
Trade in means of transport	239,396
Trade in fuel	524,962
Trade in articles of luxury and those pertaining to letters and the arts and sciences	522,130
Trade in refuse matter	3,695
Trade of other sorts	2,192,534
C —PUBLIC ADMINISTRATIONS AND LIBERAL ARTS	10,912,123
VI —Public Force	2,398 586
Army	665,278
Navy	4,640
Police	1,728,668
VII —Public Administration	2,648,005
VIII —Professions and Liberal Arts	5,325 357
Religion	2,769,489
Law	303,408
Medicine	626,900
Instruction	674,393
Letters and arts and sciences	951,167
IX —Persons living principally on their Income	540,175
D —MISCELLANEOUS	17,286,678
X —Domestic Service	4,599,080
XI —Insufficiently described Occupations	9,236,210
XII —Unproductive	3,451,281
Inmates of jails, asylums and hospitals	132,610
Beggars, vagrants and prostitutes	3,318,771

DISTRIBUTION OF THE POPULATION.

	India	British Provinces	Native States.
1	2	3	4
Area in square miles	1,802,657	1,093,074	709,583
Number of Towns and Villages	722,495	538,809	183,686
(*a*) Towns	2 153	1,452	701
(*b*) Villages	720,342	537,357	182,985
Number of Occupied Houses	63,710,179	49,140,947	14,569,232
(*a*) In Towns	6,037,456	4,409,121	1,628,335
(*b*) In Villages	57,672,723	44,731,826	12,940,897
Total Population	315,156,396	244,267,542	70,888,854
(*a*) In Towns	20,748,228	22,817,715	6,930,513
(*b*) In Villages	285,408,168	221,449,827	63,958,341
Males	161 338,935	124,873,691	36,465,244
(*a*) In Towns	16,108,304	12,525,830	3,582,474
(*b*) In Villages	145,230,631	112,347,861	32,882,770
Females	153,817,461	119,393,851	34,423,610
(*a*) In Towns	13,639,924	10,291,885	3,348,039
(*b*) In Villages	140,177,537	109,101,966	31,075,571

India Buddhists and Jains together number 11,969,635 Thus 229,556,527 or about 73 per cent of the Indian people depend for their spiritual sustenance on Hinduism and its offshoots

The Buddhist population is mostly Burmese, Buddhism having ceased a thousand years ago to count as a leading religion in the land of its birth Several reasons are usually given to account for the hostility of Hinduism to Buddhism, such as that Buddha denied the authority of the Vedas and the existence of God and of the human soul Jainism did all this, and yet Jains to-day occupy a recognised position in the Hindu social system The real reason for the Hindu hostility to Buddhism was that it influenced and was in its turn influenced by in the later years of its prevalence in India, the alien Mongolian consciousness Hinduism has always been extremely tolerant of indigenous heresies, but it is jealous of outside influence Indian Buddhism, too, had become extremely corrupt and superstitious long before Hinduism re-established itself as the religion pre-eminently of the Indian people

Other Indigenous Religions—Buddhism and Jainism were originally only sects of Hinduism Jainism even now is not so sharply divided from the latter religion as Buddhism is Jains are everywhere a recognised section of Hindu Society, and in some parts of the country there has been an increasing tendency on their part to return themselves at the Census as Hindus The outstanding feature of Jainism is the extreme sanctity in which all forms of life are held The Jains are generally bankers and traders Their number at the last Census was 1,248,182, the apparent decline being due to the tendency noted above for Jains to return themselves as Hindus Buddhism is professed but by few persons in India The Buddhist population of the Indian Empire is mainly Burmese Their number is 10,721,453 The founders of Buddhism and Jainism are believed to have been contemporaries, whose date is assigned somewhere in the 5th Century B C Sikhism which is the next important indigenous religion, had its origin many centuries later. The founder of Sikhism, Guru Nanak, flourished in the latter half of the 15th Century of the Christian era Nanak's teaching amounted to nothing more than pure Theism. He taught that there is only one true God, he condemned idolatry, proclaimed the futility of pilgrimages and rites and ceremonies, and declared that the path to salvation lies through good deeds combined with devotion to the Supreme Being He preached the brotherhood of men Sikhism continued to exist as a pacific cult till about the end of the seventeenth century, when the persecutions of Aurangzeb had the effect of converting it into a militant creed This momentous change was accomplished under the direction of Guru Govind, the tenth and last of the Gurus "I shall send a sparrow," he once exclaimed and "lo! the imperial falcons will fly before it" On his death-bed, he exhorted his followers to regard the Granth, the sacred book of the Sikhs, as their Guru, to look upon it as the person of the living Guru After his death, Sikhism passed through a period of deepest gloom, but it soon recovered and in 1758 the Sikhs entered Lahore in triumph The teachings of Guru Nanak have profoundly affected Hindu thought and life in the Punjab, though the number of persons professing the Sikh religion is only 3,014,466 according to the 1911 Census This represents an increase of over 40 per cent since 1901 Two other religious movements, offshoots of Hinduism, remain to be mentioned, namely, the Brahmo-Samaj and the Arya-Samaj Both of them are less than one hundred years old The founder of the former was Raja Ram Mohan Roy, and of the latter, Swami Dayanand Saraswati The Brahmo-Samaj does not believe in an infallible scripture, while the Arya-Samaj accepts the Vedas as Divinely revealed Both the movements are opposed to idolatry and favour social reform The Brahmo movement, appealing as it does to the cultured intellect, has not been making as much progress as the Arya-Samaj The number of persons professing each of these creeds is 5,504 and 243,445 respectively The stronghold of the Arya-Samaj is the Punjab, that of the Brahmo-Samaj, Bengal

Non-Indian Religions.

Mahomedanism—Of non-Indian religions, that is, of religions which had their origin outside India the religion which has the largest number of followers in this country is Mahomedanism One hundred years before the Mussulmans obtained a foothold in Sind by right of conquest, they were settled in Cochin as traders and missionaries The author of Cochin Tribes and Castes refers to a tradition that in the 7th Century, a Mahomedan merchant named Malak Medina, accompanied by some priests, had settled in or near Mangalore The Kollam era of Malabar dates, according to popular tradition, from the departure of Cheruman Perumal, the last of the Perumal Kings, to Arabia, on his conversion to Islam The date of the commencement of the era is the 25th August 825 A D. For about twelve Centuries, Islam has existed in India side by side with Hinduism. During that period it has been greatly influenced by Hindu ideas and institutions Moreover, the Indian converts to Mahomedanism have to a large extent retained the customs and beliefs of Hinduism. The writer of the article on religions of India in the new edition of the *Imperial Gazetteer* observes of Islam in India "If it has gained some converts from Hinduism it has borrowed from it many of those practices which distinguish it from the original faith of Arabia By degrees the fervid enthusiasm of the early raiders was softened down, the two religions learned to live side by side, and if the Mahomedan of the later days could never conceal his contempt for the faith of his 'pagan' neighbours, he came to understand that it could not be destroyed by persecution From the Hindus Islam derived much of its demonology, the belief in witchcraft, and the veneration of departed Pirs or Saints The village Musulman of the present day employs the Hindu astrologer to fix a lucky day for a marriage, or will pray to the village god to grant a son to his wife This is the more natural, because conversion to Islam, whenever it does occur, is largely from the lower castes" Mahomedanism has

two main and several minor sects. The major sects are the Shiah and the Sunni. The great majority of Indian Mussulmans are of the latter sect. The Punjab and Sind in the North-West and East Bengal in the North-East are the strongholds of Islam in India. The Mussulman population of India, according to the Census of 1911, is 66,647,299. Of this number no less than 24 millions are in Bengal, about 12 millions in the Punjab, and about 5 millions in the United Provinces. Amongst Native States, Kashmere has the largest Mussulman population, about 2½ millions.

Christianity. Indian Christianity has an even longer history than Indian Mahomedanism. According to the tradition prevailing among the Syrian Christians in Malabar, the introduction of Christianity and the establishment of the Original Church in Malabar in the year 52 A.D. are ascribed to the Apostle St. Thomas, who landed at Cranganore or Musiris, converted many Brahmins and others, ordained two Presbyters, and also founded seven churches, six in Travancore and Cochin, and the seventh in South Malabar (Cochin Castes and Tribes, Vol. II. Chapter XVI, p. 435). The history of Roman Catholicism in India dates from the beginning of the sixteenth Century. The first Protestant mission was established two centuries later by the Lutherans who started their work in Tranquebar in South India under Danish protection. The Christian population, according to the last Census, numbers 3,876,203. Nearly 2½ millions are inhabitants of the Madras Presidency and the Native States connected with it. Bihar and Bombay have each over 200,000 Christians.

Zoroastrianism.—This religion was brought or brought back to India in 717 A.D. by Parsis who, fleeing from persecution at the hands of the Mussulman conquerors of their native land, arrived at the little port of Sanjan, sixty miles north of Bombay in that year. According to the Indian antiquarian scholar, the late Rajendralal Mitra, the ancestors of the Hindus and Parsis dwelt together in the Punjab, when a religious schism led to the latter retracing their steps to Persia. This theory derives probability from the names of the beneficent and malefic deities referred to in the Hindu and Parsi sacred books. "What is most striking in the relations of the two faiths, is," writes Mr. Crooke in his article on the Religions of India in the *Imperial Gazetteer*: "that in the Avesta the evil spirits are known as Daeva (modern Persian Div), a term which the Indo-Aryans applied, in the form Deva, to the spirits of light. By a similar inversion Asura, the name of the gods in the Rig Veda, suffered degradation and at a latter date was applied to evil spirits, but in Iran, Ahura was consistently applied in the higher sense to the deity, especially as Ahura Mazda, the wise, to the Supreme God." The Parsis have two sects. The principal difference between them appears to be that the holy days of the one precede those of the other by about a month. The number of Parsis, according to the last Census, is 100,096. The majority of the Parsis live in Bombay.

Jews.—The Beni-Israel at Kolaba, in Bombay and the Jews at Cochin are descendants of ancient Colonies. The Kolaba Colony dates back to the sixth century, and the Cochin colony to the second century A.D. Both Jewish colonies recognize a white and black section, the latter being those who have more completely coalesced with the native population. The Jews numbered 20,980 at the Census of 1911.

Animists.—Since the Census of 1891, an attempt has been made to enumerate the "Animists" separately from the Hindus. 10,295,168 persons are classed as Animists, according to the last Census. The difference between Animism and Anthropomorphism has been stated by Professor Westermark, to be that, while the animist worships inanimate objects as gods, Anthropomorphism consists in the worship of such objects as representatives and reflection of the Deity. As a subtle distinction of this kind is not within the grasp of the average enumerator, the category of Animists in the Census Schedules is largely conjectural. Mr. Crooke in the *Imperial Gazetteer* observes: "Such a classification is of no practical value simply because it ignores the fact that the fundamental religion of the majority of the people—Hindu, Buddhist, or even Mussulman is mainly Animistic. The peasant may nominally worship the greater gods, but where trouble comes in the shape of disease, drought, or famine, it is from the older gods that he seeks relief."

SOCIAL INSTITUTIONS.

Uniformity of Indian Social Life.—Though India is a land of many religions and though each religious community has, as a rule, lived apart from the other communities for centuries, still there is a considerable uniformity in the arrangements and institutions of their social life. The social system of the Hindus is the type to which all other communities domiciled in the country have hitherto tended to conform. To a large extent, this uniformity of social arrangements is clearly due to the fact that, amongst the Mahomedans and Indian Christians, for instance, the converts from Hinduism continued to retain their old ideas in regard to social conduct. To a smaller extent, the motive which influenced them to conform to Hindu social ideal has been the convenience thereby caused in business intercourse with their Hindu neighbours. Thus, we find, there is scarcely any community in India which has not been more or less infected by the caste spirit. The Jews, the Parsis, the Christians, and even the Mahomedans have been influenced by it. Other Hindu social institutions and customs which have exerted a similar influence are the joint family system, the custom of child marriages, and of enforced widowhood, and the feeling that contact with persons engaged in certain occupations is polluting. In view of this general similarity of the social institutions of the several Indian communities, a description of the Hindu social system which is the great prototype of them all, will give a general idea of the social life of the Indian population as a whole. It should, however, be mentioned here that, in recent years, as the result of a growing communal consciousness, efforts have been

made by many of the Indian communities to discard whatever is in disaccord with the original simplicity of their respective faiths But this movement has as yet touched no more than the highly educated fringe, and even among the latter, there are thoughtful men who distrust "revivals" as substitutes for reform

Caste—The most conspicuous social institution of India is Caste Caste is based on birth The effect of caste is to divide society into a number of vertical sections, and not as in modern countries, into horizontal sections The economic and cultural differences among the members of each caste are great The millionaire and the pauper, the scholar and the illiterate of one caste, form a social unit The rich man of one caste must seek a husband for his daughter among the poor of his caste, if he cannot find one of a corresponding position in life He can on no account think of marrying her to a young man of another caste, though as regards culture and social position, he may be a most desirable match Thus, each caste is, within itself, a democracy in which the poor and the lowly have always the upper hand over the rich and the high-placed In this way, the system of caste has, in the past, served as a substitute for State relief of the poor by means of special laws and institutions To some extent, this is the case even now but the economic pressure of these days, and the influence of Western education, are profoundly modifying the conception of caste The growth of the English-educated class on the one hand, and of the modern industrial and commercial class of Indians, on the other with common aspirations and interests, is a factor calculated to undermine the importance of caste Although for purely social purposes, it will, no doubt, linger for many years longer, it is bound ultimately to collapse before the intellectual and economic influences which are moulding modern India The question how caste originated has been discussed by several learned Orientalists, but the latest and most authoritative opinion is that its rise and growth were due to several causes, the principal of them being differences of race and occupation The four original castes of the Hindus have multiplied to nearly two thousand, owing to the fissiparous tendencies of Hindu social life Some large castes consist of many thousands of families, while others, notably in Gujarat, comprise scarcely a hundred houses Among Indian Mahomedans, there are several communities which are virtually castes, though they are not so rigidly closed as Hindu castes Indian Christian converts, in some parts of the country, insist on maintaining the distinctions of their original castes, and in a recent case, one caste of Indian Christians contested, in a Court of Law, a ruling of their Bishop disallowing the exclusive use of a part of their church to members of that caste The Parsis are practically a caste in themselves The observations regarding caste apply more or less to the institution of the joint family of which really the former is an extension. This institution is rapidly breaking-up, though the rigidity of the Hindu law of succession operates wholly in its favour.

The Social Reform Movement—The social reform movement among the Hindus to which reference is made in the foregoing paragraph, had its origin in efforts made by the Government of India, with the co-operation and support of enlightened Hindus in the early part of the last century to put down the practice of *sati*, that is, burning the widow along with her dead husband This cruel practice, which prevailed particularly among the high caste Hindus in Bengal, was eventually suppressed by legislation But the discussions which ensued in connection with *sati* question led to the exposure of the hard lot of Hindu widows as a class Remarriage was prohibited and as child marriages were common, several young girls were condemned to lead a life of celibacy on the death of their husbands This led to immorality and infanticide by young widows, who were anxious to hide their shame was not infrequent Led by the Pandit Ishwar Chandra Vidyasagara, a very learned Sanskrit scholar, a movement began which had for its object the removal of the ban on the remarriage of Hindu widows The Pandit was able to prove from the Hindu religious books that the remarriage of widows had the sanction of antiquity But it was necessary in order to establish the validity of the remarriage of Hindu widows beyond doubt, to have a law passed by the Legislative Council of the Governor-General of India The Pandit and his followers memorialised Government There was strong opposition from the orthodox masses, but the Government of the day were convinced that justice was on the side of the reformers, and the Hindu Widow Remarriage Act was passed The controversy on the question of the remarriage of widows led to other consequences It was felt that the age at which girls were married was absurdly low, and that child marriages were at the root of many social evils It was also realised that the general illiteracy of Indian women was the greatest obstacle in the way of reforming social customs, and that education of women should be the first plank in the social reform platform The earliest social reformers in India were the Brahmo Samajists who discarded idolatry and caste Other reformers since then have endeavoured to propagate ideas of social reform entirely on a secular basis The Indian National Social Conference is their principal organisation, and it is supported by Provincial and District Conferences and Associations Social reform ideas have made considerable headway during the last twenty-five years Widow marriages are of weekly occurrence in some provinces The restrictions of caste as to inter-dining and sea-voyage have lost much of their force The age at which girls are married is steadily, if slowly, rising The education of girls is making rapid progress An increasing number of them go to high Schools and Colleges every year But the most significant testimony to the spread of social reform ideas in the country is the remarkable diminution in the volume and weight of the opposition to them The number of journals devoted to the social reform cause is increasing, and some of the newspapers which had made themselves conspicuous by their virulent opposition to social reform twenty years ago, now recognise its utility and importance

SEX.

In India as a whole the proportion of females per thousand males rose steadily from 954 in 1881 to 963 in 1901 It has now fallen again to exactly the same figure as in 1881 The important aspect of these figures is the great contrast they show between India and Europe, where the number of females per thousand males varies from 1,093 in Portugal, and 1,068 in England and Wales, to 1,013 in Belgium, and 1,003 in Ireland In drawing attention to this disparity the Chief Census Officer argued that the relatively high mortality amongst females was sufficient to account for the difference stated Then in summarising the causes of this relatively higher mortality he said " In Europe, boys and girls are equally well cared for Consequently, as boys are constitutionally more delicate than girls, by the time adolescence is reached, a higher death-rate has already obliterated the excess of males and produced a numerical equality between the two sexes Later on in life, the mortality amongst males remains relatively high, owing to the risks to which they are exposed in their daily avocations, hard work, exposure in all weathers and accidents of various kinds combine to make their mean duration of life less than that of women,who are for the most part engaged in domestic duties or occupations of a lighter nature Hence the proportion of females steadily rises In India, the conditions are altogether different Sons are earnestly longed for, while daughters are not wanted This feeling exists everywhere, but it varies greatly in intensity It is strongest amongst communities such as the higher Rajput clans, where large sums have to be paid to obtain a husband of suitable status and the cost of the marriage ceremony is excessive and those like the Pathans who despise women and hold in derision the father of daughters Sometimes the prejudice against daughters is so strong that abortion is resorted to when the midwife predicts the birth of a girl Formerly female infants were frequently killed as soon as they were born, and even now they are very commonly neglected to a greater or less extent The advantage which nature gives to girls is thus neutralised by the treatment accorded to them by their parents To make matters worse, they are given in marriage at a very early age, and cohabitation begins long before they are physically fit for it To the evils of early child-bearing must be added unskilful midwifery, and the combined result is an excessive mortality amongst young mothers In India almost every woman has to face these dangers Lastly, amongst the lower classes, who form the bulk of the population, the women often have to work as hard as, and sometimes harder than, the men, and they are thus less favourably situated in respect of their occupations than their sisters in Europe" It is but fair to say that this conclusion has been challenged by many Indian writers, who attribute far greater importance than the Chief Census Officer to the omission of females at the enumeration

MARRIAGE.

Although recognised in some backward parts, polyandry is now rare in India With orthodox Hindus marriage is a religious sacrament which cannot be revoked The Mahomedans allow a man to divorce his wife without any special reason, but he then becomes liable to pay her dower The permission is seldom acted upon The Buddhists of Burma regard marriage merely as a civil contract, and either side can annul it The Hindu law places no restriction on the number of wives a man may have, but most castes object to their members having more than one wife, except for special reasons A Mahomedan may have four wives, but he also in practice is generally monogamous

Marriage Statistics.—In the population of ages and religions, about half the males and one-third of the females are unmarried, 46 per cent. of the males and 18 of the females are married, and 5 and 17 per cent respectively are widowed A reference to the age statistics shows that the great majority of the unmarried of both sexes are very young children three-quarters of the bachelors being under 15 years of age, while a somewhat larger proportion of the spinsters are under 10, only one bachelor in 24 is over 30, and only one spinster in 14 is over 15 At the higher ages practically no one is left unmarried, except persons suffering from some infirmity or disfigurement, beggars, prostitutes, concubines, religious devotees and mendicants and a few members of certain hypergamous groups who have been unable to effect alliances of the kind which alone are permitted to them by the rules of their community It is the persons of the above classes who contribute the 4 per cent of the males over 40, and the 1 per cent of the females over 30 who are not, and never have been married

Marriage Universal.—This universality of marriage constitutes one of the most striking differences between the social practices of India and those of Western Europe It has often been explained on the ground that, with the Hindus, marriage is a religious necessity Every man must marry in order to beget a son who will perform his funeral rites and rescue his soul from hell. In the case of a girl it is incumbent on the parents to give her in marriage before she reaches the age of puberty Failure to do so is punished with social ostracism in this world and hell fire in the next But it is not only with the Hindus that marriage is practically universal, it is almost equally so with the Mahomedans, Animists and Buddhists

Early Marriage.—Another striking feature of the Indian statistics as compared with those of Western Europe is the early age at which marriage takes place According to M Sundbarg's table showing the average distribution by age and civil condition of the people of Western Europe according to the censuses taken about the year 1880, of the population below the age of 20, only one male in 2,147 is married and one female in 142 In India on the other hand, 10 per cent of the male, and 27 per cent of the female, population below that age are married The number of males below the age of 5 who are married is small, but of those aged 5 to 10, 4 per cent. are married, and of those aged 10 to

15, 13 per cent. At '15-20' the proportion rises to 32, and '20-30' to 69 per cent Of the females under 5, one in 72 is married, of those between 5 and 10, one in ten, between 10 and 15, more than two in five, and between 15 and 20, four in five In the whole of India there are 2¼ million wives under 10, and 9 million under 15 years of age The Hindu law books inculcate marriage at a very early age, while many of the aboriginal tribes do not give their girls in wedlock until after they have attained puberty

Widowhood —It is only when we come to a consideration of the widowed that we find a state of things peculiarly Indian and one that seems to be derived from the prescriptions of the Hindu law-givers The proportion of widowers (5 per cent of the total male population) does not differ greatly from that in other countries, but that of the widows is extraordinarily large, being no less than 17 per cent of the total number of females, against only 9 per cent in Western Europe When we consider their distribution by age, the difference becomes more still striking, for while in western Europe only 7 per cent of the widows are less than 40 years old, in India 28 per cent are below this age, and 1 3 per cent (the actual number exceeds a third of a million) are under 15, an age at which in Europe no one is even married

The large number of widows in India is due partly to the early age at which girls are given in marriage, and partly to the disparity which often exists between the ages of husband and wife, but most of all to the prejudice against the re-marriage of widows Many castes, especially the higher ones, forbid it altogether, and even where it is not absolutely prohibited, it is often unpopular Although widow marriage is permitted by their religion, and the Prophet himself married a widow, the Mahomedans of India share the prejudice to some extent How the re-marriage of widows first came to be objected to, it is impossible to say, but it seems highly probable that the interdiction originated amongst the Aryan Hindus, that it was confined at first to the higher castes, and that it has spread from them downwards

Infant Marriage.—It is difficult to draw from the statistics any definite conclusion as to whether infant marriage is becoming more or less common, but so far as they go, they point to a slight diminution of the practice The figures for 1901 were abnormal owing to the famines of 1897 and 1900, and it is safer to take the year 1891 as the basis of comparison There are now 18 Hindu girls per mille who are married at the age of '0-5' as compared with only 16 at that time, but at the age '5-10' the proportion has fallen from 146 to 132 and at '10-15' from 542 to 488. Amongst Mahomedans the proportion at the first mentioned age-period has fallen from 7 to 5, at the second from 83 to 65 and at the third from 474 to 393

The practice has been denounced by many social reformers, since Mr. Malabari opened the campaign a quarter of a century ago, and the Social Conference which holds its meetings annually in connection with the National Congress has made the abolition of child marriage one of the leading planks in its platform It is, as we have seen, strongly discouraged by the Brahmos in Bengal and the Aryas in Northern India The more enlightened members of the higher castes who do not allow widows to re-marry are beginning to realise how wrong it is to expose their daughters to the risk of lifelong widowhood, and a feeling against infant marriage is thus springing up amongst them

In two Native States action has been taken In Mysore an Act has been passed forbidding the marriage of girls under eight altogether, and that of girls under fourteen, with men over fifty years of age The object of the latter provision is to prevent those unequal marriages of elderly widowers with very young girls which are popularly believed to be so disastrous to the health of the latter, and which in any case must result in a large proportion of them leading a long life of enforced widowhood The Gaekwar of Baroda, the pioneer of so much advanced legislation, has gone further He passed for his State in 1904, in the face of a good deal of popular opposition, an "Infant Marriage Prevention Act", which forbids absolutely the marriage of all girls below the age of nine and allows that of girls below the age of twelve and of boys below the age of sixteen, only if the parents first obtain the consent of a tribunal consisting of the local Sub-Judge and three assessors of the petitioner's caste Consent is not supposed to be given except on special grounds, which are specified in the Act

Widow re-marriage —The prohibition of widow marriage is a badge of respectability Castes do not allow it rank higher on that account in social estimation There is a strong tendency amongst the lower Hindu castes to prohibit, or at least, to discountenance, the marriage of widows At the other end of the social structure there is a movement in the opposite direction Many social reformers have inveighed against the condemnation of virgin widows to perpetual widowhood, and have pointed out that the custom is a modern innovation which was unknown in Vedic times In many provinces recently there have been cases in which such widows have been given in marriage a second time, not only amongst Brahmos and Aryas, who naturally lead the way, but also amongst orthodox Hindus A number of such marriages have taken place amongst the Bhatias of the Bombay Presidency It is said that in the United Provinces considerably more than a hundred widows have been re-married in the last ten years The actual results no doubt are small so far, but the first step has been taken and the most violent of the opposition has perhaps been overcome.

EDUCATION.

The general education policy of the Government of India, and its results, are discussed in a special article Education (*q v*) But we may conveniently here indicate some of the education tendencies revealed in the census returns

Of the total population of India, only 59 persons per mille are literate in the sense of being able to write a letter to a friend and to read his reply The number who can decipher the pages of a printed book with more or less difficulty is no doubt much larger. Throughout India there are many Hindus who though unable to write can

drone out at least the more familiar parts of the Mahabharata or Ramayana to their neighbours, who feel that it is meritorious to listen to the recital of the sacred texts, even though they, and possibly the reader also, may not always fully understand the meaning Similarly there are many Mahomedans,especially in Northern India, who can read the Koran, though they cannot write a word Of this minor form of literacy the census takes no count The number of persons who are literate in the sense in which the term was used at the present census is divided very unequally between the two sexes, of the total male population, 106 per mille are able to read and write, and of the female only 10 In other words there is only one literate female to every eleven males If we leave out of account children under 15 years of age, the number of literate males per mille is 149, and that of literate females 13

Education by Provinces.—Thanks to the free instruction imparted in the monasteries and the absence of the pardah system which hampers the education of females in other parts of India Burma easily holds the first place in respect of literacy In the whole population 222 persons per mille are literate and the proportion rises to 314 amongst persons over 15 years of age In every thousand persons of each sex, 376 males and 61 females are able to read and write Of the other main British provinces, Bengal and Madras come next with 77 and 75 literate persons per mille respectively Bombay follows closely on their heels Then after a long interval, come Assam, Bihar and Orissa and the Punjab At the bottom of the list are the United Provinces and the Central Provinces and Berar, with 34 and 33 literate persons per mille respectively Differences similar to those noticed above sometimes have their counterpart within provincial boundaries Thus in Bihar and Orissa, the Orissa natural division has 64 literate persons per mille and the Chota Nagpur plateau only 28 In the Central Provinces and Berar, the proportion ranges from only 6 per mille in the Chota Nagpur States to 54 in the Nerbudda Valley

Native States.—Education is more widely diffused in British provinces than in the Native States, which, taken as a whole, have only 79 males and 8 females per mille who are literate, as compared with 113 and 11 in British territory The three Native States of Cochin, Travancore and Baroda, however, take rank above all British provinces except Burma, while in respect of female education Cochin divides with Burma the honours of first place The Kashmir State where only 21 persons per mille can read and write, is in this respect the most backward part of India

By Religion.—Of the different religious communities excluding the Brahmos and Aryas whose numbers are insignificant, the Parsis easily bear the palm in respect of education. Of their total number 711 per mille are literate, and the proportion rises to 831, if persons under 15 years of age are left out of account Of the males nearly four-fifths are literate, and of the females nearly two-thirds. Amongst those over 15 years of age only 8 per cent of the males and 2β per cent of the females are unable to read and write. The Jains, who are mostly traders, come next, but they have only two literate persons to every five amongst the Parsis. Half the males are able to read and write, but only 4 per cent of the females It is noticeable, however, that whereas the proportion of literate males is only slightly greater than it was at the commencement of the decade, that of literate females has doubled The Buddhists follow closely on the Jains, with one person in four able to read and write Here also we see the phenomenon of a practically unchanged proportion of literate males (40 per cent) coupled with a large increase in that of literate females which is now 6 per cent compared with 4 per cent in 1901 The Christians (22 per cent literate) are almost on a part with the Buddhists, but in their case the inequality between the position of the two sexes, is much smaller, the proportion of literate females being nearly half that of males In order to ascertain how far the high position of Christians is due to the inclusion of Europeans and Anglo-Indians, the figures for Indian Christians have been worked out separately The result is somewhat surprising, for although the Indian converts to Christianity are recruited mainly from the aboriginal tribes and the lowest Hindu castes, who are almost wholly illiterate, they have, in proportion to their numbers, three times as many literate persons as the Hindus and more than four times as many as the Mahomedans. One Indian Christian in six is able to read and write, for males the proportion is one in four, and for females one in ten The influence of Christianity on education is strikingly illustrated by the figures for the province of Bihar and Orissa, where the proportion of Indian Christians who are literate is 76 per mille, compared with only 5 per mille amongst their animistic congeners It has to be remembered, moreover, that many of the Indian Christians had already passed the school-going age at the time of their conversion, the proportion who are able to read and write must be far higher amongst those who were brought up as Christians

The Sikhs come next in order of merit, with one literate person in every fifteen, for males the ratio is one in ten and for females one in seventy Here again, while the proportion for males shows only a slight improvement, that for females has doubled during the decade. The Hindus have almost as large a proportion of literate males per mille (101) as the Sikhs, but fewer literate females (8) The Mahomedans with only 69 and 4 per mille respectively, stand at the bottom of the list, except for the Animistic tribes of whom only 11 males and 1 female in a thousand of each sex are able to read and write The low position of the Mahomedans is due largely to the fact that they are found chiefly in the north-west of India, where all classes are backward in respect of education, and in Eastern Bengal where they consist mainly of local converts from a depressed class. In the United Provinces, Madras and the Central Provinces and Berar they stand above or on an equality with the Hindus and the same is the case in Bombay excluding Sind In Sind the Mahomedan population is exceptionally illiterate, but in the rest of the Presidency it consists largely of traders, and education is much more widely diffused amongst them than amongst Hindus. The figures for Hindus again are a general average for all castes, high and low. It will be seen further on that some of the higher Hindu castes

are better educated than the Buddhists while others are even less so than the Animists

Increase of Literacy —The total number of literate persons has risen during the decade from 15 7 to 18 6 millions or by 18 per cent The number of literate males has increased by 15 and that of literate females by 61 per cent The proportion who are literate per thousand males has risen from 98 to 106 and the corresponding proportion for females from 7 to 10 If persons under 15 years of age be excluded, the proportions are 138 and 149 for male and 8 and 13 for females The great improvement in the proportion of literate females is most encouraging It is true that too much stress should not be laid on this when the actual number is still so small, but, on the other hand, it must be remembered that the rate of increase was equally great in the previous decade, so that it has now been continuous for twenty years The total number of females over 15 years of age who can read and write is now a million and a quarter compared with less than half a million twenty years ago

Progress —Before leaving these statistics of schools and scholars we may glance briefly at the progress which they show is being made The total number of scholars in all kinds of educational institutions in 1891 was only 3 7 millions In 1901 it had risen to 4 4, and in 1911 to 6 3 millions 17 7 per cent of the population of school-going age were at school in 1912 as compared with 14 8 per cent in 1907 Between 1891 and 1911 the number of students in secondary schools and Arts Colleges has doubled, and the number in primary schools has increased by 67 per cent, the proportion ranging from 39 per cent in Bombay to 204 per cent in the United Provinces Excluding Madras, where a school final examination has recently taken the place of the Matriculation, or Entrance, examination of the University, the number of persons passing that examination has risen from 4,079 in 1891 to 10,512 in 1911 Including Madras the number who passed the Intermediate examination in Arts or Science has risen during the same period from 2,055 to 5,141, and that of those who obtained a degree in Arts, Science, Medicine or Law from 1,437 to 5,373 The general conclusion appears to be that, while the general rate of progress is far greater than would appear from a comparison of the census returns of 1901 and 1911, it is most marked in respect of secondary education

There was a continuous fall, both in the number and the proportion of persons afflicted from 1881 to 1901, and this has now been followed by a move in the other direction Though the proportion is smaller the number of the insane and the deaf-mutes is now about the same as it was thirty years ago The number of lepers and blind however is less by about a sixth than it then was

Infirmities.

The total number of persons suffering from each infirmity at each of the last four censuses is shown in the following table —

Infirmity	Number afflicated			
	1911	1901	1891	1881
Insane ..	81,006 **26**	66,205 **23**	74,279 **27**	81,132 **35**
Deaf-mutes	199,891 **64**	153,168 **52**	196,861 **75**	197,215 **86**
Blind	443,653 **142**	354,104 **121**	458,868 **167**	526,748 **229**
Lepers	109,094 **35**	97,340 **33**	126,244 **46**	134,968 **57**
Total .	833,644 **267**	670,817 **229**	856,252 **315**	937,063 **407**

NOTE —The figures in heavier type represent the proportion per 100,000 of the population.

Insanity.—In respect of the prevalence of insanity, India compares very favourably with European countries. According to the latest returns, the proportion of persons thus afflicted in England and Wales is 364 per hundred thousand of the population, or fourteen times the proportion in India This may be due partly to the fact that the English statistics include the weak-minded as well as those who are actively insane, and to the greater completeness of the return in a country where the majority of the mentally afflicted are confined in asylums, but the main reason no doubt is to be found in the comparatively tranquil life of the native of India It is well known that insanity increases with the spread of civilisation, owing to the greater wear and tear of nerve tissues involved in the struggle for existence

The total number of insane persons exceeds by 9 per cent that returned in 1891, but their proportion per hundred thousand of the population has fallen from 27 to 26 The decline is fairly general, the chief exceptions being the United Provinces, the North-West Frontier Province and four Native States in the peninsular area In the United Provinces the number of the insane per hundred thousand of the population has risen from 12 to 18 No satisfactory explanation of this large increase is forthcoming

Deaf-Mutes.—By deaf-mutism is meant the congenital want of the sense of hearing which, in the absence of special schools, such as are only

just beginning to appear in India, necessarily prevents the sufferer from learning to talk. Clear instructions were given to the enumerators to enter only persons who were congenitally afflicted. Some few, perhaps, may have been included in the return who had lost the power of speech or hearing after birth, but the total number of such mistakes is now very small. In India as a whole 74 males and 53 females per hundred thousand are deaf and dumb from birth. These proportions are much the same as those obtaining in European countries.

Blindness.—In India as a whole fourteen persons in every ten thousand of the population are blind, as compared with from eight to nine in most European countries and in the United States of America. It is a matter of common observation that blindness is ordinarily far more common in tropical countries than in those with a temperate climate. It is, however, less common in India than in parts of Eastern Europe, in Russia, for instance, nineteen persons in very ten thousand are blind.

Lepers.—In India as a whole 51 males and 18 females per hundred thousand persons of each sex are lepers. Of the different provinces, Assam suffers most, then Burma, and then in order Bihar and Orissa, the Central Provinces and Berar, Madras, Bengal, Bombay, the United Provinces, the Punjab and the North-West Frontier Province. In the two last-mentioned provinces there are only 17 male and 8 female lepers per hundred thousand of each sex. The occurrence of leprosy is very local and its prevalence varies enormously within provincial boundaries.

The number of lepers has fallen since 1891 from 126 to 109 thousand, a drop of more than 13 per cent. When it is remembered that the number of persons suffering from the other three infirmities taken together has remained almost stationary, it may be concluded that the decrease in the reported number of lepers is genuine and indicates a real diminution in the prevalence of the disease. It is possible that this is partly the result of the improved material condition of the lower castes, amongst whom leprosy is most common, and of a higher standard of cleanliness. The greater efforts which have been made in recent years to house the lepers in asylums may also have helped to prevent the disease from spreading. The total number of asylums in India is now 73, and they contain some five thousand inmates, or about 4·7 per cent of the total number of lepers. This may not seem much, but it has to be remembered that the movement is still in its infancy and that progress has been very rapid in recent years. Complete statistics for 1901 are not readily available, but it is known that in the two provinces of Bengal and Bihar and Orissa, the number of lepers in asylums was then only about half what it is now. The greater part of the credit for the provision of asylums for these unfortunate persons belongs to the Mission for Lepers in India and the East, which receives liberal help from Government. Its latest report shows that there are 3,537 lepers in the forty asylums maintained by the Society.

The belief is growing that leprosy is communicated from one human being to another by some insect, and two South African doctors have recently published papers implicating the bed bug (*acanthia lectularia*). If this theory be correct it is obvious that the segregation of lepers in asylums must reduce the number of foci of the disease, and to that extent prevent it from spreading. It is worthy of note that in many of the districts where the disease was most prevalent in 1891, there has since been a remarkable improvement. Chamba which in 1891 had 34 lepers in every ten thousand of its population, now has only 15, in Birbhum the corresponding proportion has fallen from 35 to 16, in Bankura from 36 to 23, in Simla 29 to 18, in Dehra Dun from 20 to 11, in Garhwal from 17 to 10, in Burdwan from 22 to 14 and in North Arakan from 28 to 20.

OCCUPATIONS.

Nowhere are the many points of difference in the local conditions of India, as compared with those of western countries, more marked than in respect of the functional distribution of the people. In England, according to the returns for 1901, of every hundred actual workers, 58 are engaged in industrial pursuits, 14 in domestic service, 13 in trade and only 8 in agriculture, whereas in India 71 per cent are engaged in pasture and agriculture and only 29 per cent in all other occupations combined. The preparation and supply of material substances afford a means of livelihood to 19 per cent of the population (actual workers) of whom 12 per cent are employed in industries, 2 in transport and 5 in trade. The extraction of minerals supports only 2 persons per mille, the civil and military services support 14, the professions and liberal arts 15, and domestic service 18, persons per mille. The difference is due to the extraordinary expansion of trade and industry which has taken place in Western Europe during the last century in consequence of the discovery of the steam engine, and to the great improvement in means of transport and the use of mechanical power in factories of all kinds which have resulted therefrom. In Germany, sixty years ago, the agricultural population was very little less than it is at the present time in India. There are, as we shall see further on, indications that in the latter country also great changes are impending and it is not unlikely that, as time goes on, the functional distribution of the people will become less dissimilar from that now existing in Europe.

The village.—Until the recent introduction of western commodities, such as machine-made cloth, kerosine oil, umbrellas and the like, each village was provided with a complete equipment of artisans and menials, and was thus almost wholly self-supporting and independent. Its chamars skinned the dead cattle, cured their hides, and made the villagers' sandals and thongs. Local carpenters made their ploughs, local blacksmiths their shares, local potters their utensils for cooking and carrying water, and local weavers their cotton clothing. Each village had its own oil-pressers, its own washermen, and its own barbers and scavengers. Where this system was fully developed, the duties and remuneration of each group of artisans were fixed by custom and the caste rules strictly prohibited a man from entering into competition with another of the same caste. The barber, the washerman, the blacksmith, etc.

all had their own definite circle within which they worked, and they received a regular yearly payment for their services, which often took the form of a prescriptive share of the harvest, apportioned to them when the crop had been reaped and brought to the threshing floor

Village sufficiency declining.—Even in India proper the village is no longer the self-contained industrial unit which it formerly was, and many disintegrating influences are at work to break down the solidarity of village life. The rising spirit of individualism, which is the result of modern education and western influences, is impelling the classes who perform the humbler functions in the economy of village life to aspire to higher and more dignified pursuits. There is also a tendency to replace the prescriptive yearly remuneration by payment for actual work done. In many parts for instance, the village Chamar is no longer allowed the hides of dead cattle as his perquisite, but receives instead a payment for removing the cattle and for skinning them, and the hides are then sold to a dealer by the owner of the animal. Improved means of communication have greatly stimulated migration and the consequent disruption of the village community, and by facilitating and lowering the cost of transport of commodities, have created a tendency for industries to become localised. The extensive importation of cheap European piecegoods and utensils, and the establishment in India itself of numerous factories of the western type, have more or less destroyed many village industries. The high prices of agricultural produce have also led many village artisans to abandon their hereditary craft in favour of agriculture. The extent to which this disintegration of the old village organisation is proceeding varies considerably in different parts. The change is most noticeable in the more advanced provinces, whereas in comparatively backward tracts, like Central India and Rajputana, the old organisation remains almost intact.

Agriculture.—India is pre-eminently an agricultural country. Of its total population 72 per cent are engaged in pasture and agriculture, *viz*, 69 per cent in ordinary cultivation and 3 per cent in market gardening, the growing of special products, forestry and the raising of farm stock and small animals. The 217 million persons supported by ordinary cultivation comprise nearly 8 million landlords, 167 million cultivators of their own or rented land, over 41 million farm servants and field labourers and less than a million estate agents and managers and their employes.

On the average, in the whole of India, every hundred cultivators employ 25 labourers, but the number varies in the main provinces from 2 in Assam, 10 in the Punjab, 12 in Bengal and 16 in the United Provinces to 27 in Burma, 33 in Bihar and Orissa, 40 in Madras, 41 in Bombay and 59 in the Central Provinces and Berar. These local variations appear to be independent alike of the fertility of the soil and of the density of population. The conclusion seems to be that the differences are due to social, rather than economic, conditions, and that those provinces have most field labourers which contain the largest proportion of the depressed castes who are hereditary agrestic serfs.

Of the two million persons supported by the growing of special products rather more than half were returned in tea, coffee, cinchona, indigo, etc., plantations and the remainder in fruit, vegetable, betel, vine, arecanut, etc. growers. Of those in the former group, nearly nine-tenths were enumerated in the tea-gardens of Assam (675,000) and Bengal (248,000) and most of the remainder in the coffee, tea, rubber and other plantations of Southern India.

Of the 16 persons per mille who were classed under Raising of farm stock, nearly four-fifths were herdsmen, shepherds, and goatherds, rather more than one-seventh were cattle and buffalo-breeders, and keepers and one-eleventh sheep, goat and pig breeders.

Fishing and Hunting.—In the whole of India about 2 million persons, or 6 per mille subsist by fishing and hunting. Of these, all but a small fraction are fishermen. About half the total number are found in the two provinces of Bengal (644,000) and Madras (313,000). The number who live by this occupation is exceptionally small in the United Provinces (38,000) and Punjab (10,000). The Punjab Superintendent says that, owing to the destruction of immature fish and fry and the obstruction of the free passage of fish to their spawning grounds, the five thousand odd miles of large rivers and major canals in his Province probably produce less food than an equal volume of water in any other part of the world. The sea fisheries of India, though now known to be very valuable, are at present but little exploited.

Mines.—In the whole of India only 530,000 persons or 17 in every ten thousand are supported by the extraction of minerals. Coal mines and petroleum wells account for about half the total number (277,000). The coal fields of Bihar and Orissa support 127,000 persons and those of Bengal 115,000. In the Manbhum district, which contains the Jherria, and part of the Raniganj coal field, 111,000 persons or 7 per cent of the inhabitants are supported by work in the collieries. Though the Raniganj coal field was discovered as far back as 1774 many years elapsed before much use was made of the discovery. In 1840 the total quantity of coal sent to Calcutta was only 36,000 tons. It rose to 220,000 tons in 1858 and to six million tons in 1901. Since then the growth has been very rapid. The output in 1911 from the coal mines of Bengal and Bihar and Orissa exceeded eleven million tons. In the same year the total yield for all India was twelve million tons. Of the latter quantity nearly one million tons were exported, and four million were used by the railways. The total output however is still trivial compared with that of the United Kingdom, which amounted in 1911 to 272 million tons. Most of the persons employed in the mines of Bengal and Bihar and Orissa are aboriginal or quasi-aboriginal, about half are Bauris and Santals, and many of the remainder belong to the Bhuiya, Chamar or Mochi, Kora, Rajwar, Dosadh and Musahar castes. The great majority are recruited locally. The coal mines of Hyderabad, Assam, the Central Provinces and Berar, and the Punjab support between them only about 27,000 persons.

Metals.—Of the 98,000 persons supported by mining for metals, more than half were returned

in the Mysore State, and of these the great majority were employed in the gold mines of Kolar, where for some years past the value of the gold produced has been about £2,000,000 per annum The mines in the Central Provinces and Berar, which support 21,000 persons, are principally for the extraction of manganese The mining of this ore was greatly fostered by the Japanese War, which caused Russia to discontinue her exports of it for the time There has since been a period of depression, which seems now to have come to an end Manganese is extracted elsewhere also, *e g* in Mysore and Madras In Burma tin and lead are extracted as well as silver and wolfram in small quantities Iron ore is worked in various places, but chiefly in Mayurbhanj which supplies the raw material for Messrs Tata and Company's ironworks at Sakchi

Of the 75,000 persons supported by work in quarries and mines for non-metallic minerals, other than coal and salt, two-fifths were enumerated in Bombay, where the quarrying of stone and limestone is an important business chiefly in the neighbourhood of Bombay city In Bihar and Orissa and Madras mica mining is of some importance

The extraction of salt and saltpetre supports 78,000 persons Nearly a third of the total number are found in Bihar and Orissa where the Nuniyas are still largely employed in digging out and refining saltpetre This industry is carried on also in the Punjab Rock salt is mined in the same province and in Rajputana

The total number of persons employed in the extraction of minerals has risen during the decade from 235 to 517 thousand. The most noticeable increase is in Coal mines and petroleum wells which embrass nearly three times as many persons as in 1901 The bulk of the increase has occurred in Bengal and Bihar and Orissa, but it is to be noted that Hyderabad and the Central Provinces and Berar which now contribute about 12,000 persons to this group gave practically none ten years previously Miners for metals are 2½ times as numerous as they were in 1901

Industries —Of the 35 3 million persons dependent on industrial occupations, nearly one-fourth, or 2 6 per cent of the total population, are supported by textile industries Of these, the most important, from a numerical point of view, are industries connected with cotton. The number of persons supported by cotton spinning, sizing and weaving is close on 6 millions, and another half million are employed in ginning, cleaning and pressing the raw material The proportion of the population supported by cotton spinning, sizing and weaving is 37 per mille in the Punjab, 29 in Bombay and Rajputana, 27 in Madras, 22 in the Central Provinces and Berars and 18 in the United Provinces In Burma, Bihar and Orissa, Bengal and Assam it is much smaller, ranging only from 8 to 11 per mille. Nearly two-fifths of a million persons are supported by rope, twine and string making, and more than a third of a million by jute spinning, pressing and weaving Other important textile industries are wool spinning and weaving, silk spinning and weaving, and dyeing and printing, etc., each of which supports from a quarter to a third of a million persons. It is clear therefore that so far as India is concerned, in spite of the growing number of cotton mills in the Bombay Presidency and elsewhere, the hand industry still, to a great extent, hold its own Only 13,000 persons are employed in silk spinning and weaving factories, 7,000 in woollen factories including those for the making of carpets and even smaller numbers in other factories of this class Some of these textile industries are very local Those connected with jute are practically confined to Bengal, in which province nine-tenths of the persons supported by them were enumerated. More than half the persons dependent on rope, twine and string making and on working in 'other fibres' chiefly coir, and palmyra fibre were enumerated in Madras and its Native States and a quarter of those supported by wool industries in Hyderabad Half the silk spinners and weavers are found in two provinces, Bengal and Madras The dyeing, bleaching and printing of textiles and lace, crape and similar industries are almost unknown in Assam, Bengal, Burma and the Central Provinces and Berar.

Growth of Industry —As compared with 1901 there has been a decrease of 6 1 per cent in the number of persons supported by textile industries This is due mainly to the almost complete extinction of cotton spinning by hand Weaving by hand has also suffered severely from the competition of goods made by machinery both in Europe and in this country. There has been a large increase in the number of Indian cotton mills, but as the output per head in factories is far greater than that from hand-looms, the addition of a given number of factory hands involves the displacement of a far larger number of hand workers

Hides —As compared with 1901, a large decline in the number returned as general workers in hides is partly compensated for by an increase in shoe, boot and sandal makers In the two heads taken together there has been a drop of about 6 per cent During the same period the number of hide dealers has more than doubled Owing to the growing demand for hides in Europe and America and the resulting high prices, the export trade in hides has been greatly stimulated The local cobbler, on the other hand, having to pay more for his raw material and feeling the increasing competition of machine-made goods has been tempted to abandon his hereditary craft for some other means of livelihood, such as agriculture or work in factories of various kinds

Woodworkers —Wood cutting and working and basket making support 2 5 and 1 3 million persons, respectively, or 3 8 million in all The number of factories devoted to these industries is still inconsiderable Saw mills and timber yards each employ some 12,000 persons and carpentry works about 5,000 There is only one cane factory with 46 employes.

Metal workers —The workers in metals are only about half as numerous as those in wood and cane. About three-quarters of the persons in this order are general workers in iron, and one-seventh are workers in brass, copper and bell-metal

The total number of persons dependent on metal industries shows a decline of 6 6 per cent as compared with 1901.

Earthenware.—The manufacture of glass bricks, and earthenware supports in all 2 2 mill

on persons Seven-eights of these are the ordinary village potters who make the various earthenware utensils for cooking and storing water which are required by the poorer classes, as well as tiles, rings for wells and the like In most parts of India the potter, like the carpenter, oil-presses, blacksmith and cobbler, is found in practically every village

Chemicals —In a country like India, whose economic development is still backward it is not to be expected that a large number of persons should be engaged in industries connected with chemical products The total number returned as supported by these industries exceeds a million but it shrinks to less than 100,000 if we exclude manufacture and refining of vegetable and mineral oils The 1 1 million persons included in this group are almost entirely village artisans who extract oil from mustard linseed, etc, grown by their fellow villagers

Food Industries —Of the 3 7 million persons supported by food industries the great majority follow occupations of a very primitive type Rice pounders and huskers and flour grinders number 1 6 million, gram parchers, etc 0 6 million, and toddy drawers about the same There are 352,000 butchers 281,000 sweetmeat makers, etc and 97,000 bakers and biscuit makers The other five heads of the scheme contain between them only 227,000 persons The principal factories in connection with food industries are flour and rice mills, which employ 42,000 persons, sugar factories 8,000, opium, ganja and tobacco factories 7,000 and breweries 5,000.

Dress —In all 7 8 million persons are supported by industries of dress and the toilet Of these 1 3 millions are grouped under the head tailors, milliners, dressmakers, etc and 2 1 million under each of the heads (*a*) shoe, boot and sandal makers, (*b*) washermen, cleaners and dyers, and (*c*) barbers, hair-dressers and wig-makers

Transport —Transport supports about five million persons, or 16 per mille of the population, *viz* , transport by water one million, transport by road 2 8 million, transport by rail one million, and the post, telegraph and telephone services 0 2 million Transport by water, about three-fifths are owners of country boats and their boatmen; nearly one-sixth are employed on inland steamers and ocean-going vessels of all kinds, one-sixth are engaged in the construction and maintenance of canals, and one-twentieth in the management and upkeep of harbours Transport by road includes one million carters and cart-owners, more than half a million porters and messengers and considerably less than that number of owners and drivers of pack animals Palki owners and bearers number 202,000 and persons engaged on road construction and maintenance 563,000

Trade —The number of persons dependent on trade for their livelihood is 17 8 millions, or 6 per cent of the population Of these, more than half are supported by trade in food stuffs, including 2 9 million grocers and sellers of vegetable oil, salt and other condiments, who are for the most part the petty village shop-keepers, commonly known as salt and oil sellers, 2 2 million grain and pulse dealers; 1 6 million betel leaf, vegetables and fruit sellers,and nearly a million fish vendors. Trade in textiles is the next most important item, supporting 4 per mille of the population In connection with these figures, it is necessary to draw attention to the great difference which exists between the economic conditions of India and those of Europe In Europe the seller is almost invariably a middleman, whereas in India he is usually the maker of the article and is thus classified under the industrial and not the commercial head.

Professions —The public administration and the liberal arts support 10 9 million persons or 35 per mille, namely, public force 2 4 million, public administration 2 7 million, the professions and liberal arts 5 8 million, and persons of independent means about half a million The head Public force includes the Army (0 7 million), the Navy (less than 5,000) and the Police (1 6 million) India has practically no navy and her army is exceptionally small, as compared with those of European countries The number of persons actually employed in it is only 384,000 or 1 per mille of the population, as compared with 4 per mille in England and 10 in Germany The figures for Police include village watchmen and their families The real number in this group is greater than that shown in the census tables, many of these village officials have other means of subsistence, and the latter were sometimes shown as their principal occupation Under the head Public administration are classed only those persons who are directly engaged in the Executive and Judicial administration and their establishments, whether employed directly under Government or under a municipality or other local body Employees of Government and local bodies who have a specific occupation of their own, such as doctors printers, school-masters, land surveyors, etc are shown under the special heads provided for these occupations Of the 5 3 million persons supported by the professions and liberal arts, Religion accounts for rather more than half, Letters and the arts and sciences for more than a sixth, Instruction and Medicine for one-eighth, and Law for one-eighteenth The main head Religion contains 1 6 million priests, ministers, etc , 0 7 million religious mendicants, 0 4 million pilgrim conductors, circumcisers and persons engaged in temples, burial or burning ground service, and 0 06 million catechists and other persons in church and mission service Of Law, more than half are lawyers, law agents and mukhtiars and the remainder lawyers' clerks and petition writers More than two-thirds of the persons under the Medical head are medical practitioners of various kinds, including dentists the remainder are midwives, vaccinators, compounders, nurses, etc The real number of persons who act as midwives must exceed considerably that shown in the return This service is usually performed by the wife of the village scavenger or other person of low caste, and she must often have been returned under her husband s occupation Nearly three-fourths of the persons classed under Letters and the arts and sciences are found in Music composers and masters, players on musical instruments, singers actors and dancers The bulk of these are village drummers, whose services are invariably requisitioned on the occasion of marriages and religious festivals

Factories.—There are in the whole of India 7,113 factories employing 2 1 million persons, or 7 per mille of the population. Of these per-

sons, 810,000, or two-fifths of the total number are employed in the growing of special products, 558,000 in textile industries, 224,000 in mines, 125,000 in transport, 74,000 in food industries, 71,000 in metal industries, 49,000 in glass and earthenware industries, the same number in industries connected with chemical products and 45,000 in industries of luxury Of the special products, tea (703,000 employees) is by far the most important The number of tea gardens is not much more than double that of coffee plantations, but twelve times as many persons are employed on them The coffee plantations are four times as numerous as indigo concerns and employ twice as many labourers Of the labourers on tea gardens, 70 per cent are returned by Assam and 27 per cent by Bengal Madras, Mysore and Coorg contain between them practically all the coffee plantations, and Bihar and Orissa all the indigo factories Of the persons working in mines, 143,000, or 64 per cent are found in collieries, eight-ninths of them being in the two provinces of Bihar and Orissa and Bengal The number of persons engaged in gold mines is about one-fifth of the number in the coal mines nine-tenths of them were returned from Mysore Of the 558,000 workers in textile industries, cotton mills contribute 308,000 and jute, hemp, etc 222,000 About two-thirds of the persons employed in cotton mills are found in the Bombay Presidency, from 8 to 9 per cent in the Central Provinces and Berar and Madras, and about half this proportion in the united Provinces and Bengal Jute mills are a monopoly of Bengal Of the industries connected with transport, railway workshops are by far the most important and afford employment to 99,000 persons, or 79 per cent of the total number of persons engaged in these industries about one-fourth of them are found in Bengal and one-sixth in Bombay Of the factories connected with food industries, the most prominent are rice and flour mills These employ 42,000 persons, of whom nearly three-fourths are engaged in the rice mills of Rangoon and other places in Burma

Indians and Europeans —The proportion of Indians to Europeans varies considerably in different classes of factories The great majority of the larger concerns are financed by European capital, and in such cases management or direction is generally European, and the Indians shown under this head are engaged for the most part on supervision and clerical work. In Assam where 549 tea gardens are owned by Europeans and 60 by Indians, there are 536 European and 73 Indian managers In the coffee plantations of Madras and Mysore the same principle is apparent The jute mills of Bengal are financed by European capital and the managers are all Europeans, while in Bombay where Indians own 110 of the cotton spinning and weaving mills and share 25 with Europeans, and the latter own exclusively only 12, all but 4 3 of the managers are Indians Sometimes the proportion of Europeans employed in supervision, etc , varies with the character of the work In the gold mines where the planning and control of the deep underground workings require a high degree of skill, Europeans outnumber Indians in the ratio of nearly 4 to 1, whereas in the collieries Indians are twelve times as numerous as Europeans

Indian Education.

Indian Education* is unintelligible except through its history. Seen thus it affords the spectacle of a growth which, while to one it will appear as a huge blunder based on an initial error of judgment easily avoided, to another stands out as a symbol of sincerity and honest endeavour on the part of a far-sighted race of rulers whose aim has been to guide a people alien in sentiments and prejudices into the channels of thought and attitudes best calculated to fit them for the needs of modern life and western ideals. A careful survey of the history of Indian Education will reveal the opposition between two tendencies whose struggle for supremacy was finally decided by Lord Macaulay's Minute of 1835 The beginnings of public education in India belong to a generation before Macaulay's regime But it was not till Macaulay poured such emphatic contempt on Oriental learning that the Government in India in general definitely chose the path of English education as the road to future progress Macaulay's Minute crystallises a point of view which had already some years before begun to impress itself upon educationists in this country And when we find a statesman of the acumen of Lord Curzon saying "Ever since the cold breath of Macaulay's rhetoric passed over the field of the Indian languages and Indian text books, the elementary education of the people in their own tongue has shrivelled and pined," we must not suppose that he regarded Macaulay as solely responsible for the trend which modern education has taken. It needs but a cursory glance at the history of education in India under British rule to make clear once for all that education on Western lines was necessary as an answer to a growing demand which none but callous rulers could refuse, as also for the very forcible reason that without some kind of organised training of Indians in English composition and ideas the practical work of administration which demands an ever-increasing number of clerical assistants to meet the needs of steadily accumulating office work, could never have been carried on These two points give one the clue to the main features of Indian education (1) the claim of newly-awakened races to be allowed to substitute for their own lifeless learning the progressive culture of modern Western thought, and (2) the obvious utility of a system whose object should be, in part at least, to assist Indians to a development of their capacities and sympathies on lines which might be of service in the actual government of the country. With reference to this last point the following consideration may be urged The object of our great Universities and Public Schools in England is generally admitted to be something more than the satisfaction of purely theoretical interests They are meant to be the training ground of capable public servants Let us once admit this to be a necessity in England; if then we recognise the impossibility of administering the great Indian Empire through Englishmen alone, there seems to be no adequate reason for refusing to apply the same methods to India And as there is nothing in Indian History to show the particular value of any Oriental system of education as a training for public service, the logical conclusion is that Indians should be educated in English along Western lines If an observer were confronted with a country ruled by foreign administrators backed up by a foreign army, he would infer on a priori grounds that the said foreign power had included in its legislation a system of education analogous to its own---if his opinion of it had not led him to suppose that it had adopted the sceptical or ungenerous policy of not educating its subjects at all That would present itself as the only possible alternative And the problem of Indian education may be said to resolve itself into a doubt which of the two policies is preferable, that of non-education or that of English education Yet the doubt itself has only to be stated to be solved And the task of explaining Indian education becomes in the end simply one of showing how the initial encouragement on the part of British rulers of Oriental learning did not so much begin education as foster the desire for education, until at last the Government undertook the duty of guiding such aspirations into what it conceived to be the right channel To this end our aim will be to show (1) Indian education in the stage of conception, and its birth somewhere about the time of Macaulay's Minute, (2) its growth and organisation, (3) its present situation

THE BIRTH OF INDIAN EDUCATION.

The seeds of an interest in education may be said to have been sown by the foundation of the Calcutta Madrasa by Warren Hastings in 1781 and the Sanskrit College at Benares by Jonathan Duncan in 1791 Whatever interest there was in learning during this period was directed solely to the encouragement of Sanskrit and Arabic Even the Act of 1813 which set apart a lakh of rupees for "the revival and promotion of literature and the encouragement of learned natives of India, and for the introduction and promotion of a knowledge of the sciences in the British territories of India" was interpreted as a scheme for the encouragement of Sanskrit and Arabic, and it was not till the famous meeting of the Governor-General's Council in 1835 that it was definitely discussed whether it might not accord with the meaning of the Act of 1813 to use at least part of the money for the encouragement of the study of English But other forces had been already at work In 1817 the Hindu College was opened at Calcutta with the express object of instructing "the sons of Hindus in the European and Asiatic languages and sciences," English being assigned the most prominent position The moving spirit which led to the foundation of this institution was Raja Ram Mohan Roy who in the words of Mr. H. R. James in his important book 'Education and Statesmanship in India," "incarnates the impulse which led thinking

*This term is in common use for "Education in India," just as "English Education" means in India, education through the medium of English in Western learning.

Statement of Educational Progress in INDIA

	1907-08.	1908-09	1909-10	1910-11.	1911-12	1912-13
Area in square miles	1,151,022	1,144,105	1,145,728	1,152,894	1,135,513	1,137,686
Population { Male	123,249,577	123,249,836	122,699,630	130,113,723	130,408,551	130,302,188
Population { Female	119,570 056	119,570,469	119,017,958	124,706,893	124,960,002	124,851,633
Total Population	242,819,633	242 820 305	241,717,588	254 820 616	255,368,553	255,153,821
Public Institutions for Males						
Number of arts colleges	126	123	128	128	130	128
Number of high schools*	1,169	1,174	1,190	1,203	1,219	1,273
Number of primary schools	104,354	106,329	107,463	108,144	110,692	113,955
Male Scholars in Public Institutions						
In arts colleges	19,384	18 788	22,912	24,806	29,369	32,931
In high schools *	301,565	315,905	344,647	364,704	390,881	428,182
In primary schools	3,626,044	3,786,462	3,888,671	3,936,419	4,202,631	4,428,531
Percentage of male scholars in public institutions to male population of school-going age	23 1	25 15	26 2	25 3‡	26 8	28 4
Public Institutions for Females						
Number of arts colleges	8	7	8	8	10	10
Number of high schools*	114	124	125	130	135	144
Number of primary schools	10,845	11,511	11,753	12,027	12,886	13,694
Female Scholars in Public Institutions						
In arts colleges	175	185	217	244	279	318
In high schools*	12,924	13 654	14,257	14,864	16,884	18,515
In primary schools	570,540	631,906	668,636	689,471	785,511	832,962
Percentage of female scholars in public institutions to female population of school-going age	3 6	4 0	4 2	‡4 2	4 7	5 0
TOTAL SCHOLARS in public institutions { Male	4,428,175	4,650,134	4,826,554	4,930,084	5,253,065	5,559,841
TOTAL SCHOLARS in public institutions { Female	647 786	720 342	763,580	793,646	875,660	928,983
TOTAL SCHOLARS in public institutions Total	5,075,961	5 370,476	5 590,134	5.723,730	6 128,725	6,488,824
TOTAL SCHOLARS (both male and female) in all institutions.	5,699,146	5,972,204	6,203,305	6,345,582	6,780,721	7,149,663
Expenditure (in thousands of rupees)						
From provincial revenues	1,98,54	2,12,42	2,34,30	2,42,08	2,69,59	3,39,25
From local funds	1,01,86	1,17,24	1,02,24	1,00,32	1,05 80	1,23,08
From municipal funds	22,22	24,27	24,56	28,00	29,84	33,28
Total Expenditure from public funds	3,22,62	3,53,93	3,61,10	3,70,40	4,05,23	4,95,61
From fees	1,57,30	1,69,37	1,85,42	2,00,67	2,19,09	2,40,52
From other sources	1,21,67	1,35,18	1,40,24	1,47.61	1,61,61	1,65,96
GRAND TOTAL OF EXPENDITURE	6,01,59	6,58,48	6,86,76	7,18,68	7,85,93	9,02,09

* High schools include vernacular high schools also, in some provinces.

‡ The percentages for 1910-11, being reckoned on the new Census figures are slightly misleading for purposes of comparison with previous years This remark applies throughout all the Tables

Indians to desire and work for English Education" From that time forward the far-sighted observer must have realised that a movement had begun which whether we would or not we could no longer check The same phenomenon was witnessed on the Western side of India, and Mountstuart Elphinstone's Minute on Education, dated March 1824, deserves particular notice for its recognition of the necessity of introducing a knowledge of European sciences into any scheme of education as well as for its wise restraint in dealing with Oriental learning For though his declared object was to establish English schools and encourage the natives in the pursuit of European sciences, he repudiates the idea that the purely Hindu side of education should be totally abandoned In his own words "It would surely be a preposterous way of adding to the intellectual treasures of a nation to begin by the destruction of its indigenous literature, and I cannot but think that the future attainments of the natives will be increased in extent as well as in variety by being, as it were, engrafted on their own previous knowledge and imbued with their own original and peculiar character" Elphinstone's interest in educational matters was sufficiently appreciated by the citizens of Bombay who in 1827, the year of his departure, resolved to found two professorships in his memory "to be held by gentlemen from Great Britain until the happy period when natives shall be fully competent to hold them" It is sufficiently clear not only that an interest had been aroused in English education but that some attempts had been made to meet the interest before 1835, though Lord Curzon may have given a just estimate of the situation at the Educational Conference of Simla in 1901 when he said "Education there was, but it was narrow in its range exclusive and spasmodic in its application, religious rather than secular, theoretical rather than utilitarian in character Above all, it wholly lacked any scientific organisation and it was confined to a single sex"

GROWTH AND ORGANISATION OF ENGLISH EDUCATION IN INDIA.

It is, of course, just the possibility of engrafting modern western knowledge on the old Indian stocks that is open to doubt Herein lies the significance of Macaulay's famous tirade on Oriental science, which deserves quoting for the contrast it forms to the juster estimate of Mountstuart Elphinstone It is perhaps more offensive to Indian ears for the element of truth it contains, though the entirely unsympathetic form in which he expresses himself is a sufficient stumbling-block in itself "The question before us," he writes, 'is simply whether, when it is in our power to teach this language—English—we shall teach languages in which, by universal confession, there are no books on any subject to be compared to our own, whether, when we can teach European science, we shall teach systems which, by universal confession, wherever they differ from those of Europe, differ for the worse, and whether, when we patronise sound philosophy and true history, we shall countenance at the public expense, medical doctrines which would disgrace an English farrier, astronomy which would move laughter in the girls at an English boarding-school, history abounding with kings thirty feet high and reigns thirty thousand years long, and geography made up of seas of treacle and seas of butter" The reiterated phrase 'by universal confession' is beyond the mark, but Macaulay was surely right in his valuation of ancient Hindu science *as science* or history *as history* Where he was surely wrong was in his implied condemnation of Indian literature *as literature* From that point of view you might just as well condemn Homer for his mythology (as indeed Plato does in the Republic) Where, again, he was possibly wrong was in his vehement antipathy to the view that, if modern science is to be taught, it should be taught through the medium of Indian languages Yet here too he represents an attitude which was fast becoming that of enlighted Indians And, if there were no other reasons, the ultimate utility to the Government itself of Indians trained in the English language is a strong argument in his favour This utilitarian motive for English education lurks often unconscious and unrecognised under the whole progress of Indian education —to its detriment as some think, for the great charge against the modern Indian student is that he regards a career in Government school and college not so much as education and an end in itself as a mere means to more or less lucrative employment in Government offices Be that as it may, we shall probably not be far wrong in saying that the famous Minute of 1835 was in spirit right but in expression wrong Its result was that the Government of Lord William Bentinck made the following momentous Resolution 'His Lordship in Council is of opinion that the great object of the British Government ought to be the promotion of European literature and science among the natives of India, and that all the funds appropriated for the purposes of education would be best employed on English education alone"

Universities Established.

Macaulay's period of service on the Committee of Public Instruction (first formed in 1824) gave considerable impetus to the movement he advocated, as figures will show Whereas the Committee had no more than fourteen institutions under its control in Bengal when he joined it, this number was more than trebled by the end of 1837, the larger part being Anglo-Vernacular schools or colleges Progress continued along these lines in Bengal, and more slowly in other Presidencies, until in 1852 the numbers under instruction in Government colleges amounted to 25,372 of which 9,893 were for English education (James p.34). The increase of numbers must have been materially affected by a Resolution of Lord Hardinge's Government in 1844 in which it was stated that in the selection of candidates for public employment, preference would be given to those who had been educated in the newly fashioned type of institution. An adherent of the old-fashioned intellectual ideal of college

Statement of Educational Progress in MADRAS.

	1907–08	1908–09	1909–10	1910–11	1911–12	1912–13
Area in square miles	No change	No change	No change	141 866	142,491	No change
Population { Male				20 152 916	20 389,666	
Population { Female				20 770 668	21 029 264	
Total Population				40 923,584	41,418,930	
Public Institutions for Males.						
Number of arts colleges	33	32	30	30	30	29
Number of high schools	170	169	172	172	168	171
Number of primary schools	21,929	22 412	23,108	23 426	24 044	25,223
Male Scholars in Public Institutions						
In arts colleges	4,283	4,227	3 911	3,709	4 893	5,491
In high schools	64,185	66 189	72 673	69,543	71,294	77,581
In primary schools	659 716	689,817	739 933	766,884	829,331	889,393
Percentage of male scholars in public institutions to male population of school-going age	27 4	27 8	30 8	29 7	30 8	33 1
Public Institutions for Females						
Number of arts colleges	2	1	1	1	2	2
Number of high schools*	28	32	31	32	33	32
Number of primary schools	893	862	886	900	1,162	1,281
Female Scholars in Public Institutions						
In arts colleges	37	38	37	32	46	56
In high schools*	3,808	4 981	4,212	4 027	4,510	4,689
In primary schools	127,107	135 784	147,910	156 027	199,719	223,835
Percentage of female scholars in public institutions to female population of school-going age	5 4	5 8	6 2	6 1	6 6	7 4
TOTAL SCHOLARS in public institutions { Male	775,450	813,056	870,505	896 701	943,369	1,011,753
TOTAL SCHOLARS in public institutions { Female	156,948	168 167	181 461	190 861	209,517	234,197
Total	932,398	981,223	1,051 966	1 087,562	1,152,886	1 245 950
TOTAL SCHOLARS (both male and female) in all institutions	1 057 170	1,099,615	1 179,048	1,215,725	1,280,065	1,362,182
Expenditure (in thousands of rupees)						
From provincial revenues	28 40	27 79	39,07	43,16	44,22	58,20
From local funds	16,69	20 91	11 45	11 24	12 28	17,27
From municipal funds	2,95	3 84	3,17	3 21	3 15	4,15
Total Expenditure from public funds	48,01	52 54	53,69	57,61	59 65	79,62
From fees	31,98	32,50	34 89	37 29	37,90	41,44
From other sources	26,89	32,37	30 81	32 78	38,10	36 56
GRAND TOTAL OF EXPENDITURE	1,06,91	1,71,41	1 19,39	1 27,68	1,35,65	1,57,62

* Include also vernacular high schools for girls

life would see in this Resolution a fatal concession to the utilitarian view and a fatal misdirection of public attitude towards education.

Meanwhile educational institutions had so multiplied throughout India that the time was becoming ripe for the decisions arrived at in Sir Charles Wood's Despatch of 1854 The old idea had been that the education imparted to the higher classes of society would gradually 'filter down' to the lower classes How little true it is that education could ever filter down to the masses in India by its own percolative properties is evident enough even now when our wide system of schools entirely fails to touch the majority of India's population. The Despatch of 1854 marks a departure from the 'filtration' policy and a recognition on the part of an enlightened Government of educational duties, even towards sections of the population who had never entertained the idea of Government obligations in their direction The result of the Despatch was the formation of Departments of Public Instruction on lines which do not differ at all essentially from Departments of Public Instruction of the present day They represent a direct desertion of the *laissez faire* or *filtration* policy, and an attempt on the part of Government to "combat the ignorance of the people which may be considered the greatest curse of the country" Another feature of the Despatch was an outline of a 'University' system, which formed the basis of the scheme adopted in 1857 when Acts were passed for the incorporation of three Universities, one for Calcutta, one for Bombay and one for Madras As Lord Curzon said "The Indian Universities may be described as the first fruits of the broad and liberal policy of the Education Despatch of 1854" He might have gone further and said that the scheme outlined in it not only originated universities but contained suggestions for their proper conduct whose value has only recently been understood In its proposal of a distinction between "common degrees" and "honours" degrees it anticipates the actual procedure of at least one University, that of Bombay, by nearly sixty years

Private Agencies

The Despatch of 1854 and the orders based on it, together with later resolutions and modifications, organised education into something like the present system Government took the whole thing into its own hands and established Universities, colleges, high schools and middle schools Efforts were made to extend elementary education so as to reach the masses and also to establish a system of inspection with a view to guaranteeing the efficiency of private institutions which should be allowed grants-in-aid as well as Government Institutions themselves Expansion under control sums up the aims of this combined system of grants-in-aid and inspection As Mr James puts it "Local management under Government inspection stimulated by grants-in-aid, was to supplement and finally, perhaps, in large measure, to supersede direct management by Government" (p 48) The latter part of the sentence may have been the inspiration of the Commission of 1882 appointed to inquire into the way in which the recommendations of the Despatch of 1854 had been carried out The result of the Commission was to relax the control exercised by Government over education Government's withdrawal was intended to refer only to secondary instruction The idea was to encourage private enterprise in the founding of secondary schools But though the recommendations of the Commission included much talk of conditions and cautions and of the necessity of maintaining a high standard, the addition of a further recommendation that the managers of aided schools and colleges be permitted, if they wished, to charge less fees than Government schools of the same class led in the result to a general deterioration of standard The recommendations of this Commission appear to some as a charter of inefficiency. They are the avenue to educational institutions run as a business proposition Meanwhile perhaps the most creditable feature of the Commission's Report was its insistence on the importance of Primary Education and its recommendation "that primary education be declared to be that part of the whole system of Public Instruction which possesses an almost exclusive claim on local funds set apart for education and a large claim on provincial revenues" The least creditable feature is its recommendation "that preference be given to that system which regulates the aid given mainly according to the results of examination" To pay by results is wilfully to encourage the cramming institution

Great Expansion

The period from 1882 to beginning of the new century is one of phenomenal expansion There was a general stampede for education, and no proper regard was paid to the standard or quality of the product It is this period which if any deserves the opprobrium incurred by education in India And it is the universities which stand out as the chief sinners There can be no reasonable doubt that students were being turned out with degrees attached to their names who could not be regarded as educated from any respectable standpoint As a man who is doubtful whether an act of his really is so praiseworthy as the general chorus of congratulation had led him to suppose, suddenly, with tremors at the thought of the revulsion of opinion that is sure to follow if he turns out to have done wrong, feels certain of his error, so our Governors and Chancellors and Vice-Chancellors of this period gradually arrived at the conviction that something was wrong with the seemingly excellent product of the Despatch of 1854 and the Commission of 1882 Criticism began from without, but finally it invaded the sphere of Convocation addresses. At last in 1901 the Vice-Chancellor of the University of Calcutta made this statement "For the first time, the Chancellor asks the University to consider the possibility of constitutional reform" In September of that year an educational conference was convened at Simla by the Viceroy Lord Curzon. In 1902 the Indian Universities Commission was appointed and in 1904 an Act was passed to amend the law relating to the Universities of British India.

Statement of Educational Progress in BOMBAY

	1907–08.	1908–09	1909–10	1910–11	1911–12	1912–13.
Area in square miles	No change	No change	No change	188,826	188,826	No change.
Population . Male				14,006,375	14,013,522	
Female				13,071,673	13,074,273	
Total Population				27,078,048	27,087,795	
Public Institutions for Males						
Number of arts colleges	11	11	11	11	11	11
Number of high schools	115	112	114	117	129	138
Number of primary schools	9,602	9,900	10,686	11,267	11,609	12,169
Male Scholars in Public Institutions.						
In arts colleges ..	2,567	2,613	2,958	3,177	3,643	3,850
In high schools	33,079	35,921	37,707	39,569	41,325	45,385
In primary schools . .	515,382	539,513	580,927	593,197	630,427	678,031
Percentage of male scholars in public institutions to male population of school-going age	29 4	30 9	33 2	31 8	33 6	36 2
Public Institutions for Females						
Number of arts colleges .						
Number of high schools	23	25	26	24	27	30
Number of primary schools	1,026	1,050	1,104	1,121	1,154	1,199
Female Scholars in Public Institutions						
In arts colleges . ..	53	60	76	81	76	91
In high schools	2,555	2,859	2,929	2 987	3,662	4,095
In primary schools .	92,158	101 328	109 606	112,105	126,703	136,378
Percentage of female scholars in public institutions to female population of school-going age	5 3	5 8	6 3	6 1	6 9	7 4
TOTAL SCHOLARS in public institutions Male	578,348	607,537	653,704	667,469	707,328	761,435
Female	98,799	108,176	116,731	119,596	134,981	145,392
Total ..	677,147	715,713	770,435	787,065	842,309	906,827
TOTAL SCHOLARS (both male and female) in all institutions.	749,391	792,559	850,293	868 535	922,877	987,685
Expenditure (in thousands of rupees)						
From provincial revenues	44,90	46,72	49,04	46,60	53,98	68,82
From local funds ..	8,72	10,77	10,34	10,84	10,76	11,62
From municipal funds ..	7,08	7,34	7,50	9,54	10,14	9,85
Total Expenditure from public funds	60,70	66,83	56,88	66,98	74,88	90,29
From fees ..	21,81	22,40	23,96	24,49	26,27	26,36
From other sources	30,92	30,80	32,68	32,53	35,02	36,83
GRAND TOTAL OF EXPENDITURE	1,13,43	1,18,03	1,23,52	1,24,00	1,36,17	1,53,48

UNIVERSITIES ACT AND PRESENT SITUATION.

The Commission of 1882, which favoured the policy of withdrawing higher education from the control of Government within certain limits and of allowing colleges and secondary schools conducted by private enterprise to reduce their fees, though in many details it made admirable proposals, yet by its general policy led to a general inefficiency and lowering of standard in higher education In some matters it anticipated all that has hitherto been done For example, in suggesting that there should be two sides in secondary schools, "one leading to the entrance examination of the Universities, the other of a more practical character, intended to fit youths for commercial and other non-literary pursuits," it still anticipates Government action by many years The Universities Commission of 1902 proposed to make the School Final examination a preliminary test for certain professions and posts in Government service and to substitute it for the Matriculation as a general qualification, even, if possible, as a test of fitness to enter the University The latest statement of Government policy (dated Feb 1913) re-asserts and emphasises these proposals, which are an attempt to enforce the suggestion of the Commission of 1882 But the general relaxation of Government control seemed to Lord Curzon the radical evil of his day

New Senates

Not to speak of the lowering of efficiency consequent on the lowering of fees in schools and colleges by private enterprise, we may mention among the more glaring defects which Lord Curzon had to face the maladministration of the Universities due to the mistake of their composition All kinds of people had crept into the Senates of Universities who from the true educational point of view had no business there The numbers had become unwieldy so that it was impossible to get passed even necessary reforms The progress of education was retarded and modern innovations simply ignored As reconstituted the Universities have revised their regulations and though they have not ceased to be examining universities they have taken upon themselves the necessary function of inspecting the colleges affiliated to them They have also received powers of becoming teaching bodies Little has yet been done to make them that, but it may be judged from utterances in their Senates that they are becoming increasingly conscious of their possibilities or duties in this direction In the last Resolution on Education (Feb 1913) it was decided that the principle of an examining and affiliating University must still be maintained Nevertheless a movement is promised in the direction of "new local teaching and residential Universities within each of the provinces in harmony with the best modern opinion as to the right road to educational efficiency" Under the present system it is no longer impossible to pass radical changes The Senate of each University has been reduced to one hundred in number, and the Act lays down that in the election of members of the Syndicate, the executive body in the University, a certain number of those actively engaged in educational work should be selected To quote from the Fifth Quinquennial Review "the Colleges have defined rights of representation on the Syndicate, to this extent that among the elected members of the Syndicate a number not falling short by more than one of a majority must be heads or professors of colleges One University has required by its regulations that a majority of the elected members of the Syndicate shall be heads or professors of Colleges" It is evident then that the working bodies in the Universities have been cleaned up and are now so constituted as to contain the obviously essential educational element

Policy of 1913

The influence of Lord Curzon on educational progress has been generally salutary For though his reforms had the air of restriction and raised a general outcry in India—"the least that Lord Curzon was charged with was a deliberate attempt to throttle higher education in India" ("Indian Unrest" by Valentine Chirol)—it is now recognised by enlightened thinkers that all branches of education required careful review Before any quantitative increase took place, it was necessary to reform the qualitative basis A glance at the work done as summarised by the last Quinquennial Review will show how the machinery has been cleaned The Universities are now respectable, secondary schools have been improved and placed under stricter conditions of recognition, attention, though insufficient, has been paid to the training of teachers, in primary schools examinations have been simplified, buildings improved, the pay of teachers raised, the courses of studies revised and widened In these circumstances the Government Resolution of 1913 was justified in its aims to extend educational institutions on every side It proposed to double the number of primary schools (a scheme which may be regarded as a compromise between the policy of *laissez faire* and that of compulsory education), and to encourage the establishment of a greater number of secondary schools on the lines of private enterprise by increased grants on conditions of submission to Government inspection, recognition, and control One of the most interesting features of the Resolution is Government's desire to develop the hostel system In the words of the Resolution "The Government of India desire to see the hostel system develop until there is adequate residential accommodation attached to every college and secondary school in India" Altogether the Resolution of February 1913 ranks as a notable pronouncement, ranging as it does over every conceivable topic, from the Universities to what is often called Female Education, with a depth of insight and a readiness to face the most complex problems of finance and organisation that augurs well for educational progress There is reason to hope that our educational system in India will stand out as one of the most remarkable achievements in the history of imperial politics

University Organisations

These Universities are examining bodies with colleges affiliated to them The Gover-

Statement of Educational Progress in BENGAL

——	1907–08	1908–09	1909–10	1910–11	1911–12	1912–13
Area in square miles	124 432	No change	124 492	124,492	No change.	78,699
Population { Male	26,674,767	26,675 026	26 124 820	27,436 187		23,365,225
Population { Female	27,097,147	27,097,560	26 545 049	27,587,153		22,117,852
Total Population	53,771 914	53,772 586	52,669,869	55 023,340		45,483,077
Public Institutions for Males						
Number of arts colleges	32	29	29	29	29	31
Number of high schools	397	397	396	399	398	532
Number of primary schools	33,960	34,480	35,201	35,437	36,342	28,107
Male Scholars in Public Institutions						
In arts colleges	5 455	4,613	7,107	8 255	9,635	12,791
In high schools	80,380	82,822	87 172	94,844	103,096	164,244
In primary schools	934,121	968,939	992,103	997,953	1,047,769	999,110
Percentage of male scholars in public institutions to male population of school-going age.	28 6	30 2	32 0	31 4	33 2	40 9
Public Institutions for Females						
Number of arts colleges	2	2	3	3	3	3
Number of high schools	15	17	17	21	19	21
Number of primary schools	3,384	3,029	3 065	3,052	3 124	6,798
Female Scholars in Public Institutions						
In arts colleges	38	42	47	63	81	105
In high schools	1,631	1,974	2,046	2,301	2 423	3,090
In primary schools	127,803	139 904	145,233	146,223	158,616	205,784
Percentage of female scholars in public institutions to female population of school-going age	3 5	3 9	4 2	4 2	4 6	6 8
TOTAL SCHOLARS in public institutions { Male	1,146 567	1,208,718	1 254 914	1,290,621	1,364,946	1,435,452
TOTAL SCHOLARS in public institutions { Female	141,974	159,562	167,505	173,207	189,971	227,313
Total	1,288 541	1,368,280	1,422 419	1 463,828	1,554 917	1,662,765
TOTAL SCHOLARS (both male and female) in all institutions	1,338,190	1,421 389	1,475,376	1 518,239	1,609,360	1,718,623
Expenditure (in thousands of rupees)						
From provincial revenues	41,38	49.79	49 93	50 16	54,76	64,97
From local funds	11 19	11,56	11 36	11,64	11,64	15,88
From municipal funds	1 31	1,32	1 41	1 58	1,70	1,56
Total Expenditure from public funds	53 88	62,67	62,70	63 38	68,10	82,41
From fees	46,31	52,71	56,19	61,02	67,88	86,62
From other sources	25,37	29,20	32 00	36,31	36,04	33,68
GRAND TOTAL OF EXPENDITURE	1,25,56	1 44 58	1 50 89	1,60 71	1,72,02	2,02,71

nor-General is the Chancellor of the University of Calcutta and the head of the provincial Government the Chancellor of each of the other Universities. The Vice-Chancellor is nominated by each head of Government The *executive* body is the Syndicate which is now organised so as to contain a larger educational element. Over this body the Vice-Chancellor presides, all other members being elected by the various Faculties except the Director of Public Instruction who is a member *ex officio* The secretarial work of all university business is done by an officer appointed by the Senate, the Registrar The *legislative* body is the Senate which is divided into faculties, a Faculty being a section of the Senate appointed to control the work of a particular subject. The Faculties are in most cases those of Arts, science, law, medicine and engineering. There is an oriental faculty in the Punjab University alone Each of the main branches of study in a University is represented in addition by a Board of Studies, that is, an advisory body whose duties are to look after the curricula and recommend text books or books which represent the standard of knowledge required in the various examinations The Senate as a whole consists of from 75 to 100 members the majority of whom are nominated by Government, the remainder being elected by the Senate or its faculties or by the body of graduates of the University.

UNIVERSITIES

Constitution —There are in British India five Universities with the following territorial limits (V. Fifth Quinquennial Review P 7)—

University	Territorial Limits	
	Province (including any Native State under its political control and any foreign possession included within its boundaries)	Native State or Colony.
Calcutta	Bengal, Burma and Assam	
Madras	Madras and Coorg	Hyderabad, Mysore and Ceylon
Bombay	Bombay and Sind	Baroda
Allahabad	United Provinces of Agra and Oudh, the Central Provinces (including Berar) and Ajmer-Merwara	The States included in the Rajputana and Central India Agencies
Punjab	Punjab, North-West Frontier Province and British Baluchistan	Kashmir and Baluchistan.

Courses and Examinations

The Matriculation Examination is the test for entrance to a University After matriculation, if the student decides to graduate in Arts, he must take a four years' course After two years he takes the Intermediate Examination After another two years he may appear for the Examination for Bachelor of Arts The regulations with regard to Honours vary in the different Universities In Calcutta the honours and pass courses are separate. In Bombay the honours student takes in addition to the pass three extra papers. In Madras the honours course is taken the year after and in addition to the pass course The degree of Master of Arts requires a further examination (except in Madras) which is taken one or two years after the examination for the B. A. degree. If the student elects to take science, his course is one of four years. In some Universities he receives the degree of B. A , in others a separate degree of B. Sc. Where the separation between Arts and Science is clearly defined, the student takes the Inter Examination in Science two years after Matriculation, and two years after this examination appears for that of B.Sc. Those students who choose a professional course, *e g*, agriculture, medicine or engineering, must in most cases first attend an Arts College for one or two years before proceeding to the professional college The student who has graduated as Bachelor at a University can graduate as a Bachelor of Law in two years

The average annual output of graduates is reckoned in the Fifth Quinquennial Review at 1935, and the proportion of students who graduate in the four main faculties is given as follows .—

Arts	85%
Science .	20%
Medicine ..	9%
Engineering	4%

But it should be remembered than in some universities the Arts degree is given for Science subjects

Dacca University.

One of the most interesting features of the last Government Resolution on education is the decision to found a teaching and residential university at Dacca Government also profess themselves willing to sanction under certain

Statement of Educational Progress in BIHAR and ORISSA.

	1911-12.	1912-13.
Area in square miles	98,170	No change.
Population — Male	18,032,708	
Population — Female	18,827,328	
TOTAL POPULATION	36,860,036	
Public Institutions for Males		
Number of arts colleges	7	7
Number of high schools	93	95
Number of primary schools	21,990	22,452
Male Scholars in Public Institutions		
In arts colleges	1,430	1,722
In high schools	25,402	28,110
In primary schools	567,341	592,242
Percentage of male scholars in public institutions to male population of school-going age	24 8	26 0
Public Institutions for Females		
Number of arts colleges		
Number of high schools	3	3
Number of primary schools	1,259	1,498
Female Scholars in Public Institutions		
In arts colleges		
In high schools	286	287
In primary schools	78,076	82,254
Percentage of female scholars in public institutions to female population of school-going age	3 2	3.4
TOTAL SCHOLARS in public institutions — Male	669,921	704,485
TOTAL SCHOLARS in public institutions — Female	90,953	95,281
TOTAL	760,874	799,766
TOTAL SCHOLARS (both male and female) in all institutions.	804,658	847,244
Expenditure (in thousands of rupees)		
From provincial revenues	19,55	23,11
From local funds	7,25	8,24
From municipal funds	52	52
Total Expenditure from public funds	27,32	31,87
From fees	17,35	18,11
From other sources	11,27	11,90
GRAND TOTAL OF EXPENDITURE	55,94	61,88

conditions the establishment of similar universities at Aligarh and Benares and elsewhere as occasion may demand This experiment may be regarded as an initial attempt to get away from the affiliating and examining type of University and to conform to that ideal of a University which requires it not only to confer degrees but to supervise the training of intellect and character as closely as possible A University of this type will turn out graduates who may be trusted to have in their degree satisfactory credentials about their general character and ability Under the existing system the University turns out graduates of whom it knows absolutely nothing beyond what it learns in examinations

Colleges

Affiliated to the University are colleges, which the Universities have power to inspect and regulate In 1907 the number of colleges affiliated to the Indian Universities is given as 176, of which 161 are Arts Colleges, three Law Colleges (including the Law School in Bombay), four Medical, three Engineering, one Oriental, one Agricultural, and three Teachers' Colleges All colleges, whether under Government or private management, are inspected by the Universities Colleges receive financial aid from public funds, both provincial and Imperial Under the Universities Act the Universities are empowered to make regulations about the residence of college students The rule now is that students who do not reside with parent or guardian must reside either in a boarding house under supervision or in an approved lodging house The result has been a larger provision of college residential buildings The hostel system is definitely encouraged by Government and in the latest Resolution (Feb 1913) Government express the desire to see the hostel system extended to all colleges and secondary schools The number of students in Arts Colleges in 1907 was 18,001

Schools

Government policy with regard to schools has been to provide a small number of institutions which are to be regarded as models for private enterprise At the same time they insist on a careful inspection of all schools, whether they are run by municipalities or local boards, by private individuals or by missionary or other societies Private enterprise is encouraged by an extensive system of grants-in-aid, which are dependent on the efficiency of the school and its expenditure on teachers and general equipment

Secondary Schools

There is some difficulty in the classification of schools, secondary and primary Here the Fifth Quinquennial Review is followed as issuing from the Director General of Education Secondary schools are divided into *English* and *Vernacular* in the first place In the former English is a subject of instruction in the lower part and the medium of instruction in the upper part of the school. In the latter English is not taught in any way. In the second place these schools are divided into *high* and *middle* schools In the former instruction in its highest branches leads to the standard of matriculation for a University, in the latter instruction is carried to a standard within three years of that in high schools Thus there are four kinds of schools, English, High and Middle, and Vernacular, High and Middle Of these the first two are often called Anglo-Vernacular as they combine instruction through the medium of the vernacular with instruction through the medium of English But as there are so small a number of vernacular high schools that they are hardly worth including in a classification, and further as the vernacular middle schools are simply the highest stage of vernacular education and should therefore be included in the primary school system, the Review regards the distinction between English High and English Middle schools as a satisfactory classification The distinction between these two is slight A middle school in the words of the Review, "is nothing more than a high school with two or three top classes cut off" Secondary schools in 1907 numbered 3,285 with 473,130 pupils They are regulated both by Government and by the Universities There are now two examinations which a boy may take at the end of his school career —(1) The Matriculation examination, (2) the School Final In order to prevent the evils arising from setting a University examination as a test for a school education, Government now insist on the School Final as a test for certain professions and posts in Government Service The latest Government Resolution lays particular stress on this point

Primary Schools

Here again there is a difficulty of classification owing to the different systems prevailing in the different provinces However they are divided generally according to grade into lower primary and upper primary Middle vernacular schools, classed usually among secondary schools, are really only superior primary schools and bear little relation to the systems prevailing in secondary schools Primary schools, as the Review points out, have been defined as the education of the masses through the vernacular If the medium of instruction be taken as the differentiation, then clearly middle vernacular schools ought to be classed as primary In 1907 the number of these schools was 102,947 In the Government Resolution of Feb 1913 is found the following statement "It is the desire and hope of the Government of India to see in the not distant future some 91,000 primary public schools added to the 100,000 which already existed for boys and to double the 4¼ millions of pupils who now receive instruction in them" Middle vernacular schools in 1907 numbered 2,039 with 184,132 pupils

Primary to Anglo-Vernacular.

The transition from Primary to Anglo-Vernacular schools, that is, from primary to secondary education, is comparable to the transition from a Board school in England to a secondary school under the authority of a Municipality or County Council But there is a difficulty owing to the different systems prevailing in different Presidencies Nevertheless in all provinces a boy may begin in a vernacular primary school and pass from it to a secondary school According to the Quinquennial Review, "in Bombay all children

Statement of Educational Progress in the UNITED PROVINCES

——	1907–08	1908–09	1909–10	1910–11	1911–12.	1912–13
Area in square miles	No change	No change	No change	107,164	107,267	No change.
Population . Male				24,628,344	24,641,831	
Population . Female				22 565 048	22,540,213	
Total Population				47 193,392	47,182 044	
Public Institutions for Males						
Number of arts colleges	23	24	31	31	32	32
Number of high schools	104	108	112	113	115	117
Number of primary schools	9 717	9,598	9 267	9,067	9,258	10,158
Male Scholars in Public Institutions						
In arts colleges	3 424	3,519	4,150	4 180	4,602	4,869
In high schools	26 470	28,647	32 065	33 192	34,257	35,804
In primary schools	447,726	450 309	436 675	432,497	470,953	537,551
Percentage of male scholars in public institutions to male population of school-going age	14 6	14 6	14 6	14 4	15 5	17 4
Public Institutions for Females						
Number of arts colleges	4	4	4	4	5	5
Number of high schools	22	22	23	20	20	21
Number of primary schools	850	938	936	941	957	1,008
Female Scholars in Public Institutions						
In arts colleges	42	38	45	51	54	55
In high schools	1 838	1 827	1 960	1 824	1,804	1,984
In primary schools	38,968	39 316	36,017	37,365	41,340	42,943
Percentage of female scholars in public institutions to female population of school-going age	1 2	1 3	1 2	1 3	1 4	1 5
TOTAL SCHOLARS in public institutions Male	537 633	539 414	533,175	530 341	573,194	643,900
TOTAL SCHOLARS in public institutions Female	43 166	44,319	41 529	43,066	48,394	50,269
Total	580 799	583 733	574,704	573 407	621,588	694,169
TOTAL SCHOLARS (both male and female) in all institutions.	654,527	658,348	647,581	645,787	712,000	788,298
Expenditure (in thousands of rupees)						
From provincial revenues	18,44	21 76	29 45	31 33	37,50	48,04
From local funds	26 81	30,25	27 69	24,74	26,54	26,57
From municipal funds	2,36	2 81	3 01	3,17	3,54	3,72
Total Expenditure from public funds	47,61	54,82	60 15	59,24	67,58	78,33
From fees	14 04	15,03	17,32	18 59	20,50	23,32
From other sources	12 11	14,67	15,76	15 56	19,85	19,55
GRAND TOTAL OF EXPENDITURE	73,76	84,52	93,23	93,39	107,93	1,21,20

must begin in the vernacular schools before proceeding to the secondary schools, in other provinces children *may* do so" (The Italics are ours) "The point at which the teaching of English is begun in the secondary schools is usually the highest point in the secondary school to which children from vernacular schools can be drafted; but in the United Provinces and the Punjab there are special arrangements made to facilitate the transition from the vernacular school system to the secondary school system of children who have pursued the vernacular school course to a higher point than this" (p 97) It may be useful to describe the actual procedure in one Presidency In Bombay, before proceeding to an Anglo-vernacular school a boy must have passed standard IV of a primary school and a girl standard III The curriculum of the first three standards of an Anglo-vernacular school is very similar to that of the last three standards of a vernacular school (Standards V, VI and VII)—except that in the Anglo-Vernacular school English is added as a subject, though not used in those standards as the medium of instruction

Rural Schools.

In the provinces of Bombay, Bengal, the Punjab and the Central Provinces a distinction is drawn between *rural* and *urban* primary schools. The curriculum differs according to this distinction In the Central Provinces the distinction was, up to the time of the publication of the last Review, one of time mainly, to allow the boys to spend half their time in agricultural work The object of rural schools is not so much to teach agriculture as to train the minds of prospective agriculturists in an elementary way. In 1905 an attempt was made in Bombay to introduce agricultural text-books, the effect of which may only have been to destroy the faith of the boys in their father's primitive methods without having any appreciable influence on the improvement of agricultural practices About a year ago a meeting of educational Inspectors decided against this experiment The whole question of remodelling the rural school course has been reconsidered, and in Bombay at least that and the ordinary primary course have been brought closer together. A boy who starts in a rural school can now complete the whole primary course in the same time as a boy who starts in an urban school. The idea is that boys educated in rural schools should not be put at a disadvantage. At the same time—and this is important—an attempt has been made to make rural education, however elementary, form a system of elementary education which should be complete in itself Hence the differences between rural education and ordinary primary education are unimportant and indefinite, in Bombay at least The last Government Resolution declares it to be "not practicable at present in most parts of India to draw any great distinction between the curricula of rural and of urban primary schools," but in the latter class of schools there is special scope for practical teaching of geography, school excursions, etc, and the nature study should vary with the environment and some other form of simple knowledge of the locality might advantageously be substituted for the study of the village map As competent teachers become available a greater differentiation in the courses will be possible." Such differentiation has long been found a perplexing problem, and it may be doubted whether with wisdom any but indefinite differences can be introduced.

Professional and Technical Education.

Industrial schools are to be found dotted about India, some maintained by Government, others by municipalities or local boards and others by private bodies One of the most important institutions of this type is the Victoria Jubilee Technical Institute in Bombay. There is also the well-known Thomason College of Engineering at Roorkee, the College of Science at Poona, and the Sibpur College in Bengal There are Schools of Art in the larger towns of India, where not only architecture and the fine arts are studied but also practical crafts like pottery and iron-work There is also a school of Forestry at Dehra Dun in the north of India Besides these there are many medical schools and colleges which prepare students for the medical degrees of the various Universities and of which the Grant Medical College in Bombay may be taken as a good example There are agricultural colleges, the most important of which is the Pusa Agricultural College and Research Institute, which trains experts in specialised branches of agricultural science, such as agricultural chemistry, economic botany, mycology and entomology We may also mention the Indian Institute of Science at Bangalore, the product of generous donations by the Tata family Two institutions mark the progress of educational interest in the Bombay Presidency, the Government Institute of Science—for whose capacious building (not yet completed) the Government is indebted to the generosity of Sir Cowasji Jehangir, Sir Jacob Sassoon, and Sir Currimbhoy Ebrahim—and the College of Commerce, instituted to supply teaching in connection with the establishment of a Faculty of Commerce in the University

Colleges for Teachers.

There are training colleges for secondary teachers in various parts of India, and what are called in some cases Training Colleges, in others normal schools, for the training of vernacular teachers As there has been considerable dissatisfaction on account of the defective qualities and pay of teachers in schools, Government are now wakening to the importance of paying more careful attention to these institutions and the last Resolution provides for a better scheme of pay for teachers.

Education of Girls.

Hitherto little attention has been paid to this important branch of education Even in the latest Resolution nothing is definitely proposed though certain lines are laid down for guidance of enterprise in this direction However there do exist schools and colleges for girls, while a number of the female sex are educated at institutions common to both sexes. Arts Colleges, Medical Colleges and the like admit both male and female students, and a small percentage of women attend them. In those Presidency Towns, however, where there are no colleges

Statement of Educational Progress in the PUNJAB

	1907–08	1908–09	1909–10	1910–11	1911–12	1912–13
Area in square miles	No change	97,272 No change	No change	97,213	No change	No change.
Population .. Male				10,992,067		
Female				8,982,889		
Total Population				19,974,956		
Public Institutions for males						
Number of arts colleges	10	10	10	11	11	9
Number of high schools*	93	94	98	98	101	102
Number of primary schools	3,343	3,408	3,345	3,321	3,417	3,689
Male Scholars in Public Institutions						
In arts colleges	1,725	1,860	2,022	2,270	2,659	2,770
In high schools*	32,043	34,971	40,895	44,893	47,740	46,999
In primary schools	146,290	149 542	157,946	164,081	179,410	197,230
Percentage of male scholars in public institutions to male population of school-going age	13 3	13 8	14–9	15 6	16 9	18·1
Public Institutions for Females						
Number of arts colleges						
Number of high schools	11	12	12	15	16	.15
Number of primary schools	586	600	602	599	637	709
Female Scholars in Public Institutions						
In arts colleges						3
In high schools	929	944	1,007	1,244	1,605	1,526
In primary schools	21,615	22,672	26,309	26,174	29,269	32,118
Percentage of female scholars in public institutions to female population of school-going age.	1 8	1 9	2 2	2 4	2·7	2 9
TOTAL SCHOLARS in public institutions Male	218,592	226 502	245,722	257,432	279,492	298,014
Female	25,679	27,282	30,995	32,186	36 675	39,838
Total	244,271	253 784	276,717	289 618	316,167	337,852
TOTAL SCHOLARS (both male and female) in all institutions.	302,863	302,576	329,466	346,940	381,113	410,491
Expenditure (in thousands of rupees)						
From provincial revenues	20,78	17,66	18,61	18 63	22,79	29,79
From local funds	11,48	12,43	12,39	12,31	12.44	16,17
From municipal Funds	2,76	3 06	3 43	4,05	3,53	3,96
Total Expenditure from public funds	35,02	33,15	34,43	34,99	38,76	49,92
From fees	11,23	11,98	13,34	15,20	17,75	20,67
From other sources	10,11	10,46	10,66	10 38	12,14	13,61
GRAND TOTAL OF EXPENDITURE	56,36	55,59	58,43	60,57	68,65	84,20

* Include also vernacular high schools

specially for women, it seems to be generally recognised that there ought to be, particularly when one remembers how important it is to bring the influential class of women and mothers round to some sympathy with modern thought and ideals It may be presumed that Government will pay very limited attention to this side of education until Indians themselves demand such a move Most Indians object to invasions on their family life and take a different attitude to women from that of Western races Still there are schools for girls and female inspectresses employed by Government

European Schools

There are schools for Europeans and Eurasians in India and they are inspected by Government inspectors specially appointed for the control of European schools and for the allocation of grants to schools under their sphere of influence The education of the domiciled communities has been found a singularly perplexing problem, and in 1912 a special conference was summoned to consider the matter The difficulty is that they are a thing apart from the general system of education devoted to Indians proper

Educational Services

These are divided into (*a*) the Indian Educational Service, (*b*) the Provincial Educational Service, (*c*) the Subordinate Educational Service

(*a*) Indian Educational Service The Indian Educational Service is comprised of distinguished graduates of Universities of the United Kingdom, chiefly from Oxford and Cambridge At the head of the Educational Department in each Presidency is the Director of Public Instruction, who is a member of the Service drawn from one of its branches and *ex officio* a member of the Legislative Council of his Presidency Under him are Educational Officers in three branches, (*a*) Inspectors, (*b*) Principals and Professors of colleges, (*c*) Headmasters of High Schools Under the present system it is still possible for an English graduate sent out from home to start in one branch of the service and pass from one to another at the will of Government At present also a Headmaster of a High School is brought out under less satisfactory conditions than Inspectors and professors All start at the pay of Rs 500 per mensem with an annual increment of Rs 50 per mensem But Head-masters stop at the pay of Rs 750 per mensem, while other members of the service go up to Rs 1,000 per mensem, the Director of Public Instruction being put on to the salary of Rs 2,500 per mensem On the other hand, headmasters as a rule are transferred to the Inspectorate before they reach the maximum of Rs 750, and are then put under the same conditions as the rest of the service A small number of personal allowances was arranged in 1896, when the service was re organised and received its title There are lower allowances of Rs 200 to Rs 250, higher allowances of Rs 250 to Rs 500, and an allowance of Rs 100 after fifteen years of approved service to those who do not get any of the other allowances Except for the Director of Public Instruction, the limit of the prospect of a member of the Indian Educational Service is Rs 1,500 a month, the average prospects being considerably less There is no short service pension Schemes are on foot to improve the prospects of the service Hitherto this service which is in reality one of the most important in the country has not been rightly estimated, though its members are as a rule men of more real culture than members of the Indian Civil Hence the great difficulty of recruitment The number of posts in this service in 1907 throughout India was 157 Additions have been made since then, but it is clear that the Service is understaffed, if one considers the range and importance of its work Hitherto higher educational work has been little appreciated in India, particularly by Englishmen Now-a-days much is said of its importance, but little done for those who carry it out

At the head of all Educational departments in India, at the seat of Government, is the Member for Education who sits in the Viceroy's Executive Council

(*b*) Provincial Educational Service —In this service also are found principals and professors of colleges, headmasters and inspectors of schools, and, in addition, translators to Government and members engaged in other exceptional posts This service is composed of Indians and recruited in India, the pay scheme being arranged on a much lower scale than that of the Indian Service in accordance with the qualifications and the cheaper rates of living of natives of India The maximum pay is Rs 700, the minimum pay Rs 200 There is a general division between two branches, collegiate and general The number of posts in 1907 was 265

(*c*) Subordinate Educational Service —The majority of this service are headmasters (a few), assistant deputy inspectors and all the assistant masters in Government high and middle schools In Bengal a number of poorly paid teachers have been converted into a "lower subordinate service" The pay and prospects of this service are not good, and much complaint is made of the inferior nature of the teaching in schools run by its members In 1907 the figures for this service stood at 6025 The maximum pay of this service is somewhere about Rs 400 The minimum pay used to be Rs 30, but is now Rs 46 per mensem.

STATISTICAL RESULTS.

The statistical table of educational progress in British India published in March 1914 gives the following results —

The grand total of pupils in all institutions (including private institutions) has risen by 368,948 to 7,149,669 The largest increases occurred in Bengal (109,000), Madras (82,000), the United Provinces (76,000), Bombay (65,000), and Bihar and Orissa (43,000)

The Percentage of pupils in public institutions to children of school-going age (reckoned at 15 per cent of the population) has risen, in the case of boys from 26 8 to 28 4, in that of girls from 4 7 to 5 0 in that of both from 16 0 to 17 0 The percentage of both boys and girls in public and private institutions together has

Statement of Educational Progress in BURMA.

	1907–08	1908–09	1909–10	1910–11	1911–12	1912–13.
Area in square miles	No change	236,738	No change	236,738	230,839	No change
Population { Male	5,342,033	No change		6,144 301	6,183 494	
Population { Female	5,148,591			5,913,604	5,931,723	
Total Population	10,490,624			12,057,905	12,115,217	
Public Institutions for Males						
Number of arts colleges	2	2	2	2	2	2
Number of high schools*	29	31	35	39	36	39
Number of primary schools	5,113	5 261	5,163	4,895	4,764	4,733
Male Scholars in Public Institutions						
In arts colleges	133	148	232	261	302	336
In high schools*	9 366	8,893	9,599	10 368	10,034	10 888
In primary schools	130,677	136,687	131,386	124,377	125,552	126 877
Percentage of male scholars in public institutions to male population of school-going age	22 9	24 1	24 1	20 4	20 9	21 8
Public Institutions for Females						
Number of arts colleges						
Number of high schools	8	9	9	11	11	13
Number of primary schools	532	616	619	553	552	588
Female Scholars in Public Institutions						
In arts colleges	5	7	12	17	22	8
In high schools	1 862	1,683	1,694	1 974	2,135	2,440
In primary schools	52 613	55 606	53 779	53,291	55,854	57 479
Percentage of female scholars in public institutions to female population of school-going age	8 6	9–1	9 1	8 1	8 5	9 0
TOTAL SCHOLARS in public institutions { Male	183,180	192,628	192,862	188,129	194,401	202,108
TOTAL SCHOLARS in public institutions { Female	66,220	70 358	70,106	71,032	75,909	80,325
Total	249 400	262.986	262.968	259,161	270 310	282,433
TOTAL SCHOLARS (both male and female) in all institutions	423,819	433 211	433,973	429,992	445,255	459,593
From provincial revenues	18 79	17 45	17,03	16,71	18,98	22,31
From local funds	3,14	3 71	4,07	4,08	4,22	4,44
From municipal funds	3,31	3 35	3 40	3,48	3 68	3,88
Total Expenditure from public funds	25,24	24 51	24 50	24 27	26 88	30,63
From fees	9,71	10 32	13,77	14,53	15,09	16,53
From other sources	4,37	4,48	4,44	4 83	5 40	6,20
GRAND TOTAL OF EXPENDITURE	39,32	39 31	42,71	43 63	47,37	53,36

* Include also vernacular high schools

risen from 17 7 to 18 7, and the percentage to the whole population from 2 6 to 2 8 Madras, Bombay and Bengal show from 33 to 40 per cent of boys of school-going age at school in public institutions, Assam over 30 per cent Burma, Bihar and Orissa, and the Central Provinces from 21 to 26 per cent, in the United Provinces, the Punjab, and the North-West Frontier Province, the percentages range from 15 to 18 The highest figures for girls are 17 4 per cent in Coorg and 9 0 per cent in Burma

The increase in collegiate and higher institutions has been 69,164 against 28,687 last year The figures for higher institutions are as follows —

	Male	Female	Total
In colleges	40,370	414	40,784
In high schools	428,182	18,515	446,697
In middle schools	494,085	48,252	542,337

In primary schools the figure has risen by 273,351 and now stands —

Male	4,428,531
Female	832,962

The total of those under primary instruction in public and private schools (including primary departments of secondary schools, other schools and private institutions where a vernacular is taught (was 6,007,196 at the end of 1911-12, and is now 6,331,355

The number of those under training for the profession of teaching has risen from 13,354 to 15,531, and 6,027 passed the prescribed tests during the year

The number of pupils in technical schools has decreased from 12,064 to 11,465

The number in schools for Europeans and the domiciled community now stands at 33,900 an increase of 180

The increase in Muhammadan pupils amounts to 64,308 Secondary schools and colleges show an increase of 16,607 and elementary schools of 36,680 The total in institutions of the former kind stands at 191,008, in those of the latter 1,059,448 Other public institutions account for the remainder of the increase The complete total in public institutions is 1,381,306 Nearly half of this number is contributed by Bengal

Expenditure.

The total expenditure was Rs 9,02,09,000, an increase of Rs 1,16,16,000 over that of the preceding year To this increase public funds have contributed Rs 90,38,000 against an increase under this head of Rs 34,83,000 in the year before Of the total, roughly 495 lakhs are now met from public funds (against 405 lakhs in the preceding year), *viz*, 339 lakhs (against 270 lakhs) from provincial, 123 from district and 33 from municipal funds Of the 406 lakhs from private sources, fees contributed 240 lakhs

Among the larger provinces, the highest expenditure is in Bengal, 202¾ lakhs, the lowest in Assam, 19 lakhs. Save in Bengal, public funds contributed more than private

The average annual cost of educating a pupil has risen to Rs 13 9 This calculation includes indirect expenditure

Principal developments —In the year 1912-13, the following additional allotments from Imperial funds were announced for education in provinces and politically administered areas— 319 lakhs non-recurring from the surplus revenue of that year, and 55 lakhs recurring from the revenue of the year 1913-14 The developments of the five preceding years have been described in the quinquennial review Compared with the figures for 1910-11, the increase during the past two years in pupils of public institutions has amounted to 13 4 per cent and that in expenditure to 25 5 per cent

Among special features of the period are the establishment of a Faculty and the scheme for a college of Commerce in the Bombay University A generous gift of 10 lakhs to the University of Calcutta was made by Dr. Rash Bihari Ghose A committee worked out a scheme for the Dacca University, a project which has subsequently received the general approval of the Secretary of State The reports on education in the various provinces show that in Madras the rules for grant-in-aid have been made more elastic and the amount given as grant-in-aid has increased by nearly 5 lakhs In other provinces improvements have been made in secondary education, and in the Bombay Presidency the pay of assistant teachers in Government secondary schools has been increased The pay of primary school teachers has likewise been improved, in the Punjab, graded scales of salaries from Rs 12 to Rs 30 a month are being generally introduced, in Bihar and Orissa the stipends paid to aided school teachers have been regulated, in the Central Provinces a sum has been earmarked for rendering pensionable the pay of all masters drawing Rs 11 and over Among developments in Muhammadan education the foundation of an Islamia College at Peshawar has been conspicuous A committee considered the foundation of a Technological Institute in Calcutta Other important committees deliberated during the period on primary education, the education of Muhammadans and other important subjects.

It should be observed that the Statistical tables differ from those given last year in the new arrangement necessitated by the rearrangement of the provinces of Bengal and Bihar and Orissa

Recent Developments.

The main developments of the last and of immediately preceding years have been described in the resolution which appeared in the *Gazette of India* published on the 22nd February 1913, which also laid down the policy of the Government of India The year witnessed the assertion at the Imperial Durbar by command of His Most Gracious Majesty the King-Emperor of the predominant claims of educational advancement, the announcement of a recurring Imperial grant of 50 lakhs for the promotion of truly popular education, and the high expression of his hopes and wishes for the expansion and improvement of education delivered by His Majesty the King-Emperor in graciously receiving an address presented by the Calcutta University In addition to the recurring grant of 50 lakhs a recurring grant of 10 lakhs was sanctioned for university and higher education, and a non-recurring grant of 65 lakhs was also made There has been expansion in expenditure accompanied by an increase of those under instruction.

Other features of the year have been the collection of materials for the preparation of

Statement of Educational Progress in CENTRAL PROVINCES and BERAR

	1907–08	1908–09	1909–10	1910–11	1911–12.	1912–13
Area in square miles	130,174	No change.	No change	130,174	117,935	No change
Population . Male	6,793,832			7,764,777	7,766,007	
Female	6,965,191			7,832,712	7,833,993	
Total Population	13,759,023			15 597,489	15,600,000	
Public Institutions for Males						
Number of arts colleges	3	3	3	3	4	4
Number of high schools *	31	34	35	35	35	39
Number of primary schools	2,777	2,892	3,019	3,094	3,195	3,471
Male Scholars in Public Institutions						
In arts colleges	381	457	479	514	608	705
In high schools *	2,305	2,657	3,059	3,236	3,102	3,547
In primary schools	187,387	199,526	212,857	216,750	228,255	248,439
Percentage of male scholars in public institutions to male population of school-going age	23 2	25 4	26 2	23 1	24 2	25 9
Public Institutions for Females						
Number of arts colleges			..	..		
Number of high schools	4	4	4	4	5	7
Number of primary schools	261	287	301	301	309	322
Female Scholars in Public Institutions						
In arts colleges				..		
In high schools	26	20	24	23	28	51
In primary schools	20 801	23 230	26,669	26,033	27,948	30,339
Percentage of female scholars in public institutions to female population of school-going age	2 2	2 5	2 8	2 4	2 6	2·8
TOTAL SCHOLARS in public institutions Male	234,859	250 602	266,850	269 062	282,257	302,077
Female	23,156	25,831	29,373	28,452	30,729	32,854
Total	258,015	276 433	296,223	297,514	312,986	334,931
TOTAL SCHOLARS (both male and female) in all institutions	258 308	276,700	296,305	297,620	313,205	335,248
Expenditure (in thousands of rupees)						
From provincial revenues	8,89	9,98	10,92	11,48	10,64	11,87
From local funds	9,19	11,74	10,65	11,05	12,08	13,88
From municipal funds	1,65	1,58	1,59	1,88	2,93	3,70
Total Expenditure from public funds	19,73	23,30	23,16	24,41	25,61	29,45
From fees	1,65	1,79	1,95	2,29	2,84	3,67
From other sources	3,38	3,87	3,81	4,15	4,16	4,76
GRAND TOTAL OF EXPENDITURE	24,76	28,96	28,92	30,85	32,65	37,88

extensive schemes for the spread of elementary education, and, in certain provinces, for the improvement of secondary education, the growth of new ideas regarding university teaching, which has resulted in the proposal for at teaching and residential university at Dacca, and the establishment of Professorships, Readerships, and Lectureships in Universities like those of Calcutta and Bombay, the generous gifts of Sir T N Palit and Dr Rash Behari Ghose to the University of Calcutta, the creation of a department of industries at Madras as a portion of the scheme of industrial training and development, the sanctioning of an industrial scheme for the Central Provinces, the institution of a College of commerce in Bombay, an inquiry carried out by Colonel Atkinson and Mr Dawson into the question of bringing technical institutions into closer touch with the employers of labour the institution of proposals for an Oriental Research Institute, and the conference held in July 1912 on the education of the domiciled community

Statement of Educational Progress in ASSAM.

	1911-12	1912-13
Area in square miles	61,471	No change
Population — Male	3,638,287	
Population — Female	3,421,570	
TOTAL POPULATION	7,059,857	
Public Institutions for Males		
Number of arts colleges	2	2
Number of high schools	27	27
Number of primary schools	3,469	3,534
Male Scholars in Public Institutions		
In arts colleges	295	360
In high schools	8,723	9,985
In primary schools	132,151	138,236
Percentage of male Scholars in public institutions to male population of school-going age	29 1	30 8
Public Institutions for Females		
Number of arts colleges		
Number of high schools	1	2
Number of primary schools	242	256
Female Scholars in Public Institutions		
In arts colleges		
In high schools	201	352
In primary schools	16,836	17,845
Percentage of female scholars inpublic institutions to female population of school-going age	3 5	3 7
TOTAL SCHOLARS in public institutions — Male	159,101	168,364
TOTAL SCHOLARS in public institutions — Female	17,931	19,085
TOTAL	177,032	187,449
TOTAL SCHOLARS (both male and female) in all institutions	182,112	194,288
Expenditure (in thousands of rupees)		
From provincial revenues	5,87	7,71
From local funds	5,03	5,82
From municipal funds	14	16
Total Expenditure from public funds	11,04	13,69
From fees	2,79	3,02
From other sources	2,26	2,33
GRAND TOTAL OF EXPENDITURE	16,09	19,04

Statement of Educational Progress in the NORTH-WEST FRONTIER PROVINCE

	1907–08	1908–09	1909–10	1910–11	1911–12	1912–13
Area in square miles	16,466	No change	No change	13,193	No change	No change.
Population . { Male	1,159 306			1,182,102		
{ Female	966 174.			1.014 831		
Total Population	2 125,480			2 196 933		
Public Institutions for Males						
Number of arts colleges	1	1	1	1	1	1
Number of high schools	12	12	12	12	12	12
Number of primary schools	256	254	267	264	260	335
Male Scholars in Public Institutions						
In arts colleges	22	22	19	22	38	37
In high schools	3 562	3 617	4,255	4 486	5,146	5,438
In primary schools	11 271	11 415	12 069	13,034	14,129	16,899
Percentage of male scholars in public institutions to male population of school-going age	10 0	10 1	11 2	11 8	13 1	15 4
Public Institutions for Females						
Number of arts colleges						
Number of high schools						
Number of primary schools	24	23	25	27	28	29
Female Scholars in Public Institutions						
In arts colleges						
In high schools						
In primary schools	1,337	1 301	1 576	1 775	1 925	2,044
Percentage of female scholars in public institutions to female population of school-going age	1 1	1 1	1 3	1 4	1 5	1 6
TOTAL SCHOLARS in public institutions { Male	17,323	17 630	19 589	20 919	23,236	27,344
{ Female	1 548	1 605	1 873	2 093	2,247	2 396
Total	18 871	19,235	21 462	23 012	25 483	29,740
TOTAL SCHOLARS (both male and female) in all institutions	29 243	28 891	30 045	31,891	34 911	38 472
Expenditure (in thousands of rupees)						
From provincial revenues	*58	*80	*58	†1 35	99	‡ 3,68
From local funds	95	83	91	92	1 42	‡ 3,06
From municipal funds	45	55	53	61	68	‡ 1,76
Total Expenditure from public funds	1,98	2 18	2 02	2 88	3,09	8,50
From fees	40	40	45	47	56	65
From other sources	32	61	65	53	63	47
GRAND TOTAL OF EXPENDITURE	2,70	3 19	3 12	3 88	4 28	9,62

* Imperial Revenues † Including Rs 58,215 from Imperial Revenues

‡ Including Rs 2,60 1,60 and 1,04 in thousands respectively from Imperial grants

Statement of Educational Progress in COORG.

	1907–08	1908–09	1909–10	1910–11	1911–12	1912–13
Area in square miles	1,582	No change	No change	No change	1,582	No change
Population . Male	100,258				97,279	
Female	80,349				77 697	
TOTAL POPULATION .	180,607				174 976	
Public Institutions for Males						
Number of arts colleges						
Numbr of high schools ..	1	1	1	1	1	1
Number of primary schools	81	82	82	81	80	84
Male Scholars in Public Institutions						
In arts colleges						
In high schools	298	288	240	226	206	201
In primary schools	2,929	3,427	3,688	3,721	3 970	4,523
Percentage of male scholars in public institutions to male population of school-going age	22 5	25 7	27 2	27 2	29 7	33 6
Public Institutions for Females						
Number of arts colleges						
Number of high schools ..						
Number of primary schools	5	5	5	6	6	6
Female Scholars in Public Institutions						
In arts colleges						
In high schools	8	8	2	2	1	1
In primary schools .	1,143	1,421	1,588	1 721	1,773	1,943
Percentage of female scholars in public institutions to female population of school-going age	9 6	12 0	13 6	15 0	16 0	17 4
TOTAL SCHOLARS in public institutions Male	3,380	3,869	4,087	4,099	4,342	4,909
Female	1,163	1,447	1,644	1,811	1,681	2,033
Total	4,543	5,316	5,731	5 910	6,203	6,942
TOTAL SCHOLARS (both male and female) in all institutions	5,004	5,792	6,335	6,640	6 811	7,545
Expenditure (in housands of rupees)						
From provincial revenues	24	26	30	61	39	75
From local funds .	11	11	12	12	13	13
From municipal funds .	1	1	1	1	2	2
Total Expenditure from public funds	36	38	43	74	54	90
From fees	12	12	12	12	13	13
From other sources	3	3	5	6	6	7
GRAND TOTAL OF EXPENDITURE	51	53	60	92	73	110

The Hindu University Movement.

There were originally three distinct movements in favour of founding a Central Hindu University In the first place, in 1904, the Hon Pandit Madan Mohan Malaviya made proposals which were confirmed and approved by the Sanatan Dharma Mahasabha or Congress of Hindu Religion which met at Allahabad in January 1906 About that time, Mrs Annie Besant also put forward the idea of establishing a University at Benares and applied to the Government for a charter In the third place, a number of Hindu gentlemen under the guidance of the Hon Maharaja Sir Rameshwar Singh Bahadur, KCIE, of Darbhanga were considering the possibilities of starting an educational institution at Benares The leaders of these movements soon recognised that a union of forces was essential, and in April 1911 Mrs Besant and the Hon Pandit Madan Mohan Malaviya met at Allahabad to consider possible lines of agreement This meeting was followed shortly afterwards by another, when it was agreed that the first governing body should consist of representatives of the Hindu community, Mrs Besant and representative trustees of the Central Hindu College and also that the Theological faculty should be entirely in the hands of Hindus At the same time Mrs Besant agreed to withdraw her petition for a charter which was then before the Secretary of State At subsequent meetings presided over by the Maharaja Bahadur of Darbhanga a draft constitution was arranged and it was decided to wait upon the Hon Member for Education and lay before him the provisional scheme In the meantime, deputations for the collection of funds were instituted and these visited the leading centres in India The result was most satisfactory Amounts, big and small, were promised not only from India, but from Indians so far afield as Borneo, Mauritius and South Africa, and besides Hindus of all denominations and stations in life, some Mahomedans, and a few Europeans, official as well as unofficial, have promised to contribute The total receipts on October 20, 1913, amounted to Rs 28,24,069-11-5 to which may be added the capitalised value of the annual gifts in perpetuity of the Jodhpur, Kashmir and Bikanir Durbars And a year later the grand total of receipts was approximately 42 lakhs It is, therefore, confidently believed that there will be no difficulty in collecting the balance of the minimum of Rs 50,00,000 required by Government

Government Approval. —In October 1911, Sir Harcourt Butler wrote a very sympathetic letter signifying the approval of Government to the scheme and indicating the conditions laid down by the Government of India —

1. The Hindus should approach Government in a body, like the Mahomedans
2. A strong, efficient and financially sound college with an adequate European staff should be the basis of the scheme
3. The University should differ from existing Indian Universities by being a teaching and residential institution and by offering religious instruction
4. The movement should be entirely educational
5. There should be the same measure of Government supervision as in the case of the proposed University at Aligarh.

It was subsequently added that a sum of Rs 50,00,000 must be collected, but the capitalised value of the properties transferred in trust and the perpetual grants made by the Maharajas of Jodhpur, Kashmir and Bikanir may be included

Objects of the University. —These may be said to be as follows —

1. To promote the study of the Hindu Shastras and of Sanskrit literature generally, as a means of preserving and popularising the best thoughts and culture of the Hindus and all that was good and great in the ancient civilisation of India
2. To promote learning and research generally in arts and science in all branches
3. To advance and diffuse such scientific technical and professional knowledge, combined with the necessary practical training, as is best calculated to promote indigenous industries and develop the material resources of the country.
4. To promote the building up of character in youth by making religion and ethics an integral part of education

Proposed Faculties.—In a letter to Sir Harcourt Butler the Maharaja Bahadur of Darbhanga has given an outline of the proposed faculties, which will be those of Oriental studies Theology, Arts, Science (Pure and Applied) and Law The main objects of the first named will be to foster the study of Sanskrit and its literature It is proposed to place in charge of the work a European Sanskrit scholar who will be assisted by Indian professors and pandits of the old class The faculties of Arts and Science will work for the present on the lines laid down by the existing universities The study of some special branch of technical education will be best inaugurated under the heading Applied Science which will be expanded into a Faculty of Technology in due course The Faculty of Law will specialise in the Hindu Law and its study from original sources. It is hoped also that in course of time there will be Faculties or Colleges of Agriculture, Commerce, Medicine, Surgery and other branches of knowledge such as Music and the Fine Arts

Although denominational in character, the proposed University will be open to all castes and creeds. Provision for instruction and examination in Theology and Religion will be made for Hindus only and such instruction will, in their case, be compulsory. Subject to the general control of the Senate, the instruction of youths of Jain, Sikh and other faiths will be in the hands of sub-committees consisting of representatives of their respective religions The University will be open for women, subject to such conditions as the regulations may prescribe The constitution of the University will be modelled on those of Sheffield, Manchester and Birmingham and in this respect will differ from those of the existing universities in India

Proposed constitution —In July, 1914, Sir Harcourt Butler addressed a letter to the Maharajah of Darbhanga in which he stated that the Government of India and the Secretary of State had come to the conclusion that the best form of constitution would be to constitute the Lieutenant-Governor of the United Provinces ex officio Chancellor of the University with certain opportunities for giving advice and certain powers of intervention and control "The Hindu University, he wrote," though not empowered to affiliate colleges from outside will be Imperial in the sense that subject to regulations, it will admit students from all parts of India, on the other hand it will be localised in or by Benares There will be obvious advantages in having as Chancellor of the University the Lieutenant-Governor of the province who is also Chancellor of the Allahabad University and who will be able to help to correlate the work between the two, to secure them corresponding advantages and to foster a spirit of healthy co-operation Moreover, such a constitution is in accord with the general policy of decentralization which is now pursued by the Government of India"

The powers which, in the opinion of Government, it is necessary to reserve to the Chancellor were enumerated Some of these had been suggested by the University Committee, others were emergency powers which might never be exercised The principle underlying them all is that, in the interest of the rising generation and the parents, the Government must be in co-operation with University and in a position to help it effectively and secure sound finance The interest of the Government and the students and their parents in this matter are necessarily identical

In concluding the letter referred to above, Sir Harcourt Butler said,—"In order to meet the sentiment of the subscribers it has been conceded that the University shall be called the **Benares Hindu University,** it will have no religious test and will be open to students of all denominations as well as Hindus Hindu theolgical teaching and observances will not be compulsory for any but Hindus It will also be a teaching and residential university The terms mentioned above represent the conditions, the acceptance of which is a necessary precedent to the elaboration of any detailed scheme The Secretary of State reserve his final decision on the details of the constitution of the university until they are before him in the form of a draft bill and regulation In conclusion, I have to state that when a satisfactory scheme has been evolved the Government of India will be glad to show their interest in the new university by making a liberal financial grant in aid"

A conference was to have been held, during the latter part of 1914, to discuss the above terms, but it has been postponed The terms were, however, immediately refused by Mrs Besant who, in a letter to the Press, said —"The Hindu University will run in double harness with the Government university and the *raison d'etre* of its existence will disappear Moreover if we accept these terms we do not know what further disabilities will be imposed in drafting the constitution

The office of the Organisation Committee is in Allahabad, and the Secretary is the Hon Pandit Sundarlal, C I E

The Mahomedan University.

The movement in favour of transforming the Mahomedan Anglo-Oriental College at Aligarh into a teaching and residential University was started as early as the end of last century It was hoped that the foundation of such an institution would awaken among Mahomedans the memory of their old seats of learning and prove an incentive to them in the future to regain the intellectual eminence from which they seem to have fallen of late years Some time ago it was observed in a government report that the backwardness in education on the part of Mahomedans was due partly to poverty, partly to indifference and partly to their educational wants not being the same as those of the remainder of the population amongst whom they live In this year's report, however, it is stated that a remarkable awakening on the part of Mahomedans in this direction has been witnessed during the last decade, when the total number of pupils under instruction in all classes of institutions rose by nearly 60 per cent On the other hand in the matter of higher education their numbers remain well below that proportion notwithstanding the large relative increase It was the aim of Sir Syed Ahmed Khan, K C S I, years ago to place the benefits of a liberal education within the reach of the Mahomedan community and in 1875 a school was opened which three years later was converted into the Aligarh College Under the inspiring influence of Mr Beck and of Mr (now Sir) Theodore Morison great strides have been made The college is now affiliated to the Allahabad University for the First Arts and B A for the B Sc in mathematics, chemistry and physics, for the M Sc in mathematics and chemistry and D Sc in mathematics, and for the M A in English, Arabic, Persian, Sanskrit, History, Philosophy, Political Economy and Mathematics The students of the college are also instructed in the theology and faith of Islam

Attitude of Government —The Aga Khan has for some years been awaiting the time when public opinion in the community would be ripe for taking steps to found a Mahomedan University on the basis of the Aligarh College and his appeal for funds be met with a very satisfactory response In addition, a draft constitution has been drawn up by a consultative committee to which the Hon. Sahibzada Aftab Ahmad Khan has acted as secretary, and this has been submitted to the Secretary of State It is intended that the proposed University will be open to students of every race and creed, but at the same time

it will make arrangements especially for the religious teaching of the Mahomedan undergraduates and graduates In 1912 a reply was received from Sir Harcourt Butler which was on the whole sympathetic towards the movement At the same time the Government of India laid down certain conditions which were similar in the main to those afterwards imposed in the case of the suggested Hindu University One of the conditions was that the new University should not possess the powers of affiliating Moslem institutions situated in other parts of India This restriction of the power of affiliation to local areas only is the result of the adoption by the Government of India of a considered policy of general application The Government intends thereby to encourage the development of teaching and residential universities, instead of providing any further extension of the so-called "federal" or examining universities The decision is probably a wise one, but it is a pity that it has been so long delayed, as considerable disappointment has been caused amongst Mahomedans all over India, and it is stated that it may be the cause of the demand for the return of subscriptions which have already been put forward in the Punjab. It is to be hoped, however, that the leaders of the movement will realise that this condition of the Government of India may be beneficial The difficulties of supervision and inspection already found so great in the case of the larger State universities would be augmented in that of the unofficial communal institutions offering to survey colleges in all parts of India Moreover, the position and prestige of Aligarh might easily be lowered by the fact that inferior institutions were linked with it

The promoters also complain against the decision of the Government that the University shall be designated the University of Aligarh instead of as they wish the Moslem University and also that the powers vested in the Viceroy under the constitution shall be exercised by the Government of India This third decision will certainly place the new University under official control It is unlikely that the Government will give way on these matters as besides the proposed Hindu University at Benares it is anticipated that similar institutions will shortly be founded at Patna, Nagpur and Rangoon

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Local Self-Government.

Throughout the greater part of India the village constitutes the primary territorial unit of Government organisation, and from the villages are built up the larger administrative entities—tahsils, sub-divisions, and districts

"The typical Indian village has its central residential site, with an open space for a pond and a cattle stand Stretching around this nucleus lie the village lands, consisting of a cultivated area and (very often) grounds for grazing and wood-cutting The inhabitants of such a village pass their life in the midst of these simple surroundings, welded together in a little community with its own organisation and government, which differ in character in the various types of villages, its body of detailed customary rules and its little staff of functionaries, artisans and traders It should be noted, however, that in certain portions of India, *e g*, in the greater part of Assam, in Eastern Bengal, and on the west coast of the Madras Presidency, the village as here described does not exist, the people living in small collections of houses or in separate homesteads" —(*Gazetteer of India*)

The villages above described fall under two main classes, *viz*,—

Types of Villages —"(1) The 'severalty' or raiyatwari village, which is the prevalent form outside Northern India Here the revenue is assessed on individual cultivators There is no joint responsibility among the villagers, though some of the non-cultivated lands may be set apart for a common purpose, such as grazing, and waste land may be brought under the plough only with the permission of the Revenue authorities, and on payment of assessment The village government vests in a hereditary headman, known by an old vernacular name, such as *patel* or *reddi*, who is responsible for law and order, and for the collection of the Government revenue He represents the primitive headship of the tribe or clan by which the village was originally settled

"(2) The joint or landlord village, the type prevalent in the United Provinces, the Punjab and the Frontier Province Here the revenue was formerly assessed on the village as a whole, its incidence being distributed by the body of superior proprietors, and a certain amount of collective responsibility still, as a rule, remains The village site is owned by the proprietary body, who allow residences to the tenantry, artisans traders and others The waste land is allotted to the village, and, if wanted for cultivation, is partitioned among the shareholders The village government was originally by the *punchayet* or group of heads of superior families In later times one or more headmen have been added to the organisation to represent the village in its dealings with the local authorities, but the artificial character of this appointment, as compared with that which obtains in a raiyatwari village, is evidenced by the title of its holder, which is generally *lambardar*, a vernacular derivative from the English word 'number' It is this type of village to which the well-known description in Sir H Maine's *Village Communities* is alone applicable, and here the co-proprietors are in general a local oligarchy with the bulk of the village population as tenants or labourers under them."

Village Autonomy—The Indian villages formerly possessed a large degree of local autonomy, since the native dynasties and their local representatives did not, as a rule, concern themselves with the individual cultivators, but regarded the village as a whole, or some large landholder as responsible for the payment of the Government revenues, and the maintenance of local order This autonomy has now disappeared owing to the establishment of local civil and criminal courts, the present revenue and police organisation, the increase of communications, the growth of individualism, and the operation of the individual *ryotwari* system which is extending even in the north of India Nevertheless, the village remains the first unit of administration, the principal village functionaries - the headman, the accountant, and the village watchman—are largely utilised and paid by Government, and there is still a certain amount of common village feeling and interests

Punchayets—For some yearst here was an active propaganda in favour of reviving the village council—tribunal, or *Punchayet* and the Decentralisation Commission of 1908 made the following special recommendations —

"While, therefore, we desire the development of a *punchayet* system, and consider that the objections urged thereto are far from insurmountable, we recognise that such a system can only be gradually and tentatively applied, and that it is impossible to suggest any uniform and definite method of procedure We think that a commencement should be made by giving certain limited powers to *Panchayats* in those villages in which circumstances are most favourable by reason of homogeneity, natural intelligence, and freedom from internal feuds These powers might be increased gradually as results warrant, and with success here, it will become easier to apply the system in other villages Such a policy, which must be the work of many years, will require great care and discretion, much patience, and judicious discrimination between the circumstances of different villages, and there is a considerable consensus of opinion that this new departure should be made under the special guidance of sympathetic officers"

This is, however, still mainly a question of future possibilities, and for present purposes it is unnecessary to refer at greater length to the subject of village self-government. An Act was passed in 1912 to provide for the establishment of *punchayets* in the Punjab, but it was contemplated that the areas for which these bodies would be established would b larger than villages, and their functions are limited to the disposal of petty civil suits In the Punjab, it may be mentioned, village self-government survives to a considerable extent, on a basis of custom, and the desirability of bringing it under statutory regulation has been questioned

Municipalities—The Presidency towns had some form of municipal administration, first under Royal Charters and later under statute, from comparatively early times, but outside of them there was practically no attempt at municipal legislation before 1842 An Act passed in that year for Bengal, which was practically inoperative, was followed in 1850 by an Act applying to the whole of India Under this Act and subsequent Provincial Acts a large number of municipalities was formed in all provinces The Acts provided for the appointment of commissioners to manage municipal affairs, and authorised the levy of various taxes, but in most Provinces the commissioners were all nominated, and from the point of view of self-government, these Acts did not proceed far It was not until after 1870 that much progress was made Lord Mayo's Government, in their Resolution of that year introducing the system of provincial finance, referred to the necessity of taking further steps to bring local interest and supervision to bear on the management of funds devoted to education, sanitation medical charity, and local public works New Municipal Acts were passed for the various Provinces between 1871 and 1874, which, among other things, extended the elective principle, but only in the Central Provinces was popular representation generally and successfully introduced In 1881-2 Lord Ripon's Government issued orders which had the effect of greatly extending the principle of local self-government Acts were passed in 1883-4 that greatly altered the constitution, powers, and functions of municipal bodies, a wide extension being given to the elective system, while independence and responsibility were conferred on the committees of many towns by permitting them to elect a private citizen as chairman Arrangements were made also to increase municipal resources and financial responsibility, some items of provincial revenue suited to and capable of development under local management being transferred, with a proportionate amount of provincial expenditure, for local objects The general principles thus laid down have continued to govern the administration of municipalities down to the present day In several Provinces there are besides municipalities, "notified areas," *i. e.*, small towns which are not fit for full municipal institutions, but to which parts of the Municipal Acts are applied, their affairs being administered by nominated committees These are to be regarded as embryo municipalities.

Local Boards—The establishment of boards for dealing with local affairs in rural areas is a relatively recent development No such boards existed in 1858, though some semi-voluntary funds for local improvements had been raised in Madras and Bombay, while in Bengal and the United Provinces consultative committees assisted the district officers in the management of funds devoted to local schools, roads and dispensaries The system of raising cesses on land for purposes of this description was introduced by legislation in Madras and Bombay between 1865 and 1869, in the case of Bombay, nominated committees were to administer the proceeds of the cess The year 1871 saw a wide development of legislation for local administrative purposes, partly due to growing needs, and partly the result of the financial decentralisation scheme of Lord Mayo's Government, various Acts being passed in different Provinces providing for the levy of rates and the constitution of local bodies in some cases with an elected element, to administer the funds The whole system was re organised in accordance with the policy of Lord Ripon's Government Under the Orders of 1881-2 the existing local committees were to be replaced by a system of boards extending all over the country. The lowest administrative unit was to be small enough to

secure local knowledge and interest on the part of each member of the board, and the various minor boards of the district were to be under the control of a general district board, and to send delegates to a district council for the settlement of measures common to all The non-official element was to preponderate, and the elective principle was to be recognised, as in the case of municipalities, while the resources and financial responsibilities of the boards were to be increased by transferring items of provincial revenue and expenditure It was, however, recognised that conditions were not sufficiently advanced or uniform to permit of one general system being imposed in all provinces, and a large discretion was left to Local Governments The systems introduced in different parts of India by the Acts of 1883-5 (most of which are still in force) consequently varied greatly

Mofussil Municipalities - The total number of municipalities has altered little for many years past New municipalities have been formed from time to time, but there have also been removals from the list There was, indeed, a rather marked decrease according to the last decennial review (1902-12) and the number in 1911-12 was actually less than it was thirty years earlier This result was brought about by the reduction to "notified areas" of a considerable number of the smaller municipalities in the Punjab and United Provinces The figures showing the constitution of the municipalities call for little comment Taking them as a whole, the proportion of elected members was in 1911-12 rather more than a half, whereas in 1901-02 it was slightly less The proportions of non-officials and Indians, already high in 1901, also increased during the decade Elected members are in the majority in the cities of Bombay, Madras and Rangoon and in Bengal (excluding Calcutta), Bihar and Orissa, the United Provinces, and the Central Provinces, in the North-West Frontier Province and Baluchistan, on the other hand, there are no elected members, and in Burma they form a small minority Non-officials outnumber officials everywhere, and Indians outnumber Europeans to an even greater degree, except in Rangoon Taking the municipalities individually, some of the commissioners are elected in the great majority of cases Representation in the larger municipalities is in general by wards or classes of the community, or both Voters must be residents not below a specified age, and property or status qualifications are generally laid down The Chairman or President of the Municipal Corporation is sometimes nominated under the orders of the Local Government, but more often chosen by the commissioners from among themselves. The only provinces in which there has been in the past a large proportion of elected non-official chairmen are Madras, the Central Provinces, and the two Bengals; but Bombay has now to be added to the list, in view of the changes made in that province in the closing years of the decade. Various provisions exist as to the exercise of control by Government, particularly as regards finance and appointments No loans can be raised without Government sanction, and generally speaking municipal budgets, and alterations in taxation, require the sanction of the Local Government, or of a Commissioner Proposals for giving municipal committees a larger degree of independence were put forward by the Decentralisation Commission, and some action on these lines has been taken Government may provide for the performance of any duty which the commissioners neglect, and may suspend them in case of incompetence, default, or abuse of powers

Municipal Revenues—In the provinces in which octroi is levied generally, it is the most important source of income The octroi duties have admitted disadvantages, but they are familiar through long usage to the inhabitants of the North and West of India The possibility of abolishing them was under consideration during the last decade, and it was decided in the United Provinces to take this step in many municipalities, but the alternative of direct taxation is not a popular one Precautions are taken to limit the tax to articles actually consumed in a town, and to prevent it from becoming a transit duty The list of dutiable articles contains in each case only staple articles of local consumption and goods in transit are allowed to pass in bond or receive a refund of the duties on leaving the town Articles of food are the most important class of goods subject to octroi taxation.

Incidence of Taxation—A tax on houses and lands is levied to some extent in all provinces, and is the main source of municipal revenue where there is no octroi Taxes on professions and trades, and on animals and vehicles, are generally levied, as also is a water-rate in the large towns that have been furnished with water works Tolls on roads and ferries and lighting and conservancy rates contribute to the receipts in most provinces The average incidence of municipal taxation per head of municipal population in 1911-12, for British India, as a whole, was Rs 2 95 Leaving out of account the Presidency towns, where the figures are higher, the provincial averages ranged from Rs 3 08 in the North-West Frontier Province and Rs 2 38 in the Punjab, to Rs 1 35 in Madras and Rs 1·02 in Coorg Other sources of revenue are municipal lands and buildings, conservancy receipts (other than the rates), educational and medical fees receipts from markets and slaughter-houses (a very important item in Burma), and interest on investments

Municipal Functions—Municipal functions are classified under the heads of public safety health, convenience and instruction Within these heads the duties are many and varied Expenditure, apart from that on general administration and collection, which amounts to something less than 10 per cent of the total is similarly classified The principal normal functions of municipalities now are the construction, upkeep, and lighting of streets and roads, and the provision and maintenance of public and municipal buildings, the preservation of the public health, principally with reference to the provision of medical relief, vaccination, sanitation, drainage and water-supply, and measures against epidemics, and education, particularly primary education. Money is raised by loan for water-supply and drainage schemes the cost of which is too large to be defrayed from ordinary revenues

THE PRESIDENCY TOWNS.

The corporations of the Presidency towns occupy a special position, and are constituted under special Acts

Calcutta—The municipal administration of Calcutta is regulated by the Calcutta Municipal Act of 1899, which replaced an Act of 1888, the working of which had not been altogether satisfactory The Corporation, as remodelled by the Act of 1899, consists of a Chairman, appointed by the local Government, and fifty commissioners, half of whom are elected at triennial ward elections, while the remainder are appointed, four each by the Bengal Chamber of Commerce and the Calcutta Trades Association, two by the Port Commissioners, and fifteen by the local Government The Act also constitutes a smaller body, the General Committee, consisting of the Chairman with twelve of the commissioners, four elected by the ward commissioners, four elected by the other commissioners and four appointed by the local Government There are various special committees and sub-committees

The entire executive power is vested in the Chairman, to be exercised subject to the approval or sanction of the Corporation or General Committee, whenever this is expressly directed in the Act To the Corporation are reserved the right of fixing the rates of taxation and such general functions as can be efficiently performed by a large body while the General Committee stands between the deliberative and executive authorities, and deals with those matters that are ill-adapted for discussion by the whole Corporation but too important to be left to the disposal of the Chairman alone Power is reserved to the local Government to require the municipal authorities to take action in certain circumstances, and their sanction is required to large projects

Bombay—The municipal corporation of Bombay, which formed the model for the new Calcutta constitution, dates in its main features from 1872 and continues to be regulated by the Act of 1888 as amended Some important changes were made by the City of Bombay Police Charges Act of 1907, which relieved the corporation of the police charges of the city, and made over to them in exchange further responsibility for primary education, medical relief, and vaccination

The Corporation consists of 72 councillors, of whom 36 are elected by wards, 16 by the justices of the peace, 2 by the Fellows of the University, and 2 by the Bombay Chamber of Commerce, the remaining 16 being appointed by Government The general municipal government is vested in the Corporation, while the ordinary business is transacted by a Standing Committee of 12 councillors, 8 appointed by the Corporation and 4 by Government The president of the corporation is elected by the councillors but is not, like the chairman of the Calcutta Corporation, an executive officer The chief executive authority is vested in a separate officer, appointed by Government, usually from the ranks of the Indian Civil Service, styled the Municipal Commissioner, who can, however, be removed by a vote of 45 councillors

Madras—A new Municipal Act for the City of Madras was passed in 1904 By this Act the number of the municipal commissioners, to whom as a body the name Corporation was now applied, was increased from 32 to 36, besides the President, and provision was made for the appointment of three commissioners each by the Madras Chamber of Commerce and the Madras Trades Association and of two by such other associations, corporate bodies, or classes of persons, as the Local Government might direct, while the number to be elected as divisional elections was fixed at 20 Under the Act previously in force the total number of elected commissioners was not more than 24 The remaining commissioners were appointed, as they are under the new Act, by the Local Government, who also appoint the President The Act of 1904 also introduced various other changes in the law which need not be specially noticed, it was modelled to a large extent on the Calcutta Act of 1899 Executive authority is vested in the President, who is removable under the existing law, by a vote of 28 commissioners A Standing Committee, consisting of the president and eight other commissioners, is mainly concerned with financial and building question The President, like the chief executive officers in Calcutta and Bombay, is usually a member of the Indian Civil Service The number of persons enrolled as voters in 1911-12 was 9,824 rather more than 6 per cent of the total adult male population The control of the Local Government over the municipality has hitherto been stringent than in the other Presidency towns

DISTRICT AND LOCAL BOARDS.

The duties and functions assigned to the municipalities in urban areas are in rural areas entrusted to District and Local Boards The systems of rural local government in the various provinces differ widely. The Madras organisation, which provides for three grades of local boards, most nearly resembles the pattern set in the original orders Throughout the greater part of that province important villages and groups of villages are organised as "Unions", each controlled by a PANCHAYAT These bodies receive the proceeds of a light tax on houses, and spend them mainly on sanitation Next come the Taluk Boards, which form the agency for local works in the administrative sections into which the districts are divided. Finally, there is the District Board, with general control over the local administration of the district In Bombay there are only two classes of boards, for districts and TALUKAS respectively In Bengal, the Punjab, and the North-West Frontier Province the law requires a District Board to be established in each district, but leaves the establishment of subordinate local boards to the discretion of the Local Government The Bengal Act authorises the establishment of village Unions also, but this provision has not been very largely used The United Provinces

Act formerly in force directed the establishment of district and sub-district boards, but the latter were abolished, as mentioned below, in 1906 The system in the Central Provinces bears some resemblance to that which prevails in Madras, the villages being aggregated into "circles", and the circles into "groups", each of which has a Local Board, while for each district there is a District Council having authority over the Local Boards In Assam district boards have not been introduced, and independent boards are established in each sub-division Neither district nor sub-district boards exist in Burma, or in Baluchistan District boards were started in Lower Burma in accordance with Lord Ripon's Local Self Government Resolution of 1882, but the members took no active interest in them, and they died out after a few years The district funds are now administered by the Deputy Commissioners of districts

Elective Principle—The degree to which the elective principle has been introduced varies greatly in different parts of India but there is a considerable proportion of elected members everywhere, except in the North-West Frontier Province, where the system of election was abolished in 1903 On the whole, however, the principle of representation is much less developed in rural than in municipal areas In Madras the elective system, previously applied to the district boards only, was extended to the Taluk Boards in 1909 In the United Provinces and the Central Provinces there is a substantial majority of elected members

Chairmen—The various Acts usually leave it to the Local Government to decide whether the Chairman of the district board shall be elected or nominated In most provinces the Collector has, as a general rule, been appointed, though in the Central Provinces the president is elected, and is usually a non-official In the United Provinces election subject to the veto of the Local Government, was prescribed by the Act of 1906, but in practice the Collector is chosen As regards the subordinate boards, the law and practice vary Generally speaking, the sub-district boards are on the footing of subordinate committees or agencies of the district boards, with very limited powers and resources, but in Madras they exercise independent authority, subject to the general control of the district boards, in regard to the less important roads, primary education, medical work, and sanitation

Provision is made, on much the same lines as in the case of municipalities, for the exercise of control in certain directions by Government or its officers

Sub-District Boards—The Decentralisation Commission, having in view the admitted failure of sub-district boards as a whole, under existing arrangements, except in Madras and Assam, put forward proposals for making them the principal agencies of rural board administration by giving them independent resources, separate spheres of duty, and large responsibilities Proposals for giving the district boards a larger measure of independence were also put forward

Revenue and Expenditure—The sources of income open to rural boards are much narrower and less elastic than those of the municipalities The greater part of their revenue is derived from a cess which they are empowered to levy on the land, and which usually does not exceed one anna in the rupee on the annual rent value (or, in ryatwari provinces, the Government assessment) The cess is ordinarily collected by Government agency along with the land revenue, and varies in amount with the latter Since 1905 the income derived from the land cess has been supplemented by a special Government contribution calculated at the rate of 25 per cent of that income Substantial amounts, apart from this special contribution, are granted to the district boards by the Local Governments for various purposes Apart from receipts in connection with their educational and medical institutions, and markets, the only other important sources of independent revenue are pounds and ferries, and, in Madras, road tolls Except in Madras, the sub-district boards have generally no independent sources of income, and merely receive such moneys as the District Boards may allot to them In Madras the Taluk Boards receive half the land cess levied in their areas, as well as certain miscellaneous revenues

Progress in Sanitation.

The history of the sanitary departments in India goes back for about fifty years During that period great improvements have been effected in the sanitary condition of the towns, though much remains to be done, but the progress of rural sanitation which involves the health of the great bulk of the population has been slow, and incommensurate with the thought and labour bestowed on the subject "The reason lie in the apathy of the people and the tenacity with which they cling to domestic customs injurious to health While the inhabitants of the plains of India are on the whole distinguished for personal cleanliness, the sense of public cleanliness has ever been wanting Great improvements have been effected in many places, but the village house is still often ill-ventilated and over-populated, the village site dirty, crowded with cattle, choked with rank vegetation, and poisoned by stagnant pools, and the village tanks polluted, and used indiscriminately for bathing, cooking and drinking That the way to improvement lies through the education of the people has always been recognised"

Of recent years the pace has been speeded up as education progressed, education developed, and funds were available In a resolution issued in May 23rd, 1914, the Government of India summarised the position at that time, and laid down the general lines of advance This resolution (Gazette of India, May 25th, 1914) should be studied by all who desire to understand the present position and policy its main features are summarised here

The governments in India have moved more rapidly of late. In 1898, the Government of India issued an important statement of policy In 1908, imperial grants amounting to Rs 30,00,000 (£ 200,000) a year were made to local Governments. A new department of the Government of India was created in 1910 in order to relieve the Home Department of education, sanitation and some other branches of the administration In addition to sanitary conferences held by local Governments, three All-India sanitary conferences were convened at Bombay, Madras and Lucknow, respectively, over which the Hon'ble Sir Harcourt Butler presided as Member of the Governor-General's Council in charge of the department concerned These conferences were attended by non-officials as well as officials, by laymen as well as professional sanitarians Again, the **Indian Research Fund Association** has been founded to further the prosecution of research, and the propagation of knowledge and experimental measures generally in connection with the causation, mode of spread and prevention of communicable diseases To this fund the Government of India make an annually recurring grant of 5 lakhs of rupees (£33,333) Moreover, since the constitution of the new department of the Government of India, imperial grants have been made to local Governments and Administrations to the amount of Rs 4,61,47,000 (£3,076,466), of which Rs 55 23,000 (£ 368,200) are recurring, and Rs 4,06,24 000 (£ 2,708,266) non-recurring In addition, grants amounting to Rs 82 33 lakhs (£ 548,866) a year have been made to district boards in certain provinces, a substantial portion of which will, it is hoped, be expended on rural sanitation These grants have rendered practicable the execution of schemes which a few years ago seemed beyond the limits of financial possibility, and there can be little doubt that the movement for sanitary reform is now well established and progressive throughout the country.

Organisation—As a result of the Plague Commission's Report Lord Curzon's Government took up with vigour the reorganisation of the sanitary department Research institutes were started and an appointment of Sanitary Commissioner with the Government of India was created The functions of this officer were to advise the Government of India upon sanitary and bacteriological questions to settle with local Governments the principles on which an advance should be made and to organise and direct research throughout India The arrangement was not completely successful Among the disadvantages, the separation of research from clinical work deterred men from entering the department, and the office work in connection with research prevented the Sanitary Commissioner from undertaking wide and constant touring The organisation was accordingly modified in 1912 The Sanitary Commissioner is now the independent adviser to the Government of India in all technical and sanitary matters, but all questions of personnel as well as the administration of the bacteriological department and research generally have been placed under the control of the Director-General, Indian Medical Service, with the Sanitary Commissioner as his staff officer.

The Sanitary Organisation.

The sanctioned strength of the superior sanitary organisation in India now is

(*a*) A Sanitary Commissioner with the Government of India

(*b*) A bacteriological department comprising—

(i) thirteen laboratory appointments distributed as follows —

Central Research Institute	1 Director and 3 Assistants
Bombay Bacteriological Laboratory	1 Director and 2 Assistants.
King Institute of Preventive Medicine, Madras	1 Director and 1 Assistant
Pasteur Institute, Kasauli	1 Director and 1 Assistant
Pasteur Institute, Coonoor	1 Director and 1 Assistant

(ii) fifteen new appointments recently sanctioned for the prosecution of research work and direct investigation in the field

(*c*) The following establishements under local Governments —

Province	Sanitary Commissioners	Deputy Sanitary Commissioners	Health Officers (*a*) Sanitary Engineers			
			1st class	2nd class.	Sanitary Engineers.	Deputy or Assistant Sanitary Engineers
Madras	1	3	12	19	1	6
Bombay (*c*)	1	5	4	9	1	
Bengal	1	5	6	17	1	2
United Provinces	1	4	11	17	1	3
Punjab	1	2	2	5	1	1
Burma	1	2	4	16	1	2
Bihar & Orissa	1	3	2	8	1	2
Central Provinces	1			2	1	
Assam	1	1			1	
North-West Frontier Province	1	1	1	1		
Delhi ..	1		3		1	
Total	11	26	45	94	10	16

Provincial Agency—In their resolution, dated the 23rd May 1912, the Government of India provided for a large increase in the number of deputy sanitary commissioners and for the appointment of health officers (of the first-class for larger municipalities and of the second-class for the smaller towns) on the lines of detailed proposals received from local Governments. Twelve additional appointments of deputy sanitary commissioner, thirty-five appointments of health officer of the first-class and a large addition to the number of second-class health officers were sanctioned in 1912 and 1913, the entire cost of the additional deputy sanitary commissioners on the basis of the scale of pay fixed for Indians and half the cost of the health officers being met by imperial grants. The Government of India also advised local Governments to take powers, where these did not exist, to require a municipality to appoint a health officer and to veto the appointment of an unfit person. Such powers already exist in the Bombay Presidency and have recently been taken by legislation in Bengal. Simultaneously, the Government of India recommended the system in force in Madras whereby every municipality is required to employ one or more trained sanitary inspectors in proportion to population. Sanitary inspectors are now being employed in large numbers in towns. In addition, the civil surgeon in every district is the sanitary adviser of the local authorities and in most provinces controls the vaccination staff. The provision of an increased staff of sanitary engineers is engaging urgent attention.

Voluntary Agency—The Government of India attach great importance to the organisation of voluntary agencies and have recently made a grant of Rs. 20,000 (£1,333) a sum equivalent to that given by the Bombay Government to the BOMBAY SANITARY ASSOCIATION, which was founded in 1905, and now has corresponding branches in several districts and Native States.

Research.—The policy of the Government of India is to keep the control of research under itself, but to decentralise other branches of sanitation. The creation of an imperial department is no departure from that policy, and the large imperial grants already mentioned have been made without any interference with provincial Governments. While the general direction of a policy of public health must remain with the central Government, all detailed control and executive action are, and will be, left to local Governments. The Sanitary Commissioner with the Government of India is a touring officer empowered to consult and confer informally with local Governments and their officers upon matters connected with sanitation. He is not permitted to encroach upon the authority of Local Governments over the officers under their control.

Provincial Officers—The position of Provincial Sanitary Commissioners towards the administrative heads of the medical department varies somewhat in different provinces. The Government of India do not wish to interfere with the arrangements which local Governments may consider best suited to local conditions but they desire to insist on the importance of defining the functions of the two officers and securing to the sanitary commissioner the position of responsible technical adviser to the local Government in all matters affecting public health.

Sanitary Boards—In every province, sanitary boards have been composed with varying powers, some being merely advisory, others having authority to sanction schemes and allot funds. These boards are composed of officers belonging to the medical, sanitary, engineering and other branches of the civil services with the addition of non-officials. The Government of India view with favour and confidence the devolution of financial authority and responsibility to these boards, and they commend to local Governments the appointment of a permanent salaried secretary to the board where this has not been done. They believe that such an appointment, wherever made, has resulted in an increase of efficiency.

Training—Arrangements for training the superior sanitary staff are now engaging the attention of the Government of India. The chief difficulty at present is to provide courses in practical hygiene and in the study of the bacteriology and etiology of tropical diseases. It is hoped in the near future to make arrangements in India for the former and to utilise the schools of tropical medicine at Calcutta and elsewhere for the latter. Meanwhile, a British diploma in public health is required from candidates for the post of deputy sanitary commissioners and health officers of the first class. The problems of public health in India are vitally complicated by the fact that biting insects are a prominent factor in the dissemination of disease, and it is obviously desirable to provide in India, as soon as possible, a complete course of training for sanitary officers.

Training classes for sanitary inspectors are now held in all the more important provinces.

Department of Public Health.—A substantial beginning has thus been made for the development of a department of public health and Indians have been freely enlisted for it. The posts of deputy sanitary commissioner and health officer are now open to Indians. Nine deputy sanitary commissioners out of 26 and the majority of health officers are Indians. The new bacteriological department consisting of 28 officers is also open to duly qualified Indians.

As health officers and sanitary engineers gradually relieve deputy sanitary commissioners of much of the drudgery of inspection and routine work, it is hoped that the latter will be set free to deal with epidemics and communicable diseases from a higher plane, and to consider issues of public health wider than those which they are able to review to-day. It is therefore important to provide in advance free interchange between them, the laboratory workers and those carrying out practical research in the field.

Progress of Research.—Research is slowly lifting the veil which hides the secrets of disease and mortality and opening up fields of inquiry scarcely thought of a generation ago. The discovery by Sir Ronald Ross of the part played by the mosquito in the communication of malaria and the appointment of the Plague Commission in 1898 are landmarks in the history of Indian Sanitation. In 1902, a research institute was founded at Guindy in Madras

named the King Institute after Lieutenant-Colonel King, C I E, I M S, in view of his devoted efforts in the cause of sanitation in that presidency. In 1905 Lord Curzon's Government summed up the position and the policy of the Government of India in regard to the establishment of laboratories for the study of problems of public health in India. The functions of the central laboratory were original research, the preparation of curative sera and the training of scientific workers The functions of the provincial laboratories were diagnosis and special research connected with local conditions This policy has been steadily developed The Central Research Institute has been established at Kasauli The Plague Research Laboratory at Parel has been extended and re-equipped and is now the bacteriological laboratory for the Bombay Presidency, and a proposal is under consideration to attach to it a school of tropical medicine A research laboratory and school of tropical medicine are under construction at Calcutta Pasteur institutes exist at Kasauli and Coonoor A third is about to be established in Burma, and it is under discussion to establish others in Assam (where it will be combined with a research laboratory) and Bombay

Besides the routine work connected with the bacteriological diagnosis of disease antirabic treatment, the manufacture of various vaccines and sera and general research, these laboratories at different times have been the centres of many special investigations, notable amongst which are those on plague and enteric fever It is hoped that before long each province in India will have a laboratory fully equipped for research

Research Fund Association —The foundation of the Indian Research Fund Association in 1911 has marked an important era in sanitary progress The control and management of the association are vested in a governing body, the president of which is the Member in charge of the Education Department of the Government of India The governing body is assisted by a scientific advisory board, of which not less than three members have seats on the governing body They examine all proposals for work in connection with the scientific objects of the association and report as to their importance and feasibility The members of this board are appointed for one year, but are eligible for re-election, and they have power to add to their number The present members are the Director-General, Indian Medical Service, the Sanitary Commissioner with the Government of India, the Director of the Central Research Institute at Kasauli, the Officer in charge of the Central Malarial Bureau and the Assistant Director-General, Indian Medical Service (Sanitary) Sir Ronald Ross has been elected an honorary consulting member The membership of the Indian Research Fund Association is open to non-officials Every donor of Rs 5,000 is entitled to become a permanent member, while every subscriber of Rs 100 per annum can be a temporary member Members of the association are entitled to attend and take part in the annual general meeting of the association and to receive copies of the reports and other publications issued from time to time by the association. Although, so far, the fund has been financed solely by the Government of India, it is hoped that in time Indian philanthropists will contribute towards the expansion of the association by founding chairs of research by financing experimental research measures and otherwise

Work of the Association —The association has been active and can already point to some achievement Out of an income of Rs 15 lakhs (£100,000) received since its incorporation and up to the end of 1913-14, an expenditure of over Rs 14 lakhs (£93,333) has been sanctioned In 1911, Major S P James, I M S, was deputed to study yellow fever in its endemic area and to draw up proposals for protecting India against the introduction of the disease Those proposals are still under consideration In the meanwhile, stegomyia surveys have been carried out in Calcutta Bombay, Madras, Karachi and Rangoon and other seaports Anti-malaria schemes based on preliminary surveys have been carried out at a cost of Rs 6,02,000 (£40,133) Investigations are at present in progress into the problems connected with the prevalence of cholera, kala-azar, dysentery, leprosy and goitre, as well as inquiries into the pharmacology of cinchona derivatives, the use of hydrocyanic acid gas as a pulicide and the fixation of chemical standards of purity for milk and milk products Other investigations are under consideration regarding bacteriological standards of purity for water supplies, the different anti-cholera vaccines and sera, the methods of water filtration and silt removal best suited to Indian conditions, and the etiology of diabetes and the fevers of short duration These will be started so soon as more trained research workers are available It is hoped also to carry out, during the next non-epidemic season, an experiment in plague prevention on a large scale

Besides financing the investigations conducted by its own staff, the association gives grants-in-aid to outside research on approved lines The co-operation of other workers has been sought, and every encouragement has been given to them Grants for research have been made, for instance, to Professor MacMahon, Dr Hossack and Mr Howlett The services of Indians have also been enlisted Dr Korke is engaged in an important investigation into kala-azar, while Mr Awati, a medical entomologist, is employed under the association The Government of India cordially approve the policy of encouraging private enterprise in the cause of research

The association has also started a journal for the publication of medical research work done in India—the "INDIAN JOURNAL OF MEDICAL RESEARCH"—published quarterly The favourable reception which has been accorded to the first three numbers is evidence of the increased interest that is being taken in sanitary science in India to-day

The investigations enumerated above represent the work directly under the supervision of the Government of India The local Governments also are fully alive to the importance of research, and in seven provinces nine special officers are at present engaged in investigating the causes underlying the local prevalence of malaria and devising suitable schemes for the mitigation of that disease

Water Supply—Few subjects have received more attention of late than the provision of a piped supply of filtered water in towns Complete figures are not available but sums amounting to at least Rs 3,51,58,297 (£2,34,886) have been spent during the last 20 years on completed schemes Projects costing Rs 1,10,03,433 (£933,562) are under construction and projects costing Rs 1,14 11,750 (£762,983) have been prepared and sanctioned These figures are exclusive of the expenditure in the Presidency towns and Rangoon

Drainage—Drainage schemes on modern lines, are the basis of all sanitary improvement in urban areas The demand for them is scarcely less than that for piped water and is steadily on the increase As in the case of water supply complete figures are not available but the known expenditure during the last twenty years has been considerable and is now rapidly increasing The expenditure on completed works outside the Presidency towns and Rangoon during that period amounted to Rs 97,65,049 (£651,003), whereas the cost of the works under construction is estimated at Rs 1,54,20,502 (£1,028,033) In the beginning precedence over drainage was given to piped water-supply but experience has demonstrated the advantage of introducing both concurrently Without drainage there is no means of carrying off the surplus water and without piped water-supply it is difficult to flush the drains properly

When drainage schemes on modern lines were first started in this country, there seems to have been a bias against the use of sewers, and, wherever possible, open drains were adopted Experience has shown that the preference for the open drain and the fear that sewers would give excessive trouble were not well founded On the contrary, much of the advantage of a drainage system is lost if only open drains are used, as the old system of hand-carriage latrines has to be continued Moreover, economy in establishment is possible only in the case of a sewage system

Pilgrimages—Pilgrimages necessitating as they do the collection of large numbers of persons, often more than a million, at one place at one time have an important sanitary aspect mainly in connection with cholera and other communicable diseases The Government of India recently decided to examine the sanitary arrangements at the chief places of pilgrimage throughout India and local Governments were asked to appoint provincial committees for this purpose under the presidency of the Sanitary Commissioner with the Government of India with a view to formulate practical schemes of improvement The inquiry is still in progress but the Government of India have already made a grant of Rs 2 lakhs (£13,333) and promised an additional grant of 4 lakhs of rupees (£26,666) spread over four years towards the improvement of the pilgrim route to Badrinath, and they have made a further recurring grant of Rs 20,000 (£1,333) a year for the same object The important question of improving the conditions of the pilgrimage to the Hedjaz by Indian Musulmans is undergoing close scrutiny. The Governor-General in Council anticipates that these inquiries will lead to signal sanitary improvements and promote the convenience and comfort of many millions of His Majesty's loyal Indian subjects

Rural Sanitation—The following observations are based on practical experience of rural sanitation —

(*a*) Travelling dispensaries may be used to spread a knowledge of the simple facts regarding the more common diseases For this purpose the sub-assistant surgeons in charge should be given a special training in hygiene Once they become known to the people as healers of the sick their advice as sanitarians may become more acceptable

(*b*) The improvement of the village water-supply is as important as it is difficult Apparently, excellent results have been obtained by disinfection of wells with permanganate of potash Experiments are being made in different parts of India in the use of tube-wells, etc It might serve as an useful object lesson to use pumps and tube-wells for the provision of water at fairs, schools, hospitals, and local public offices In some localities, a tank supply alone is possible and the difficulty is to protect even new tanks from pollution

(*c*) In several provinces notably in Madras, village unions, or circles have been formed and their committees entrusted with small grants for the improvement of the sanitation of the village site This measure might be extended experimentally elsewhere It is calculated to encourage discussion and inquiry regarding sanitary work

(*d*) Village midwives are, in some districts, encouraged by small grants of money and rewards to attend at the head-quarters hospital for a short and simple course of training These measures open up possibilities with reference to a reduction in infantile mortality and children's diseases generally

(*e*) In most districts in India, the civil surgeon is also in theory the sanitary officer of the district His duties at head-quarters, however, do not allow him to tour and inspect in the district to the extent that is necessary, even in the case of epidemics in the district it is sometimes not possible for him to leave headquarters In some provinces, district sanitary officers have been appointed and there can be little doubt that many more such appointments are required and that one of the most urgent and hopeful measures for promoting rural sanitation is the appointment of well qualified and whole-time district health officers to control and organise all sanitary arrangements and experiments in the district

Birth and Death Rates.—The population of the areas in which births and deaths w registered was 248,661,346, according to the census of 1911 and the number of births registe in 1912 was 9,295,296 (=38 95 per mille, compared with 38 58 per mille in 1911, and an aver of 38 04 per mille in the five years 1907–11) The total number of deaths was 7,090,991—29 per mille, as compared with 32 per mille in 1911 and 31 28 for the five years 1907-11 This v the lowest rate since 1901 The rates for the provinces are given in the following table —

	Birth Rates		Death Rates					
			1911			1912		
	1911	1912	Rural	Urban	Total.	Rural	Urban	Tot
Bengal	35 0	35 3			26 9	30 1	24 5	29
Bihar and Orissa	42 9	42 5			35 1	31 0	30 0	31
Assam	32 0	32 2			23 6	25 0	20 8	25
United Provinces	43 8	45 4	44 2	56 0	45 0	29 6	34 4	29
Punjab	43 9	45 3	33 4	39 7	34 0	26 1	31 9	26
N W Frontier Provinces	35 1	37 1	23 1	25 0	23 3	23 5	22 7	23
Central Provinces and Berar	19 5	48 2	33 7	41 9	34 7	41 8	47 6	42
Lower Burma	31 4	31 7	22 2	36 4	24 0	24 4	37 2	26
Upper Burma	34 8	33 0	24 9	50 2	27 1	27 5	44 0	29
Madras	30 4	30 9	22 4	28 2	23 1	23 8	28 6	24
Bombay	36 0	35 0	27 0	36 9	28 3	33 8	41 5	34
Minor Areas	40 6	43 8			41 2			38
Total	38 6	38 95	31 6	36 2	32 0	29 4	33 1	29

The most striking feature was the increased birth-rate and diminished death-rate in the Uni Provinces and the Punjab due to comparative freedom from malaria and plague, and to recup ation from the epidemics of previous years In the Central Provinces, on the other hand, chol and malaria prevailed, and the birth-rate (though still the highest of any province) diminis and the death-rate increased Cholera in Bombay and malaria in Burma produced similar results

The excess of births over deaths ranged from 19 per mille in the Punjab to 1 per mille in Bo bay The mean percentage of male to female births ranged from 123 in the North-West Front Province to 104 in Bihar and Orissa

Urban Vital Statistics.—The following table gives the birth-rates and death-rates ourteen of the largest towns in India

Name of Town	Year	Population	Birth-rate.	Death-rat
Ahmedabad	1913-14	225,539	33 04	38 18
Allahabad	1913-14	159,701	25 2	17 8
Bangalore	1913-14	100,834	46 60	36 83
Bombay	1913	979,445	20 05	32 47
Calcutta	1912	896,067	21 06	28 1
Cawnpore	1913-14	173,973	39 06	52 76
Delhi	1913	224,051	43 65	43 63
Karachi	1913-14	148,394	41 94	42 06
Lahore	1912	210,271	39 1	29 17
Lucknow	1913-14	240,016	36 73	44 49
Madras	1912	518,660	38 8	38 8
Nagpur	1913	107,444	47 5	38 1
Rangoon	1913	293,316	18 87	30 37
Simla	1913	*	11.7	12 3

* Winter population 18,934
Summer , 36 007

Chief Diseases.—There are three main classes of fatal disease specific fevers, diseases affecting the abdominal organs, and lung diseases Intestinal and skin parasites, ulcers and other indications of scurvy widely prevail Much of the sickness and mortality is due to deficient power of resistance and to insanitary habits and surroundings The table below shows the number of deaths from each of the principal diseases recorded in British India and the death-rates per 1,000 during the three years from 1910 to 1912 With regard to special diseases, no province escaped

Years		Cholera	Small-pox	Fevers	Dysentery and Diarrhœa	Plague	Respiratory Diseases
1910	(	430,451	51,315	4 341, 392	267,672	413,355	234,308
	)	1 90	0 23	19 17	1 18	1 83	1 03
1911	(	354 005	58,535	4,207 356	253,636	733 582	223,822
	)	1 48	0 25	17.63	1 06	3 07	0 94
1912	(	407,769	89, 357	3,936,085	292,216	263,937	247,736
	)	1 71	0 37	16 49	1 22	1 10	1 04

the visitation of Cholera, which was chiefly prevalent in Bombay and the Central Provinces Small-pox showed an increase When reference is made to "fever" in India, malarial fever is generally understood, but many causes of death and many diseases much more fatal than malarial fever are included under the heading The fever death-rates as usual varied greatly ranging from 21 2 in Bengal to 7 6 in Madras

Plague.—The present epidemic of plague in India first broke out at Bombay in August 1896 and as the annexed table shows, it has been responsible for a heavy rate of mortality since that date In 1907 the deaths from plague attained the highest total yet recorded, *viz*, 1,315,892 for India as a whole, the number in British India alone being 1,166,223 or 5 16 per mille In 1908 the mortality declined enormously, falling to 156,480, the lowest total since 1900 In 1909 there was once more a relatively low mortality *viz*, 178,808 deaths or fewer than in any year since 1900, excepting 1908 In 1910 and 1911 there was a severe recrudescence, especially in Bengal, the United Provinces, and the Punjab In the latter part of 1911 and in 1912 the virulence of the epidemic abated, and the 1913 figures show a still further fall Towards the end of that year and in the early months of 1914 there has been a rise owing to a recrudescence of the disease in Bombay

1896-97	57 543	1906	356,721
1898	116,285	1907	1 315,892
1899	139 009	1908	156,480
1900	92,807	1909	178,808
1901	282 027	1910	512,605
1902	576 365	1911	846,873
1903	883 076	1912	306,488
1904	1,14 ',993	1913	217,145*
1905	1 069,140	* Preliminary figures	

Hospitals, Dispensaries, Asylums.—The following table gives figures for Indian hospitals under three heads The institutions grouped under Heads (1) and (3) are, generally speaking for the general public. Those under Head (2) are for special classes of persons, such as railway servants, policemen, &c —

—	(1) Civil Hospitals and Dispensaries (State Public, Local Fund and Private-aided)			(2) State Special and Railway Hospitals			(3) Private Non aided Institutions		
	No of Institutions	No of In-patients	No of Out-patients	No of Institutions.	No of In-patients	No of Out-patients	No of Institutions	No of In-patients	No of Out-patients
1911 .	2 707	460,671	27,595,176	829	89,347	2,030,098	706	48,796	4,712,616
1912 .	2,733	492 798	28,956,763	826	93,350	2,154,284	669	51,799	4,774,387

The demand for more hospitals under head (1) is everywhere making itself felt The travelling dispensary system which has been so successful in the United Provinces and the Punjab is being introduced elsewhere as well The number of persons treated has risen in spite of the healthiness of the year to 29½ millions, and operations are being more freely resorted to than ever Expenditure on this head rose from £86,168 in 1911 to £104,149, and there is little reason to believe that further economies will reduce this amount Again the year 1912 the assistance afforded by individual subscriptions by Indians shows a tendency to diminution,—the amount subscribed in 1912 being only £45,557, as compared with £47,252 in 1911

There were 22 **Lunatic Asylums** in India in 1912 containing 8,050 inmates, of whom 2,174 were criminal lunatics There can be little doubt that the cases admitted into asylums in India represent only a very small proportion of the insane population The ratio of Christians, mainly drawn from the Indians and Eurasians of Bombay and Madras is generally high in regard to the total population The explanation of this is to be found in the fact that the insane amongst Christians are usually removed to an asylum on the outbreak of an attack of insanity But this is not the case with Mahomedan and Hindus, many harmless lunatics of the Hindu religion remain at large and are not brought to the asylums The prevailing forms of insanity are mania, melancholia, dementia epileptic insanity and idiocy A number of cases are attributed to the use of hemp drugs

Vaccinations in British India are performed by the agency of a special department established for the purpose and to a small extent by the staff attached to the ordinary hospitals and dispensaries The work is carried on as a branch of the Sanitary Department in each province under the general control of the provincial Sanitary Commissioner The total vaccination work done in British India during the year 1912-13 was represented by 9,919,723 operations, of which 8,792,917 were primary cases and 1,126,806 re-vaccinations the corresponding figures for the year 1911-12 were 9,684,249, 8,780,525 and 903,724 respectively Increases occurred in all the provinces, except Madras, the Central Provinces and the small provinces of Coorg and Ajmer-Merwara In regard to primary cases there was a decrease, compared with the preceding year, in Bengal, the Central Provinces, Burma and Ajmer-Merwara and in revaccinations Madras, the Central Provinces, Coorg and Ajmer-Merwara showed decreases The only provinces in which there was a decrease under both classes of work were the Central Provinces (due in part to the elimination of the statistics relating to Feudatory States, and in Ajmer-Merwara

The quality of the primary work showed an improvement on that of the preceding year, the percentage of success rising to 96 54 from 96,34, but in revaccinations the rate declined to 70 57 from 72 82 In the former the rates varied between 99,59 per cent in Bihar and Orissa and 88 4 in Madras, and in the latter between 93 17 in Ajmer-Merwara and 53 19 in Bombay—all the rates are higher than in 1911-12 The mean number of operation performed by each vaccinator was 1,630, to which it rose from 1,584 in 1911-12 the range between the highest and lowest was very considerable, 3,968, the highest, in the North-West Frontier Province and 911 the lowest in Ajmer-Merwara, the next lowest was 964 in Assam

The vaccination operations performed at dispensaries numbered 187,150 compared with 119,629 the year before, but except in Bengal, and Bihar and Orissa, which between them account for 153 306 of the total, and the Punjab and Burma which jointly contribute 21,308 operations, the vaccination work at dispensaries is inconsiderable

The ratio of successful vaccinations per thousand of the population was 36 49in1912-13, which lies between the ratios of 35 06 in 1910-11 and 37 22 in 1911-12 Neglecting the small province of Coorg with the high ratio of 64 66 per thousand, the extremes were 49 11 in the North-West Frontier Province the highest, and neglecting the small province of Ajmer-Merwara 25 94, 29 06 in Bombay, the lowest On an estimated birth-rate of 40 per thousand of the population, 16 19 per cent of the children under one year of age were successfully vaccinated, showing a decrease compared with the rate of 48 01, in the preceding year The usual great variations occurred, the highest rates being 71 02 in the Central Provinces and 68 06 in the Punjab, and the lowest 20 10 in Burma and 8 82 in Coorg

The cost of the department during the year 1912-13 amounted to Rs 16,30,427 to which it increased from Rs 15,61,261 in 1911-12 The average cost of each successful case was two annas and eleven pies, or one pie more than the year before the cost of each case varied between nine annas and two pies in Bombay and one anna in Bihar and Orissa

Calcutta Improvement Trust.

The Calcutta Improvement Trust was instituted by Government in January, 1912, the preamble of the Act by which it is founded running as follows —" Whereas it is expedient to make provision for the improvement and expansion of Calcutta by opening up congested areas, laying out or altering streets, providing open spaces for purposes of ventilation or recreation, demolishing or constructing buildings, acquiring land for the said purposes and for the re-housing of persons of the poorer and working classes displaced by the execution of improvement schemes "

The origin of the Calcutta Improvement Trust must, as in the case of the corresponding Bombay body, upon which the Calcutta Trust was to a large extent modelled, be looked for in the medical enquiry which was instituted into the sanitary condition of the town in 1896, owing to the outbreak of plague In consequence of the facts then brought to light, a Building Commission was appointed in April 1897, to consider what amendments were required in the law relating to buildings and streets in Calcutta That Commission recommended certain alterations in the law, and further suggested that a scheme should be prepared for laying out those portions of the town which were sparsely covered with masonry While unable to go into details, they recommended that in quarters newly laid out the roads and open spaces should occupy at least as much ground as the building areas As regards existing evils, they thought that it was impossible to demolish any considerable portions of the City All that could be done was to open out a number of wide streets and some open spaces The Government of Bengal, when it proposed to give effect to the recommendations of the Commission, adopted, as the work to be done, a scheme for constructing and improving 15½ miles of roads which had been drawn up by the Commission This scheme formed the basis of discussion till 1904, when a Conference was convened by Sir Andrew Fraser, then Lieutenant-Governor of Bengal It was estimated that the Trust might in the ensuing 30 years have to provide for the housing of 225,000 persons, who would occupy 2,000 acres The population of Calcutta proper, which includes all the most crowded areas, was 649,995 in 1891, and increased to 801,251, or by 25 per cent, by 1901 The corresponding figure according to the 1911 Census was 896,067

The Conference of 1904 recognised that in view of the peculiar situation of Calcutta, which is shut in on one side by the Hooghly and on the other by the Salt Lakes, its extension in a regular zone is impossible The Conference, after carefully considering the question, came to the conclusion that "arms" or "promontories" should be thrown out in five directions on the north, north-east, east, south and south-east, and south-west In these promontories it was easy to foresee that expansion would take place along the lines indicated by certain roads. It is for this reason that the Government of Bengal made the proposal that the Trust should have power to project roads to the outskirts of Calcutta It was seen that strips of land lying along or in the neighbourhood of these roads should be acquired by or for the Trust and would be dealt with by them as model areas. In the remaining part of the extension, according to the Government's plan, the Trust would have no proprietary rights over the land, but they would administer the building regulations and by this means would secure that all houses erected by private owners were constructed on a standard plan and in conformity with sanitary requirements

Legislation.

The recommendations of the 1904 Conference eventually took legislative form in a Bill introduced in the Bengal Legislative Council in August, 1910 This measure was built up on the recognition by the Government that the 15 miles road scheme only touched the fringe of the question of overcrowding and sanitation The Bill, therefore, provided for a scheme of greatly enlarged scope The amount of money required was roughly estimated at Rs 8,22,00,000 It was recognised that a great deal more could be spent with advantage, and the figure was not put forward as representing the actual cost of any definite scheme, but as a rough estimate of what would be required for any scheme of wide and permanent utility The total sum was divided into Rs 500 lakhs for new roads, Rs 172 lakhs for open spaces and Rs 150 lakhs for housing and expansion Of these sums Rs 336 lakhs were to be recovered by recoupment, 50 lakhs were granted from Imperial revenues, and the remainder was left to be raised by loans The sanction of the Secretary of State was obtained for the proposals generally on the understanding that the scheme of taxation would be for 60 years The Legislative enactment, while based on these calculations, does not actually refer to any limit of expenditure But the Act provides a special system of taxation for the service of the loans, amounting to Rs 436 lakhs, involved in the scheme For this service an annual revenue of 19 65 lakhs was required and to this have to be added 1 25 lakhs for working expenses and contingencies, bringing the total up to 20 90 lakhs To provide this revenue the Act provides for the levy of special taxes as follows —

A two per cent stamp duty on the value of all immoveable property transferred by sale, gift or reversion of mortgage,

A terminal tax of one anna on every passenger by rail or steamer arriving in the city of Calcutta, this is not to be levied on passengers from within a radius of 30 miles of Calcutta,

A customs and excise duty, not exceeding two annas per bale of 400 lbs, on raw jute,

A two per cent. consolidated Corporation rate, and

An annual Government grant of a lakh and a half.

The Act provides for the appointment of a whole time chairman of the trustees and the membership of the Trust was fixed at eleven,

part of the members being nominated by Government and others elected by local bodies whose interests are most nearly concerned

The following are the present Board of Trustees —The Hon'ble Mr C H Bompas, ICS, *Chairman*, The Hon'ble Mr C F Payne, ICS, Chairman of the Calcutta Municipal Corporation *(ex-officio)*, The Hon'ble Raja Reshee Case Law, CIE, elected by the Corporation, The Hon'ble Rai Radha Charan Pal, Bahadur, elected by the Ward Commissioners Dr Charles Banks, elected by the Commissioners appointed under Sec 8 (2) of the Calcutta Municipal Act 1899, Mr W K Dods, elected by the Bengal Chamber of Commerce, The Hon'ble Rai Sitanath Rai Bahadur elected by the Bengal National Chamber of Commerce, Sir R N Mookerjee, KCIE, Mr F H Stewart, CIE, the Hon Mr H J Hillary and Mr R M W Smyth, appointed by the Bengal Government

The Board and their Work.

It was impossible to settle in advance the exact projects to be undertaken by the Trust All details of these were, therefore, left to be worked out by the Trust after its constitution, Government exercising control by having all the individual schemes sent to them for approval before execution The Trust did not enter on a virgin field The Municipal Corporation had previously dealt in some measure with the problems they were appointed to solve and the Trust started work with the initial benefit of this previous labour Thus, the Corporation had aligned many roads and this work was useful to the Trust, though in some cases modifications were necessary

The work upon which the Trust are now definitely embarked may be divided into three classes as follows - -

Many parts of Calcutta are over-crowded with buildings and ill-provided with roads These areas are to be re-arranged both on the ground of sanitation and for convenience of traffic,

Population will continue to throng into the over-crowded parts unless it can live on the outskirts and at the same time have speedy access to the business centres of the town Quick traffic can only take place along broad roads These are almost wanting in Calcutta The construction of broad roads will at the same time ventilate the overcrowded parts of the town and it has been recognised from the outset that the construction of broad roads running both north and south and east and west will thus secure a double object,

There is the question of providing for the population displaced by improvements, and still more important of providing for the natural growth of population by laying-out roads and building sites on sparsely populated areas on the outskirts of the town. When persons of the working class are displaced or likely to be displaced the Trust can build dwellings for them if private enterprise does not undertake the work.

Engineer's Survey.

The Trust perceived at once that the problem of providing improved traffic facilities for Calcutta and its suburbs must be dealt with as a single problem and by a single mind. The first duty set by the Trust to their chief engineer was therefore, to prepare a scheme of main roads of primary importance The chief engineer Mr E P Richards, MICE, &c, devoted his whole attention to this task and his report was issued early in 1914 Mr Richards' report, which was accompanied by maps and numerous photographic illustrations, made a volume of 400 closely printed foolscap pages He found Calcutta "a city which is in a very much more than ordinary bad way", and early discovered the serious fact that "the Calcutta Improvement Act of 1911 was almost useless for the great task set to the Trust" The Trust was not constituted under a Town Planning Act but only under a local Housing Act, so that "Calcutta and her suburbs cannot possibly be jointly planned or controlled, or be moderately improved, under the existing Improvement Act" Mr Richards' report deals with the general conditions and needs of the city and the general policy of reform, with the general legislative and financial aspects and with the main programme of work He discusses the Calcutta of to day showing the chief faults as to which improvements are required A comparison is made between Calcutta and other cities, by way of illustrating Calcutta needs, and in this manner distance roads and streets per square mile road and street widths, percentage of open spaces, tramway mileage per head of population, the status of the city as a port, and so on, are fully dealt with An important chapter deals with the Calcutta slums and makes recommendations as to what should be done in regards to them Another chapter discusses the general problem of city improvement and another is devoted to suburban planning and developments

Improvement Schemes.

The Engineer submitted early last year an interesting report on the widening of Howrah Bridge Meanwhile, the Board undertook certain improvement schemes which would not be interfered with by any larger schemes adopted later The Board also embarked on a re-housing scheme with a view to provide accommodation for persons likely to be displaced by the improved schemes under preparation The buildings designed resemble those erected by the Bombay Improvement Trust The scheme was sanctioned by Government in August, 1912, but its execution has proved more expensive than was anticipated, mainly owing to the rise in the price of building materials The following paragraph from the Calcutta Improvement Trust's first annual report shows the standard according to which they regard their re-housing plans —

"The housing problem in Calcutta is of supreme importance, the figures of the last census show that much of the improvement in the health of Calcutta is only apparent, the sanitary measures of the Corporation result in the removal of bustees and the popu-

lition which occupied the bustees does not find healthier accommodation in the same locality but moves on to even more insanitary bustees in the suburban wards or in the adjacent suburban municipalities The Board do not anticipate, nor do they desire, that the chawl should become the usual dwelling for the poor of Calcutta, but it may be suitable to some classes of its heterogeneous population, and especially to those who come here for work, leaving their families behind It is very difficult to see what other class of building can be erected by the capitalist where land costs more than Rs 600 a cottah On really cheap land it is possible that good results could be obtained by arranging for the construction of sanitary bustees, the Board merely laying-out and draining the site and controlling the class of hut erected" The Board undertook the erection of three blocks of buildings as an experiment. The cost of the land worked out at Rs 832 a cottah It is recognized in England that the working classes cannot profitably be housed on land costing more than £300 an acre, or Rs 75 a cottah There will, therefore, be a loss on the Calcutta experiment, as was anticipated by the Board from the outset 'It appears, therefore" say the Trustees in their last annual report, "that the buildings would show a fair return of capital if the rooms in the two upper storeys were let out at Rs 6 a month, those on the ground floor at Rs 5 a month and the shops at Rs 10.

The Board believed the buildings to be much cheaper than anything of the kind hitherto erected in Calcutta, and applications received show that 'there would apparently be no difficulty in filling a building with tenants of the Bengali middle class, if the whole building or the two upper storeys of each block were exclusively reserved for their use "The Board, however, consider that it is most important to ascertain what rent can be paid and what accommodation is required by the artisan and labouring classes They have, therefore, decided to let the rooms at lower rates to artisans and labourers and if the buildings once become popular, it will doubtless be possible to raise the rents at a later period"

BOMBAY IMPROVEMENT TRUST.

Bombay is an island twelve miles long, but very narrow and containing only 22 square miles altogether, but in the city, occupying little more than half the island, there lives a population enumerated at 972,892 and actually totalling over a million Bombay is, in point of population, the second city of the British empire Seventy-six per cent of its million people live in one-roomed tenements Imagine the terrible conditions of overcrowding and lack of sanitation which these facts imply and you have the reason why the severe onset of plague seventeen years ago led to the formation to the Improvement Trust, for the special purpose of ameliorating the sanitary condition of the city Plague was imported into India from the Far East and was first discovered in Bombay in 1896 There was a great panic among the population Every house had its victims, most persons attacked died There was a general flight of the population to the country districts It is estimated that nearly half a million so fled Grass grew in the principal streets. These circumstances directed the attention of the authorities, as nothing else could have done, to the problem of bringing the development and housing arrangements of the city into line with modern requirements It was at once recognised that the task was too great for the Municipality, and a special body, termed the Trustees for the Improvement of the City of Bombay, was appointed It consists of 14 members, of whom four are elected by the Municipality and one each by the Chamber of Commerce, the Millowners' Association and the Port Trust, and the balance nominated by Government, or sit *ex-officio* as officers of Government The Board is presided over by a whole-time chairman, who is either a covenanted civilian or an officer of the Public Works Department, and he is also head of the executive The present chairman and members of the Trust are as follow –

Chairman—

Mr G W Hatch, I C S

Ex-officio Trustees—

Major-General G F. Gorringe, C M G, C B, D S O, General Officer Commanding Bombay District

Mr A H A Simcox, I C S, J P, Collector of Bombay

Mr P R Cadell, C I E, I C S, J P, Municipal Commissioner

Elected by the Corporation—

Sir Bhalchandra Krishna Bhatawadekar, Kt, L M, J P

Mr Dinsha Edulji Wacha, J P

The Hon'ble Sir Ibrahim Rahimtoola, Kt, C I E, J P

Mr Nowroji Jehangir Gamudia, J P

Elected by the Chamber of Commerce—

Major H A L Hepper, R E, J P.

Elected by the Port Trustees—

The Hon'ble Mr F L. Sprott, J P

Elected by the Millowners' Association—

Sir Sassoon David, Bart, J P

Nominated by Government—

Sir Vithaldas D Thackersey, Kt, J P

Mr. A. M Tod, J P

Mr A H. Whyte, J P, Executive Engineer, Presidency

The specific duties of the Trust are to construct new streets, open out crowded localities, reclaim lands from the sea to provide room for expansion, and construct sanitary dwellings for the poor

The Sanitary Problem.

Bombay city grew on haphazard lines, houses being added as population poured in with the growth of trade and without any regard to town planning or the sanitary requirements of a great town The price of land was always comparatively high, owing to the small area of the island, and while the builder had only one object in view, namely, to collect as many rent paying tenants as possible on the smallest possible piece of land, there were no proper restraints to compel him to observe the most ordinary rules of hygiene The result was the erection of great houses, sometimes five and six storeys high, constituting mere nests of rooms There was no adequate restriction as to the height of these chawls, or the provision of surrounding open space, so that the elementary rules as to the admission of light and air went unobserved and the house builder invariable erected a building extending right up to the margins of his site Consequently, great houses accommodating from a few hundred to as many as four thousand tenants were built with no more than two or three feet between any two of them and with hundreds of rooms having no opening at all into the outer air

The Trust has practically reconstructed large areas on modern sanitary lines, but unfortunately the old municipal by-laws remain quite inadequate for the requirements of the city and while the Trust are spending millions sterling of public money in sweeping away abuses, unscrupulous landlords are still unchecked in adding in the same old manner to the insanitary conditions of the place Thus, the Trust acquire and destroy insanitary houses on a certain area and lease the sites and permit new houses to be built on them subject to the reservation of a certain breadth of open ground round the edges of the site to provide for the necessary angle of light and air for the lower rooms of the new building But bordering on this area there will be old houses that were not acquired as part of the improvement scheme and the municipal by-laws allow the owners of these to increase their height by as many storeys as they like, without regard to the fact that they are thus undoing the very work of providing for the admission of light and air upon which the Trust have just poured out money The private landlords take the fullest advantage of the loophole The amendment of the Municipal by-laws so as to cure such abuses has been under discussion by the Municipal Corporation for many years and improved by-laws have been prepared.

Finance.

The work with which the Trust was charged was bound to prove unremunerative, with the exception of reclamations from the sea, and at the outset, therefore, certain Government and Municipal lands were vested in the Trust, the usufruct of which it enjoys, and the Trust at the outset received a contribution from municipal revenues not exceeding 2 per cent on the rateable value of the property assessed for taxation In practice, the works are financed out of 4 per cent loans, which are guaranteed by the Municipality and the Government, and the revenue of the Trust is used to meet interest and sinking fund charges The Trust, proceeding or these lines, found itself, in 1910, at the end of its resources When the Trust was constituted it was estimated that the usufruct on the public land vested in it would represent a contribution of Rs 96,00,000 (£640,000) from the general taxpayer But in practice this was reduced to less than Rs. 43,000,000 (£286,666). The Trust found itself with unpledged resources estimated at only Rs 16,00,000 (£106,666) The Government of India came to its assistance with a cash grant of half a crore of rupees (£333,000), given out of a budget surplus, special legislation was carried through the Bombay Legislative Council in 1913 to increase the advantage of the Trust from Provincial and Municipal appropriations, and legislative measures are now in progress to enable the Trust to raise money by special local taxation in Bombay The cautious estimate of Rs. 16,00,000 also proved to have been below the mark In the years following 1910, when the estimate was made, there was an improvement in the Trust's revenue, so that in 1913, after the amendment of the financial clauses of the Act and the grant of 50 lakhs by the Government of India, and in spite of important additions to the Trust's sanctioned programme, the financial forecast showed that the margin for expansion had increased to Rs 95 lakhs Inasmuch as the whole of this sum was required for completion of the Eastern Avenue, it was still necessary that the Trust should be provided with further funds for direct expenditure on improvement schemes To this end a Bill was introduced into the Bombay Legislative Council on 16th December, 1913, providing for the levy of a surtax in stamp duty on conveyances of property in Bombay and for the payment of the nett proceeds to the Trust The Municipal Corporation, however, protested against the raising of the necessary funds at the expense of the property owners of Bombay and suggested, as they and the Trust had already suggested in 1911, that an export duty on bales of cotton exported from Bombay should be levied instead Government announced at the March (1914) meeting of the Legislative Council that the Bill would be held over pending consideration of this suggestion

The following are some details of the Bill to amend the City of Bombay Improvement Act, which, as just mentioned, was passed by the Provincial Legislature The main object of the Bill was to simplify the financial arrangements between the Government, the Municipality and the Trust and make them more favourable to both the local bodies Under the old Act, as already mentioned, the annual Municipal contribution to the Trust was an indefinite sum limited by a maximum of 2 per cent. on the Municipal assessments of the year Under the Amended Act the Municipal contribution is a definite share of the year's general tax receipts, approximating to 2 per cent. on assessments and subject to no maximum, and the Trust keep their profits for their own use Under the original Act, the Trust had from 1909 onwards to pay to Government and the Municipality 3 per cent. per annum as interest on the schedule value of the Government and Municipal lands vested in them, while Government and the Municipality were

at liberty to resume any unleased, vested lands for public purposes without paying compensation, except in respect of capital spent by the Trust in improving them Under the amended Act the Trust have no interest to pay, and Government and the Municipality must, on resuming vested lands, pay the Trust their full market value There are other modifications of the old arrangements, similarly making for the financial benefit of the Trust The new Act makes the Municipality the reversioners of the Trust's assets and liabilities Apart from finance, the new Act contains important new sections under which the Trust are empowered to co-operate with employers of labour for the housing of the working classes by constructing chawls for their employes and leasing them to the employers at a rent calculated so as to yield to the Trust in the course of the 33 years of the lease the capital sum spent in the scheme, *plus* 4 per cent interest, the chawls then becoming the property of the employers The Trust are now co-operating with several millowners in schemes under these sections

Plan of operations.

The work of the Trust, so far as it has gone or is planned, can be divided into two parts The first concerned the immediate alleviation of the worst burdens of insanitation and the second consists of opening up new residential areas The Trust began by attacking the most insanitary areas Two broad roads, running due east and west, were cut through the worst parts of the city sweeping away a mass of insanitary property and admitting the healthy westerly breezes to the most crowded parts of it These thoroughfares are known as Sandhurst-road and Princess street They are as yet hardly completed, but the greater parts of them are already settled under the new conditions, with sites on both sides of them disposed of on long leases and many new buildings built and occupied Meanwhile, large areas of good building land, lying idle for want of development works have been developed and brought on the market, sold at remunerative rates and largely built upon An instance of this development is the Chaupati estate, the land overhung by Malabar Hill, between it and the native city This was cut up with fine new roads and is now nearly covered with modern suburban dwellings Two of the most insanitary quarters in the midst of the city have been levelled to the ground and rebuilt in accordance with hygienic principles Sanitary chawls have been built for about 20,000 persons So much for the first phase of the Trust's labours

The second phase, arising gradually out of the first and advancing along with its later stages, consists of the development of a new suburban area in the north of the island, beyond the present city, and the construction of great arterial thoroughfares traversing the island from north to south The latter undertakings were originally known as the eastern and western avenue schemes, but the cost of land is rising so rapidly throughout the city, and the expense of new works is accordingly growing so heavy, that the western avenue has had practically to be abandoned and modified improvements of existing highways from south to north, on the western side of the city, substituted for it The eastern avenue will run from the back of Crawford Market, the northernmost limit of the modern commercial city directly north to Lalbagh, near the entrance road to old Government House, Parel, and have a width varying from 100 to 120 feet It is divided into three sections The first, starting from Crawford Market and reaching to Pydhonie, is already in the hands of the engineers for execution The second, for which Parel-road will be widened, is awaiting the passage of the new legislation enabling the Trust to raise additional funds The third and northernmost portion is under construction

Beyond the northern end of the Eastern Avenue, the north east portion of the island extending some three miles, consisted until recently of swampy rice lands, interspersed with bits of jungle and small hills and a few building areas The Trust have acquired the whole area A broad thoroughfare has been laid through the centre of it, with other roads connecting the outlying parts with the central road and with the railway stations Some of the hills have been levelled and the material from them used to fill the low-lying parts of the estate Development some time ago reached the stage of readiness for building in the halt of the scheme nearest the city, and the Trust are now devoting their attention to facilitating private enterprise in this direction The suburb will probably become largely residential for people whose daily pursuits take them to the southern city but its chief use will be for those whose avocations employ them in the large new port extension which the Port Trust are carrying out at the north of the present port and where the new cotton green and grain yards will be situated The Port Trust have reclaimed 596 acres of land from the north of the harbour, at a cost of £1,833,553, and the whole of the export trade of the port will be concentrated in this new area and in that adjoining it, at Mazagaon and Sewri

Statistics.

The following are some statistical details of the progress of the Trust's operations By the end of 1913-14 the Board had raised Rs 193 lakhs by loans and their total capital receipts, including 50 lakhs received from the Government of India in 1911 and 4 lakhs from the Government of Bombay in 1913, amounted to Rs 570 lakhs, out of which they had spent 29 lakhs on improvement of Government and Municipal lands temporarily vested in them, Rs. 523 lakhs on their own acquired estates and 3 lakhs on their office building The following table shows the extent of the development operations carried out by the Trust up to the end of the official year 1913-14 :—

Developed Land.	Sq yards in thousands
Permanently leased	700 56
Chawl sites	67 17
Yet to be permanently leased	285 11
Remainder roads, open spaces, etc	432· 8
Total	1,485 65

Rent of permanently-leased area .	Rs 10 52 lakhs
Area of undeveloped land in thousands of square yards .	5,426·2
Cost of acquisition	Rs 212 42 lakhs

The disposal of plots on the Trust's newly developed estates is now progressing at a favourable rate Practice shows that for obvious reasons the disposal of plots proceeds most slowly when an estate first becomes available for leasing to the public When the first plots have been taken up and house building begins to assume defin. proportions the remaining sites pass off without difficulty The total plots disposed of during the last official year (1913-14) was above normal, both as regards area and value Taking all previous years into account the number of plots disposed of in 1913-14 (75) was one short of the record established in 1912-13 The total area (227,145 square yards, including land resumed by Government) disposed of in 1913-14 beat the previous best (109,409 square yards in 1912-13) by a large amount, while the annual rental derivable from the year's transactions is Rs 1,32,361 So far as area is concerned the land disposed of is far above normal and is a record, but in point of value there was a drop of about Rs 8 lakhs in capital value and Rs 33,000 in rental, as compared with the exceptional year 1912-13 The price per square yard realised for plots leased during the year was considerably less than during the two preceding years Only seven plots realised over Rs 100 per square yard, this being due to the fact that the most valuable plots in the area available for leasing had already been disposed of The highest price per square yard realised in 1912-13 was obtained for two plots opposite Crawford Market on the Princess Street Estate which were let on a basis of Rs 652 per square yard which is second only to the rate of Rs 730 per square yard (£236,000 per acre) obtained for the adjacent plot in 1911-12

By the beginning of 1913-14 completion certificates had been issued for 288 buildings on the Trust Estate, exclusive of Police chawls and Trust chawls In 1913-14 certificates were granted for 28 new buildings

The Working Classes.

The average total population in the Trust chawls was 16,560 in 1913-14 The total rent of the 4,362 rooms in Trust's chawls at the maximum rates works out to Rs 2,30,856 per annum, but, owing to vacancies in some chawls, the maximum for 1913-14 was Rs 2,29,481 The percentage of outgoings to gross chawl revenue is found to be approximately 31 83 per cent, this proportion being higher than in the case of private chawls mainly because private owners spend far less than the Board on the sanitation of their chawls On the basis of the maximum annual rent of Rs 2,30,856 and outgoings at 31 83 per cent, the net annual income works out to 68 17 per cent of Rs 2,30,856, *i.e.*, Rs 1,55,375, *i.e.*, 4·55 per cent on the cost of chawls (including value of land) amounting to Rs 34,55,199 on which the Board pay annual Interest and Sinking Fund charges at 4 61 per cent amounting to Rs 1,59,285 There was thus a net loss of Rs 1,990 on the existing chawls, the average population of which was 14,772 during the year under review

With the one exception of the old Nagpada chawls where there are special conditions the death rate in the Trust's permanent chawls has always been considerably below the general death rate in the vicinity The smallest one-room tenement on the Trust Estate is large enough for a family of five

A New Method.

A further development of method in dealing with insanitary areas is now in prospect It has already been recognised that estimates on the old wholesale demolition lines would be prohibitively expensive for the large "represented" areas remaining to be dealt with, owing to the constantly increasing cost of property and work, and could benefit only small areas surrounded by larger areas in which insanitary conditions are always going from bad to worse with the extension of building operations, under the lax Municipal by-laws already referred to It is recognised that what is wanted is some general scheme of improvement that can be applied all over the city and some means of putting an immediate check to the spread of further insanitary evils through the weakness of the by-laws, especially in relation to the lighting and ventilation of one-roomed tenements The Trust officers have devoted much time to studying this question and the chairman some time ago propounded a scheme by which all inadequately lighted and ventilated rooms in Bombay might be closed gradually and house-owners required, with some assistance from public funds, to reconstruct their houses, so that all rooms in them used for dwellings might have sufficient light and air The scheme attracted the attention of Government, who appointed a representative committee to consider the new plan The matter has not yet crystallised into definite action

The Indian Ports.

The administration of the affairs of the larger ports(*Calcutta, Bombay, Madras, Karachi, Rangoon and Chittagong*) is vested by law in bodies specially constituted for the purpose They have wide powers, but their proceedings are subject in a greater degree than those of municipal bodies to the control of Government Except in Calcutta, the elected members are fewer in number than the nominated members At all the ports the European members constitute the majority and the Board for Rangoon consists wholly of European members

The income and expenditure of the five principal ports managed by Trusts (Aden is excluded from the tables) is shown in the following table —

	Income	Expenditure	Capital Debt
	£	£	£
Calcutta	949,754	980 021	6 125 869
Bombay	592,538	653,111	8 644 383
Karachi	305,740	251,337	1 524 278
Madras	292 897	239,720	617,207
Rangoon	84,345	75 553	1 452 513

The Director of Statistics (Department of Commerce and Industry) last year issued the following returns showing the ratios borne by the income and the expenditure of each port to the total income and the total expenditure, respectively, of all the chief Indian ports :—

	Income per cent	Expenditure per cent
Calcutta	41 3	46 2
Bombay	26 3	24 8
Madras	4 9	5 6
Karachi	11 1	11 5
Rangoon	12 7	11·3
Chittagong	7	·6

The official return of the Director of Statistics shows that in the ten years ending 1912-13, the income and expenditure of each port have increased as shown in the following table The total income of all the ports has increased in the decade by 79 8 per cent and the total expenditure by 83 1 per cent —

	Increase per cent.	
	Income	Expenditure
Calcutta	78 9	91·5
Bombay	39 8	91·5
Madras	96 1	108 7
Karachi	139 8	139 7
Rangoon	158 5	140 3
Chittagong	71 9	122 3

The capital debt of the Trusts at the end of 1912 13 was about £17,645,410 against £16,613,333 in 1911-12

CALCUTTA.

The Commissioners for the Port of Calcutta are as follows —

Appointed by Government —The Hon'ble Mr C J Stevenson Moore, C V O, I C S, Chairman, the Hon'ble Mr H J Hillary, Officiating Vice Chairman

Elected by the Bengal Chamber of Commerce — Messrs A C Patterson (Becker Gray & Co), W E Crum (Graham & Co), R G Monteath (Mackinnon, Mackenzie & Co), and the Hon'ble Mr J C Shortock (George Henderson & Co), S Eustace (Kilburn & Co), M J Calvocoressi (Ralli Bros)

Elected by the Calcutta Trades Association — Mr W. Smith (Hamilton & Co)

Elected by the Bengal National Chamber of Commerce —Babu Amulya Dhan Addy

Elected by the Corporation of Calcutta — Dr Haridhan Dutt

Nominated by Government —Messrs W S Hopkins, I C S (Magistrate of Howrah), G C Godfrey (Agent, Bengal-Nagpur Railway), Col C A R Browne, R E (Agent, Eastern Bengal State Railway), Mr C Laird MacGregor, I C S (Collector of Customs), and Captain G S Hewett, R I M, Deputy Director, Royal Indian Marine, *ex-officio*

The principal Officers of the Trust are :—

Officiating Secretary —Mr T H Elderton, B A

Chief Engineer —Mr J Scott, M INST C E.

Consulting Engineer and London Agent — Mr J A Angus, M INST C E

The income of the Trust in 1913-14 amounted to Rs 1,51,28,435 and exceeded that of 1912-13, the previous highest record, by Rs 8,82,118. The tonnage of goods handled at the jetties was 1,187,000 and exceeded that of 1912-13 the previous highest, by 221,000 tons At the wet docks the total import and export traffic exceeded 5 million tons in 1911-12, but there was a falling off of 214,000 tons During 1913-14, 1,650 vessels, with a gross tonnage of 6,926,817, entered the port as against 1,730 vessels, with a gross tonnage of 7,074,830 in 1912-13. With the steady growth of trade and shipping at the port, the Port Commissioners' income has expanded as follows during the last decade :—

Year	Income Rs
1903–04	79,65,376
1904–05	88,86,726
1905–06	89,55,395
1906–07	1,00,08,736
1907–08	1,09.57,142

Year	Income Rs
1908-09	1,20,16,630
1909-10	1,18,46,518
1910-11	1,28 26,171
1911-12	1,35,90,408
1912-13	1,42,46,317
1913-14	1,51,28,435

The figures of income do not however indicate fully the expansion that has taken place in the operations of the Trust, because since the year 1902-03 the Commissioners have reduced their rates and charges at various times

The expenditure during the last official year amounted to Rs 1,50,61,151 This is Rs 9½ lakhs more than in the preceding year The Port Commissioners point out that an increase in their working expenses is inevitable, owing to the large amount of capital sunk in and to provide for future port extensions and at present unproductive, to increased cost of repairs and maintenance as plant increases and to extended dredging operations The Commissioners have formulated proposals which without imposing any inequitable burden upon trade will restore equilibrium between income and expenditure There was a net deficit in 1913-14 of Rs 5,73,015, which has been met out of the Revenue Reserve Fund accumulated out of past surpluses

Various considerable improvements for the expansion of the port have recently been carried out to provide for the growth of trade An important project recently undertaken was one for the lighting of the lower reaches of the Hughli with a view to their navigation by night Considerable progress has been made with a new scheme for the extension of the docks A special committee was appointed in England in 1913, to visit and inspect British and Continental ports with a view to advising the Commissioner in the light of the latest experience there on various points connected with new works

But these undertakings only belong to the outskirts of the main problem The remedial measures of the Port Trust have proved beneficial, but they are insufficient to meet the ever-increasing requirements of trade The question of the congestion at the Calcutta jetties and the absence of adequate transport facilities for the present volume of trade, has been engaging the attention of Government for some considerable time past There has been a very great expansion of the trade of the port and a large increase in the number and tonnage of vessels entering it, and the lack of sufficient accommodation has resulted in serious delays to vessels and consequent loss, chiefly arising from the inadequacy of facilities for the discharge of cargo at the jetties

The Government of Bengal, in December, 1913, appointed a Committee to investigate the important questions represented by the problem of the future development of the port. The Committee consisted of the Hon Sir William Duke, Chairman, Sir Henry Burt, the Hon. Mr. A M Monteath, the Hon Mr J. C. Shorrock, the Hon Raja Hrishikesh Leka, Mr A. G Lyster, and Mr H F Howard, members and Mr R N Reid, I C S, Secretary.

The Committee was empowered to—

(1) examine the existing traffic and port facilities in Calcutta and its immediate neighbourhood,
(2) investigate the present and future requirements of the trade of Calcutta, and
(3) determine the extent to which the various transport agencies shall provide new works and other facilities in order that these requirements may be fully met for as long a period as it is reasonable to prepare a forecast

The Bengal Government, in an explanatory announcement, agreed "that the subject for consideration is one of wider range than an enquiry into the facilities afforded to the import trade at the jetties, and that it concerns rather the question whether proper facilities of all kinds are being provided to enable the port and railway authorities to deal promptly and adequately with the rapidly-expanding trade of Calcutta in accordance with a well-defined and carefully-thought-out policy There are several projects for improving transport facilities and the railway and other approaches to the port, which have been prepared at various times and which are now under consideration, such as the provision of railway bridge over the Hughli at Pankhati, the expansion of the docks, the provision of new coaling berths on the Howrah side of the Hughli, the Grand Trunk Canal Project, the removal of the Hatkhola jute mart and additions to the jetties These projects are of the first importance and involve enormous expenditure and they should, it is rightly held, be examined and co-ordinated by a committee whose duty it would be to make an exhaustive enquiry into the requirements of the trade of the port and the means by which these requirements could be met"

The Committee's report was published in March, 1914 It approved of the new scheme already undertaken by the Port Commissioners for the extension of the Docks saying "we are of opinion that the general layout of the scheme is suitable, and that it will ensure an ample margin for the expansion of trade which is likely to take place in any period that can reasonably be foreseen" The Committee said that "the main criticism to which the conduct of the Port affairs is open is that the inception of these schemes was delayed until the great increase of trade during the last two years has showed only too conclusively how urgently they were required"

At the same time, the Committee recognised the eminent services rendered to the Port by the late Sir Frederick Dumayne, during his tenure of office as Vice Chairman of the Port Commissioners, stating that the schemes of extension recommended were initiated under his auspices and that their inception is now possible is due to his foresight and to his grasp of the situation

The Committee considered that the future expansion of the seaborne trade of Calcutta should take place in the neighbourhood of the docks. Their principle conclusions, in addition to their approval of the dock extension scheme, may be summarised as follows A standing advisory Committee should be appointed in reference to the railway approaches and lay-out of the siding accommodation for the new dock system

the Committee to consist of the traffic officers of the Port Trust and of the railways concerned It would be unwise to incur a large outlay in developing the present jetties, but steps should be taken to mitigate the existing defects in regard to them without undue expenditure on schemes that will not be permanently useful The whole question of the improvement of the river Hughli should be thoroughly investigated and decided on at an early date The present site of the Howrah bridge should be adopted for the proposed new bridge, which should be wide enough to allow of three streams of traffic in each direction, in addition to the trams, and should carry greatly widened footways. The Improvement Trust should consider the whole question of road communication in connection with the prospective development scheme of the Port Commissioners. The opening of a second railway bridge over the Hughli will be required eight years hence. The Committee recommended various measures to enable the revenues of the Port Trust to meet the charges on the large capital works contemplated

The Capital debt of the Port at the end of the last financial year was Rs 9,18,88 04 The total assets amounted to Rs. 12,07,34,832

BOMBAY.

The Board of Trustees of the Port of Bombay is constituted of 16 members, as follows —

Appointed by Government —The Hon'ble Sir F L Sprott (*Chairman*) Mr Navroji Jehangir Gamadia, Mr Mahomedbhoy Currimbhoy Ebrahim (Currimbhoy, Ebrahim & Co) Captain W Lumsden, C V O, R N (Director of the Royal Indian Marine), Mr R Woolcombe (Agent, B B & C I Railway), Mr R F L Whitty (Collector of Customs, Bombay), Major H A L Hepper, R E (Agent, G I P Ry), Mr Purshotamdas Thakurdas (Narandas Rajaram & Co) and Mr P R Cadell, C I E, I C S (Municipal Commissioner, Bombay)

Elected by the Chamber of Commerce —The Hon'ble Mr T W Birkett (Killick, Noxon & Co), the Hon'ble Mr Marshall F Reid, C I E (Bombay Co, Ltd), Mr J N Metaxa (Ralli Bros), The Hon'ble Mr W L Graham (W & A Graham & Co) and Mr A H Froom (Peninsular and Oriental Steam Navigation Co, Ltd)

Elected by the Native Piece-goods Merchants' Association —Mr Devidas Madhowji Thakersey (Madhowji Thakersey & Co)

Elected by the Millowners' Association — Sir Vithaldas D Thackersey, Kt (Thackersey, Mooljee & Co)

The following are the principal officers of the Trust —

Secretary — Mr H E Hart

Engineers —Messrs P G Messent, M Inst C E (Chief Engineer), Mr A C W Fosbery, M Inst C E (Deputy Chief Engineer), L H Savile, A M Inst C E (Deputy Chief Engineer, New Docks Works), C Anderson (Mechanical Superintendent)

Port Officer —Commander St L S Warden, R I M

The revenue of the Trust in 1913-14 amounted to Rs 98,79,805 This is the highest on record in the history of the port, and in excess of the previous highest figure, that for 1912-13, by nearly ten lakhs The expenditure from revenue was Rs 82,30,307, leaving a surplus of Rs. 16,49,498, available for transfer to the Revenue Reserve Fund This fund was thus brought up to Rs 1,05,58,869 (Its purpose is to meet the special outgoings of the Trust after the completion of the Alexandra Dock which was actually opened in March, 1914) On capital account the expenditure during the year aggregated Rs 1,54,28,303 of which Rs. 1,44,10,679 was spent upon new large works— Alexandra Wet Dock and Hughes' Dry Dock and the Mazagaon-Sewri port extension reclamation The total debt of the Trust at the end of the year amounted to Rs 12,96,65,747

The total trade of Bombay port during the last official year was Rs 209½ crores, an increase compared with the previous year of Rs 19 lakhs or 09 per cent The number of steam and square rigged vessels which entered the docks or were berthed at the harbour walls and paid dues, excluding those which remained for unloading and loading in the harbour stream during recent years, including last year, is shown by the following statement —

Year	Number	Tonnage.
1906-07	1476	2,690,406
1907-08	1477	2,678 345
1908-09	1474	2,633,303
1909-10	1611	2,747,779
1910-11	1589	2,866,623
1911-12	1519	2,767,913
1912-13	1566	2,926,506
1913-14	1579	3,135,597

Bombay Port Extension.

The Bombay Port Trust have in the past year partially completed important new development schemes, which will add greatly to the facilities of the port Foremost amongst these works comes the Alexandra Dock, the equipment of which will have no superior in the world

The starting point of the modern port of Bombay was the year 1862, when the Elphinstone Land and Press Company, which had already done useful development work, entered into a contract with Government to provide a hundred acres for the terminus of the Great Indian Peninsula Railway, receiving in return the right to reclaim from the sea for its own advantage two hundred and fifty acres fronting the properties it had already acquired The Company brought its estate into bearing with rare enterprise

Doubts were felt subsequently of the wisdom of conferring upon a private corporation such an enormous monopoly as the control of the harbour front These were resolved in 1869 by the decision to buy out the company and vest its properties in a public trust. The estate passed into the possession of the Govern-

ment in 1869, the purchase price being approximately two millions sterling, and after being managed by a department of Government in the interregnum, the property passed to the newly-constituted Port Trust in June, 1873

Government purchased in 1879, on behalf of the Trust, the private foreshore owners' rights, at a cost of Rs 75 lakhs, and at the same time reconstituted the Trust on a basis on which it has worked exceedingly well until the present day The late King Emperor Edward VII, during his visit to Bombay in 1875, laid the foundation stone of the first large dock, which has since been known as Prince's Dock This was opened in 1880, and thenceforward the financial difficulties hitherto experienced by the Port Trust disappeared The construction of the Victoria Dock followed and recent years have provided an unbroken succession of surplus receipts into the treasury of the Port Out of these profits charges on trade have been reduced wherever they pressed and the financial position of the Trust has greatly been strengthened by the building up of a large revenue, by the institution of sinking funds for the repayment of the whole of the existing debt and by liberal appropriations to depreciation accounts

The trade of the port rapidly outgrew the accommodation provided at Prince's and Victoria Docks The developments now in progress are the result and are estimated to provide for the requirements of the Port for another 20 years, or longer The new schemes may be divided into four heads

(*a*) The construction of the Alexandra Wet Dock and Hughes Dry Dock of which His Majesty The King Emperor laid the foundation stone during his visit to Bombay as Prince of Wales in 1905 His Excellency the Viceroy with Her Excellency Lady Hardinge, performed the opening ceremony in March, 1914,

(*b*) The reclamation for the development of Port facilities of 583 acres, with a wharf frontage 2¼ miles in length—an addition of some 4½ per cent to the area of the city—at Mazagaon and Sewri, beyond the present Docks at the extreme north of the harbour,

(*c*) The building of a new railway leading from the main lines of the G I P and B B & C I, outside the city, to the Docks, in order to provide for more expeditious handling of heavy railborne traffic, and

(*d*) The construction of a complete bulk oil installation at Sewri, at the north of the docks, with a deep-water pier

The total estimated cost of the new dock and its equipment is Rs 5,86,43,570, or, say, £3,909,571; cost of the Port Trust Railway over 64 lakhs (£426,666), of the bulk oil installation, 22¼ lakhs (£147,500), and of the reclamation and contingent works, Rs 388 lakhs, or, say, £2,586,666

The contract for the Alexandra Dock was given to Messrs. Price, Wills & Reeves in 1903 The dock is oblong in shape, with two bays at the north end. The total area of the wet basin is 49·52 acres, the length of quays, including the harbour wall, nearly three miles There are 17 berths 500 ft in length These berths are equipped with hydraulic cranes and transit shed accommodation varying from 3-storeyed sheds 400 ft long by 120 ft wide, to single storeyed sheds 400 ft long by 100 ft wide Railway sidings run between the quays and the sheds, also behind the sheds On the harbour wall there is a quay 3,000 ft long, equipped with hydraulic cranes and transit sheds The north end of this quay is intended for a trooping berth Hydraulic power is used for working the cranes, dock gates, machinery, transit shed lifts, capstans, etc A floating crane to lift 100 tons forms part of the equipment of the dock The dock entrance is through a lock on the south-west, parallel to which runs the new dry dock, a thousand feet long, a hundred feet wide, and with a sill thirty-four and a quarter feet below high water ordinary neap tides

Outside the dock, beyond the entrance lock, runs the new mole, a continuation of the south-west wall, alongside which ocean steamers may embark and disembark their passengers direct from the shore, thus dispensing with the tiresome interposition of the tender In the immediate vicinity of the landing pier, a Customs house, refreshment and waiting rooms, post and telegraph offices and every facility the traveller can require are under construction

The small Carnac basin, immediately north of the new dock and formerly used by country craft, has been filled in, thus enabling a canal to be cut from the northern extremity of Alexandra Dock, and extending to Victoria Dock The width of the canal will be 80 ft Four berths will be provided to permit ships to lie at the wharves on either bank The waterway will enable ships to be taken into any part of the Bombay dock area through the Alexandra Dock entrance This will probably lead to the closing of the old dock entrances, with the result that ships will be saved much intricate handling and the Port Trust will be relieved of the necessity of expensive dredging operations

The railway sidings and series of transit sheds in the new dock were planned according to the most modern principles of dock management

The Sewri reclamation will chiefly be utilised for the accommodation of the export trade of cotton, grain and seeds, which form the largest item in the traffic of the port The old cotton green—or market—is situated at Colaba, at the extreme southern end of the port and has long been greatly overcrowded, besides encumbering that end of the port The new cotton green and godowns on the reclamation will cover about 166 acres, with 182½ acres available for future extension The present greens and godowns at Colaba occupy 50 acres Unloading sidings with accommodation for 700 wagons are to be provided, in addition to ample running lines, as compared with sidings to hold 154 wagons at Colaba at present. The constant outbreak of incendiary fires on the Colaba Cotton Green led to the opening of a special, temporary cotton green on the new reclamation in 1914 and this will be used until the large new green is ready

KARACHI.

The Members of the Board of Trustees of the Port of Karachi are as follow, being seventeen in number —

Chairman —Mr H C Mules, C S I, M V O

Vice-Chairman —Mr F S. Punnett

Appointed by Government —Mr H C Sparke, Major W E R Dickson R E, Mr T J Stephen (The National Bank of India, Ltd), Mr W U Nicholas (Anderson & Co)

Elected by the Chamber of Commerce —The Hon'ble Mr M de P Webb, C I E (Forbes, Forbes, Campbell & Co, Ltd), Mr J H Fyfe (Mackinnon, Mackenzie & Co), Mr James Kenyon (Sarday, Patrick & Co)

Elected by the Municipality —The Hon'ble Mr. Harchandrai Vishindas, B A, L L B, and Mr Wadhumal Oodharam, B A, L L B

Officers of the Trust are —

Port Officer —Commander Wilson, R I M
Secretary —Mr R W Cooper
Chief Engineer —Mr G R Lynn

The revenue receipts and expenditure of Karachi port for the year 1913-14 were as under —

Revenue receipts (excluding expenditure from the Port Fund Account) Rs 48,46,100, Expenditure Rs 39,20,852 Surplus Rs 9,25 248 The revenue receipts were the highest ever realized in the history of the port, exceeding those of 1912-13, the previous highest by Rs 2,59,998 In 1907 the Port Trust appointed a committee, who after a very careful enquiry reported that as far as they were able to estimate, the income in 1917-18 would approximate Rs 45,87,800, being roughly 50 per cent more than the income in 1906-07 The Board adopted the figure, and in reporting on the subject, remarked that "looking at the growth of this port in the past ten years, in which period their revenue has increased by 25 per cent, they can see no reason why their revenue should not increase by 50 per cent in the next ten years" The figures given above show that the Board's estimate was far from unduly sanguine, as their income increased by 50 per cent in half the period named The capital debt of the Port, at the close of the last financial year, amounted to Rs 2,28,64 177

New Port Trust Offices are being built and are approaching completion A new Customs House has been undertaken

The number of vessels entering the port in the last official year was 3,163, with a tonnage of 2,056,379 tons, against 3,742, with a tonnage of 2,195 904 tons in 1912-13 This is exclusive of vessels put back and fishing boats The number of steamers which entered the port was 930 against 990 in the previous year The tonnage of steamers entering the port was 1,941,407 compared with 2,049,219 in the previous year

Imports landed during the year amounted to 1,067,004 tons and shipments 1,483,069 tons

The close of the year 1912-13 marked the practical completion of works, the result of which will be a new departure in the history of the Trust The year 1913-14 found the new "Mansfield" import yard in full working order, and the old yard handed over to the North-Western Railway Development of port facilities is in progress in several other directions

MADRAS.

The following gentlemen are the Trustees of the Port of Madras —

Officials —The Hon'ble Sir Francis J E Spring, K C I E (Chairman), Mr A S A Westropp, I C S (Collector of Customs), Mr H Hood the Port Officer, Commander W B Huddleston, R I M, and Mr A H Morin

Non-Officials —Khan Bahadur Muhammad Abdul Kuddus Badsha Sahib, M R Ry Rao Bahadur P Theagaraya Chetti Garu, B A, M R Ry. Rao Bahadur G Naravanaswami Chetti Garu

Representing Chamber of Commerce —Mr G Fraser, Sir J A Boyson, Mr R Greenall and the Hon'ble Sir Hugh S Fraser

Trades Association —The Hon'ble Mr R Maclure Savege

The receipts of the Trust from all sources of revenue during the financial year 1913-14, including the grant of Rs 50,000 from the Government Port Fund, were Rs. 15,27,501, and the gross expenditure out of revenue Rs 9,61 816, or to the equivalent of 62 97 of the gross receipts The actual working expenses of the port came to 41 94 per cent of the gross receipts Vessels of all sorts to the number of 624 and a tonnage of 1,777,470, paid port dues and about 797,665 tons of exports and imports were dealt with at the port Total value of the trade of the port in 1913-14 was Rs 2,411 82 lakhs, or 10 per cent more than in 1912-13

Constant improvements of the port are in progress to meet the increasing demands of trade. The Trust recently launched out into a policy of borrowings in order to enable the entire 200 acres within the enclosed harbour to be deepened from 28 to 32 feet below low water, with quay extensions The Government of India sanctioned a loan of Rs 50 lakhs for this purpose The work has been vigorously proceeded with* The Port Trust's debt at the end of the official year was Rs 92,58,110

RANGOON.

The personnel of the Commissioners for the port of Rangoon is comprised of the following thirteen members .—

Appointed by Government —Mr. George Cunningham Buchanan, C I E, M Inst C E (Chairman), Mr James Algernon Stevens (Chief Collector of Customs, Burma), Mr. William Henry Tarleton (Commissioner of Police, Rangoon), Commander Seymour Douglas Vale, R.I M (Principal Port Officer, Burma),

Messrs William Henry Lawson Cabell, B A, I C S (President, Rangoon Municipal Committee), Charles Townley Graham, Philip Henry Browne and Francis Dundas Couchman

Elected by the Burma Chamber of Commerce — Messrs John Renwick Halliday, Berkeley John Byng Stephens, James Cleland Mackendrick and William Macdonald

Elected by the Rangoon Trades Association — Mr. Jules Emile DuBern

Officers of the Trust are —

Secretary —Mr I Cowling.
Resident Engineer —Mr J Ll Holmes
Executive Engineer (River Training Works)— Mr W G Keay

The receipts and expenditure on revenue account of the port of Rangoon in 1912-13 were as follow —

	Rs
Receipts	51,84,773
Expenditure ..	37,03,032

The capital debt of the port fund at the end of the year was Rs 2,67,87,702

The total value of the trade of the port during the year was Rs 5,573 20 lakhs, as compared with Rs 5,436 lakhs in the preceding year

The cargo landed on the Commissioners' wharves and pontoons from sea-going vessels amounted to 608,806 tons and the total volume of imports from European ports increased by 26 per cent and the imports from Asiatic ports declined The traffic at the jetties for inland vessels totalled 1,267,552 tons The total number of steamers entering the port was 1,473 with a total net tonnage of 2,937,221 being an increase of 21 steamers and 83,970 tons over the previous year, and 1,483 steamers with a net tonnage of 2,958,733 left the port The total net tonnage of vessels entering the port was the largest on record

There took place on the 17th February, 1914, the inauguration of the recently completed river training works, rendered necessary by the erosion of the right bank of the Rangoon river above the town to such extent as to threaten the permanent diversion of the main stream from the Rangoon foreshore and the consequent formation of a sandbank in front of the whole of the port frontage The works comprised a training wall 10,000 ft long and the dredging of a channel through the shoal in front of the wall It is calculated that 99½ per cent of the river is brought under control. One and a half million tons of granite were used in the work The wall was practically completed one year and nine months before the estimated time The object of the work has successfully been accomplished, the main channel of the river has been diverted into its new course and the erosion of the right bank has ceased The revised estimate for the complete work is Rs 138 lakhs, against the sanctioned estimate of Rs 150 lakhs The cost is borne by a free grant of Rs 50 lakhs from the Government of India and by the raising of port debenture loans The work being non-revenue-producing, will impose a burden of some Rs 5½ lakhs on the trade of the port

BOY SCOUTS.

The Boy Scouts movement, initiated in England by Lt-Gen Sir Robert Baden-Powell (the Chief Scout), has spread widely in India, and the Boy Scouts Association has received the patronage of the Viceroy and the heads of the local governments The aim of the Association is to develop good citizenship among boys by forming their character—training them in habits of observation, obedience and self-reliance—inculcating loyalty and thoughtfulness for others—and teaching them services useful to the public and handicrafts useful to themselves

The following division of duties of the Indian Headquarters is officially published for information —*The Assistant Chief Commissioner* deals with all matters of Organisation and Discipline, including the issue of Warrants to new Local Associations and Officers, also the registration of new troops, which should be applied for on Form C obtainable from the General Secretary Recommendations for awards of Life Saving Medals and Certificates should be made to him and also all applications for exemption from the swimming test for 1st class (Regulation 21) and all correspondence on the subject of Challenge Trophies Correspondence on the above subjects should be addressed to him at Fort William, Calcutta, by Local Secretaries, *always through the District and Provincial Commissioner where such exist The General Secretary* (Captain T H Baker, Cubbon Road, Bangalore) deals with routine matters, official publications, sale of badges, and also all matters connected with the official publication, *The Boy Scouts Gazette of India* Local Secretaries can communicate with him direct on these matters and it is not necessary to refer to the Commissioners on such subjects

The *Boy Scouts Gazette of India* published monthly, is the official organ of the Movement in India and in it are notified all official notices and orders issued by the Indian Headquarters. It is obtainable from the General Secretary. Subscription Rs. 2-8-0 per annum

HEADQUARTERS STAFF IN INDIA.

Chief Commissioner,—Lieut -General Sir Robert I Scallon, K C B, K C I E, D S O, A D C, Lucknow

Private Secretary to Chief Commissioner—Captain W R Daniell, 123rd Outram's Rifles.

Deputy Chief Commissioner—The Hon'ble Major-General W R Birdwood, C S I, C I E, D S O, Simla

Commissioner for Sea Scouts—Captain W. Lumsden, C V O, A D C, R N, Director, Royal Indian Marine, Royal Dockyard, Bombay

Assistant Chief Commissioner—J. A Power-Robertson, 32 Dalhousie Square, Calcutta.

General Secretary—Captain T H Baker, M, D. (retired), Cubbon Road, Bangalore, Mysore, and Officiating Treasurer.

Hon Asstt Secretary to Head Quarters Council— R N Bodger, Garstin Place, Calcutta

Bankers—The Alliance Bank of Simla, Calcutta.

Famine.

Famine in India is the inevitable accompaniment of economic conditions which leave the bulk of the people dependent on the soil for their means of livelihood It is intensified, because the produce of the soil over the greater part of India is dependent on a short rainy season, and the rains are erratic and subject to violent fluctuations It falls with exceptional severity on India because the soil is divided into a multitude of petty holdings, tilled by people without any capital, living for the most part from hand to mouth, and amongst whom credit ceases to exist as soon as the rains fail In other agricultural countries there are good seasons and bad, but there is none other, with the possible exception of China, where in a famine year millions of acres may not yield so much as a blade of grass, except under artificial irrigation The conclusion to be drawn from these conditions is that for many years to come India must be susceptible to famine The shock of famine may be mitigated by the spread of railways, by the development of irrigation, the growth of manufacturing industry, and the improvement of rural credit There is evidence that all these forces are tending greatly to reduce the social and economic disturbance caused by a failure of the rains But they cannot entirely remove it

Famine under Native Rule

At one time there was a general tendency to attribute famine in India entirely to the effect of British rule In the golden age of India, we were told—whenever it may have been—famine was unknown But India had been drained of its resources of food by the railways, the people had been impoverished by the land revenue demand, and the country as a whole had been rendered less capable of meeting a failure of rains by the "Drain" caused by the Home Charges (*qv*) These fallacies have disappeared under the inexorable logic of facts A better knowledge of Indian history has shown that famines were frequent under Native rule, and frightful when they came "In 1630," says Sir William Hunter, in the History of British India, "a calamity fell upon Gujarat which enables us to realise the terrible meaning of the word famine in India under Native rule Whole cities and districts were left bare of inhabitants." In 1631 a Dutch merchant reported that only eleven of the 260 families at Swally survived He found the road thence to Surat covered with bodies, decaying on the highway where they died, there being none to bury them In Surat, that great and crowded city, he could hardly see any living persons, but "the corpses at the corner of the streets lie twenty together, nobody burying them Thirty thousand had perished in the town alone Pestilence followed famine" Further historical evidence was adduced by Sir Theodore Morrison, in his volume on the Economic Transition of India The "Drain" theory has been exploded. It has come to be seen that whilst railways have checked the old-fashioned practice of storing grain in the villages, they have made the reserves, where they exist, available for the whole of India In India there is now no such a thing as a food famine, the country always produces enough food for the whole of the population, famine when it comes is a money famine, and the task of the State is confined to providing the means for those affected by drought to earn enough to buy food The machinery whereby this is done will be examined after we have seen the experiences through which it was evolved

History of recent famines.

The Orissa famine of 1865-67 may be taken as the starting point, because that induced the first great and organised effort to combat distress through State agency It affected 180,000 square miles and 47,500,000 people The Bengal Government was a little slow in appreciating the need for action, but later food was poured into the district in prodigious quantities Thirty-five million units were relieved (a unit is one person supported for one day) at a cost of Rs 95 lakhs The mortality was very heavy, and it is estimated that a million people, or one-third of the population, died in Orissa alone This was followed by the Madras famine of 1866, and the famine in Western India of 1868-70 The latter famine introduced India to the great migration from Marwar, which was such a distinguishing feature of the famine of 1899-1900, it is estimated that out of a total population of a million and a half in Marwar, one million emigrated There was famine in Behar in 1873-74, then came the great South Indian Famine of 1876-78 This afflicted Madras, Mysore, Hyderabad and Bombay for two years, and in the second year extended to parts of the Central and United Provinces and to a small tract in the Punjab The total area affected was 257,000 square miles and the population 58,500,000 Warned by the excessive expenditure in Behar and actuated by the desire to secure economy, the Government relief programme was not entirely successful The excess mortality in this famine is said to have been 5,250,000 in British territory alone Throughout British India 700,000,000 units were relieved at a cost of Rs 8¼ crores Charitable contributions from Great Britain and the Colonies aggregated Rs 84 lakhs

The Famine Codes.

The experiences of this famine showed the necessity of placing relief on an organised basis The first great Famine Commission which sat under the presidency of Sir Richard Strachey, elaborated the Famine Codes, which amended to meet later experience, form the basis of the famine relief system to-day. They recommended (1) that employment should be given on the relief works to the able-bodied, at a wage sufficient for support, on the condition of performing a suitable task, and (2) that gratuitous relief should be given in their villages or in poor houses to those who are unable to work They recommended that the food supply should be left to private agency, except where that was unequal to the demands upon it They advised that the land-owning classes should be assisted by loans, and by general suspensions of revenue in proportion to the crop failure. In sending a provisional

famine Code to the provincial governments, the Government of India laid down as the cardinal feature of their policy that the famine wage "is the lowest amount sufficient to maintain health under given circumstances Whilst the duty of Government is to save life, it is not bound to maintain the labouring population at its normal level of comfort" Provincial codes were drawn up, and were tested by the famine of 1896-97 In that 307 000 square miles were affected, with a population of 69,500,000 The numbers relieved exceeded 4,000,000 at the time of greatest distress The cost of famine relief was Rs 7¼ crores, revenue was remitted to the extent of Rs 1¼ crore, and loans given aggregating Rs 1¼ crore The charitable relief fund amounted to about Rs 1¼ crore, of which Rs 1¼ crore was subscribed in the United Kingdom The actual famine mortality in British India was estimated at 750,000 The experiences of this famine were examined by a Commission under Sir James Lyall, which reported that the success attained in saving life and the relief of distress was greater than had ever been recorded in famines, comparable with it in severity, and that the expense was moderate But before the Local Governments had been given time to digest the proposals of this Commission or the people to recover from the shock, the great famine of 1899-1900 supervened

The Famine of 1899-1900

This famine affected 475 000 square miles with a population of 59,500,000 In the Central Provinces, Berar, Bombay, Ajmer and the Hissar district of the Punjab famine was acute it was intense in Rajputana, Baroda, Central India, Hyderabad and Kathiawar It was marked by several distinctive features The rainfall over the whole of India was in extreme defect, being eleven inches below the mean In several localities there was practically no rain There was in consequence a great fodder famine, with a terrible mortality amongst the cattle The water supply was deficient, and brought a crop of difficulties in its train Then districts like Gujarat, where famine had been unknown for so many years that the locality was thought to be famine immune were affected, the people here being softened by prosperity, clung to their villages, in the hope of saving their cattle, and came within the scope of the relief works when it was too late to save life A very large area in the Native States was affected and the Marwaris swept from their impoverished land right through Central India like a horde of locusts, leaving desolation in their train. For these reasons relief had to be given on an unprecedented scale At the end of July 4,500,000 persons were supported by the State, Rs 10 crores were spent on relief, and the total cost was estimated at Rs 15 crores The famine was also marked by a widespread acceptance by Native States of the duty hitherto shouldered by the Government of India alone—the supreme responsibility of saving human life Aided by loans to the extent of Rs 3½ crores, the Native States did a great deal to bring their administration into line with that in British India. Although actual deaths from starvation were insignificant, the extensive outbreaks of cholera, and the devastating epidemic of malaria which followed the advent of the rains, induced a famine mortality of approximately a million The experiences of this famine were collated by the Commission presided over by Sir Antony MacDonnell This Commission reported that taking the famine period as a whole the relief given was excessive, and laid down certain modified lines The cardinal feature of their policy was moral strategy Pointing out that if the people were assisted at the start they would help themselves, whilst if their condition were allowed to deteriorate it proceeded on a declining scale, they placed in the forefront of their programme the necessity of "putting heart into the people" The machinery suggested for this purpose was the prompt and liberal distribution of tagai loans, the early suspension of revenue, and a policy of prudent boldness, starting from the preparation of a large and expansive plan of relief and secured by liberal preparations, constant vigilance, and a full enlistment of non-official help The wage scale was revised, the minimum wage was abolished in the case of able-bodied workers, payments by results were recommended, and proposals were made for saving cattle

Success of the new policy.

The effectiveness of this machinery was partly demonstrated during the three lean years which followed the great famine in the Bombay Presidency But it received its most conspicuous demonstration when the rains failed in the United Provinces in 1907-08 Moral strategy was practised here on an unprecedented scale, tagai loans being granted with the greatest liberality The effect of these measures was succinctly indicated by the Lieutenant-Governor of the United Provinces. Sir John Hewett, in a speech in summarising his administration prior to his departure in England in March 1912 He showed that in the autumn harvest of 1907 there was a shortage of 4 million tons of food grains and in the spring harvest a shortage of 3 million tons, giving a total of seven million tons, or the food supplies for the Province for nine months and an economic loss of £38 million pounds The Government advanced £1½ million to cultivators for temporary purposes and large sums for wells and permanent irrigation The whole of this sum was repaid except fifty-four thousand pounds remitted owing to a second bad season and twenty-five thousand pounds then outstanding By common consent a great famine had never been met with less loss and suffering to the people, and two years later hardly a trace of it remained In 1911 the rainfall failed over a considerable area in Gujarat in the Bombay Presidency and again in 1912 in the Ahmednagar District of the Bombay Deccan and both these partial failures demonstrated that the shock of famine is far less severe now, owing to the increased resourcefulness of the people, than it was so late as 1899 Still further evidence in the same direction was furnished when the rains failed over large areas in the United Provinces in 1913-14 This famine affected 17,000 square miles with a population of 5¼ millions, whilst distress was grave in 30,000 square miles with a population of 14 millions It is not possible yet clearly to indicate the lessons of this famine,

because the detailed official report is not available, but three points soon emerged from the year—the people showed greater resisting power owing to their improved economic condition, they met the emergency with wonderful courage and resource, and the application of the relief programme brought the numbers on public works within manageable proportions, and induced the speedy return of the people to their normal avocations when the advent of bountiful rains in 1911 enabled agricultural operations to be generally resumed

The Government of India is now in possession of complete machinery to combat the effects of drought In ordinary times Government is kept informed of the meteorological conditions and the state of the crops, programmes of suitable relief works are kept up to date, the country is mapped into relief circles, reserves of tools and plant are stocked If the rains fail, policy is at once declared, non-officials are enlisted, revenue suspended and loans for agricultural purposes made Test works are then opened, and if labour in considerable quantities is attracted, they are converted into relief works on Code principles Poor houses are opened and gratuitous relief given to the infirm On the advent of the rains the people are moved from the large works to small works near their villages, liberal advances are made to agriculturists for the purchase of plough, cattle and seed When the principal autumn crop is ripe, the few remaining works are gradually closed and gratuitous relief ceases All this time the medical staff is kept in readiness to deal with cholera, which so often accompanies famine, and malaria, which generally supervenes when the rains break Recent experiences go to show that never again will the Government of India be compelled to distribute relief on the tremendous scale demanded in 1899-1900 The high prices of produce have given the cultivators considerable resources, the extension of irrigation has protected a larger area, and labour has become more mobile, utilising to the full the increasing industrialism of the country For instance, in 1911 the rains in Gujarat failed completely, yet there was little demand for relief works, and the necessities of the cultivators were rather for fodder for their cattle than for money or food for themselves Various schemes are now under consideration for the establishment of fodder reserves in the villages

Famine Protection.

Side by side with the perfection of the machinery for the relief of famine has gone the development of famine protection The Famine Commission of 1880 stated that the best, and often the only means of securing protection from the extreme effects of famine and drought, are railways and irrigation These are of two classes, productive and protective Productive works being estimated to yield profits which will pay interest and sinking fund charges are met from loans, protective works, which do not pay, directly from revenue In order to guarantee that there should be continuous progress with protective works, the Famine Insurance Grant was instituted in 1876. It was decided to set apart from the general revenues Rs 1½ crores annually, or one million sterling The first charge on this grant is famine relief, the second protective works, the third the avoidance of debt The chain of protective railways is now practically complete Great progress is being made with protective irrigation. Acting on the advice of the Irrigation Commission (*qv*) an elaborate programme of protective irrigation works is being constructed, particularly in the Bombay Deccan—the most famine susceptible district in India—and in the Central Provinces When these are completed, the shock of drought will be immensely reduced

The Indian Famine Trust.

Outside the Government programme there is always scope for private philanthropy, especially in the provision of clothes, help for the superior class poor who cannot accept Government aid, and in assisting in the rehabilitation of the cultivators when the rains break At every great famine large sums have been subscribed, particularly in the United Kingdom, for this purpose, and in 1899-1900 the people of the United States gave generous help With the idea of providing a permanent famine fund, the Maharaja of Jaipur gave in 1900 a sum of Rs 16 lakhs, in Government securities, to be held in trust for the relief of the needy in time of famine This Trust has now swollen to Rs 28 lakhs, chiefly from gifts by the founder's family It is vested in trustees drawn from all parts of India, and is freely used in an emergency Substantial grants were given for the Bombay relief fund in 1911, and for the relief of the distress in Ahmednagar (Bombay Deccan) in 1912 The report of the Trust for 1913 states that during the year two appeals for relief were received from the Bombay Committee for the Ahmednagar famine relief in 1913, the first in February and the second in April In response to the first appeal a grant of Rs 25,000 was made by the Board The second appeal had, however, to be rejected in view of the comparatively mild nature of the famine in that area To meet the first grant the board found it necessary to sell Government Paper for Rs. 27,000 out of the temporary investment

The Central Famine Relief Fund Committee of Bombay refunded a further sum of Rs 1,504-3-3 out of the grants made to them during 1912 The accumulations of interest realized were invested from time to time during the year as in 1912 and 3½ per cent Government Paper of the nominal value of Rs 79,000 was purchased at a cost of 76,300-7-7 These securities as well as those purchased in previous years, reduced by the sales effected during the year, amount to Rs 7,02,900 and stand in the joint names of the Comptroller-General and the Accountant-General, Bengal, and are available for expenditure

The Endowment Fund stands at Rs 28,10,000.

Co-operation in India.

Before the end of the last century the co-operative movement had proved so successful in its attempt at regenerating rural life in countries with such diverse conditions as Germany, Italy, Switzerland, and Ireland, that enthusiasts like Mr Wolff, social workers like the late General Booth, and Indian administrators like Sir William Wedderburn and Mr. Dupernex were anxious to introduce the movement in India to improve the economic and moral conditions of the Indian ryot More than sixty per cent of the vast population of India subsists on agriculture, and the majority of these millions generally live from hand to mouth The ryot's occupation is healthy and productive, and he is proverbially honest and straightforward in his dealings, except when years of famine and hardship make him crafty and recalcitrant, as in the Satara and Ahmednagar districts of Bombay Presidency Owing to his poverty, however, he has to contract for heavy debts to meet occasional expenses for current seasonal purposes, the improvement of his land or for ceremonial purposes, and he has therefore to seek the assistance of the local money-lender, who is usually a Bania or a Marwari, and is known as the Sowcar or the Mahajan The rates of interest on such advances vary from province to province and even in different parts of a province The average rate ruling throughout Bombay Presidency is lower than in most other provinces and there are again variations in the rate in the Presidency itself, it is 6 to 12 per cent in Gujarat and 12 to 24 per cent in parts of the Deccan, while it rises to the enormous figure of 50 per cent in several tracts In addition to charging these excessive rates, the Sowcar extorts money under various pretexts and takes from the needy borrower bonds on which heavy stamp duties are payable One of the chief causes of the ryot's poverty is, that owing to the absence of security and his short-sightedness due to want of education he does not as a rule collect and lay by his savings, but fritters away his small earnings in extravagant and unproductive expenditure on the purchase of trinkets and ornaments and on marriage and other ceremonies In some cases, he hoards coins under the ground with the likelihood that on his death the money is lost to his family for good This absence of thrift and the habit of dependence in case of difficulty on the Government or on the Sowcar are the bane of his life A Co-operative Society would change all this, inasmuch as it would provide him with a suitable institution in which to lay by his savings and would teach him the valuable lesson of self-help through the sense of responsibility he would feel in being its member. Thus the chronic poverty and indebtedness of the Indian agriculturist afford a very good field for the introduction of co-operative methods, especially as his work is of a productive character likely to enable him to earn a better living under circumstances more favourable than they are at present

First Scheme Proposed.—The question of introducing co-operation among the agricultural classes in India was first taken up in the early nineties when Sir W Wedderburn prepared a scheme of Agricultural Banks which was approved of by Lord Ripon's Government but was not sanctioned by the Secretary of State The matter was not again taken up until about fifteen years later when Lord Wenlock's Government in Madras deputed one of its ablest officers Mr F A (now Sir Frederick) Nicholson to report on the advisability of starting Land Banks in the Presidency for the relief of the agriculturists Sir Frederick had prepared himself by a thorough study of Agricultural Banks and Co-operative Societies and had visited many European countries to see for himself the various developments of the co-operative movement He was also conversant with the special conditions of the Presidency where there had been in existence an institution called the Nidhi, which corresponded in some respects to the Village Popular Banks in European countries Though these institutions provided cheap local capital to the agriculturists the spirit of co-operation was lacking in them This want was supplied in early times by the Village Panchayats which showed to what extent communal life and ideas of local self government had developed in India Sir Frederick, after thoroughly going into the conditions of the Presidency, submitted an exhaustive report to Government suggesting that the formation of Co-operative Societies was the only method which could conquer agricultural indebtedness The report surveyed the growth of the co-operative movement in European countries, the conditions favourable to its development in India, if introduced, and the difficulties to be encountered in introducing it and making it a success here Finally it contained, for the consideration of Government, a draft Bill for the organisation of Co-operative Societies Sir Fredrick pleaded for concessions to be given to the Societies—such as exemption from the income tax and remission of the stamp duty—as he felt that it would be possible to attract the people to the new movement only if Government showed its active sympathy towards it at the commencement He ended with a fervent appeal to the non-official community "to find a Raiffeisen" who would help the ryots of this country in achieving results equal to those obtained by Raiffeisen's noble efforts in Germany Unfortunately the report was not received favourably either by the non-official public or by the Government of Madras, and no action was taken on its suggestions

Commission of 1901—The next few years saw two of the worst famines that India has ever suffered from, and in 1901, Lord Curzon appointed a Commission to report on the measures to be adopted in future to prevent famines and to protect the ryot from their ravages The Commission laid stress on the proper working of the Agricultural Loans, and Land Improvement Acts under which takavi advances are made to cultivators This system was given a long trial in the years previous to the great famines as well as during the ten years succeeding the 1899-1900 famine But it is acknowledged on all hands that the system has been a failure, as it is clear that it is not

plenty of cheap capital only which will raise the agriculturist and relieve him from his debts, but capital combined with habits of thrift and self-help, which habits it obviously does not inculcate The Commission also recommended that the principal means of resisting famines was by strengthening the moral backbone of the agriculturist and it expressed its view that the introduction of co-operation in rural areas was one of those means which would improve his moral fibre

Co-operative Credit Societies Act.—These recommendations induced Lord Curzon to appoint a Committee with Sir Edward Law at its head to investigate the question and a Report, following the original Madras Report in the main, was submitted to Government Sir Anthony (now Lord) Macdonell "and others" were at the same time making experiments on similar lines in the United Provinces and the Punjab with satisfactory results All these activities, however, took a practical shape only when Lord Curzon, with his zeal for getting things done which made him famous in India, took up the question in all earnestness and his Government introduced in the Supreme Legislative Council a Bill to provide for the constitution and control of Co-operative Societies The main provisions of the Bill which became the Co-operative Credit Societies' Act (Act X of 1904) were —

(1) That any ten persons living in the same village or town or belonging to the same class or caste might be registered as a Co-operative Society for the encouragement of thrift and self-help among the members

(2) The main business of a Society was to raise funds by deposits from members and loans from non-members, Government and other co-operative societies, and to distribute money thus obtained by way of loans to members or, with the special permission of the Registrar, to other Co-operative Credit Societies

(3) The organization and control of Co-operative Credit Societies in every Presidency were put under the charge of a Special Government Officer called the Registrar of Co-operative Credit Societies

(4) The accounts of every Society were to be audited by the Registrar or by a member of his staff called the Auditor of Co-operative Credit Societies

(5) The liability of a member of a Society was to be unlimited in the case of a rural society

(6) No dividends were to be paid on the profits of a rural society but the profits were to be carried at the end of the year to the Reserve Fund, although when this fund had grown beyond certain limits fixed under the bye-laws, a bonus might be distributed to the members

(7) In the case of Urban Societies no dividend was payable until one-fourth of the profits in a year were carried to the Reserve fund.

There were a few glaring defects in the Act and these came to be recognised by the official class as the movement progressed.

Soon after the passing of the Act the local Governments in all the Presidencies and major provinces appointed some of their best officers as Registrars with full powers to organise, register and control the management of societies In the early stages of the working of this Act, Government loans were freely given, especially in the Bombay Presidency, and the response to the organising work of the Registrars was gradual and steady throughout most parts of the country

Variety of Societies—There was a great variety of types among the agricultural societies started in different provinces, and some Registrars adopted the "Schulze-Delitzsch," some the "Raiffeisen," and some the "Luzzatti" methods in their entirety The best course, as pointed out by Mr Wolff, would have been to start a few model societies and leave the movement to develop on the lines which most suited the peculiar requirements and conditions of the country The commonest type as in the Punjab and Burma was the unlimited liability society with a fee for membership and a small share capital, the share-payments to be made in instalments. In some cases the system insisted on compulsory deposits from members before entitling them to enjoy the full privileges of membership The system in Bombay, Bengal and the Central Provinces was entirely different, there being no share-capital but only a membership-fee Part of the working capital was raised by deposits from members and other local sympathisers but the bulk of it was obtained by loans from Government and other Co-operative Societies In all the Presidencies the Government set apart every year a certain sum to be advanced as loans to newly-started Co-operative Societies usually up to an amount equal to the local deposits raised by them. This practice, though necessary in the initial stages of the movement as stimulating the placing of deposits with societies, in other cases led to crooked means to secure deposits and sometimes worked as a real hardship in poor districts In the long run it proved a hindrance to the development of the co-operative spirit by having taught people to expect State aid for every new society Happily State aid has now become an exception rather the rule and this withdrawal in no way hampers the growth of the movement on account of the rapid increase of financing agencies, District and Provincial Central Banks—and of public confidence in the Societies For agricultural societies generally the four main sources of income are the share capital in some Provinces, the deposits of members, the loans and deposits from non-members and other Societies; and the percentage of the total working capital represented by each of these heads of income is that indicated below —

	Per cent.
Shares . .	13
Loans and Deposits from members	10
Do do non-members	11
Do do. other societies	58
State Aid	3.4

In some Provinces, for example, Punjab and Bombay, the members' shares and deposits form more than 25 % of the working capital

Typical Agricultural Societies—The Typical Agricultural Society in India corresponds to the "Raiffeisen" society, the management being gratuitous, the profits indivisible and the

area of work limited Usually the Secretary, especially if he is a *bona fide* member of the Society, gets a monthly pay of Re 1 to Rs 5 with a bonus at the end of the year equal to a fourth of the annual profits In parts of the country there are villages where a few literate men may be found but most of these are hardly fit enough to undertake the responsible work of a Secretary, being practically ignorant of account keeping In these cases either the village school-master or the village accountant, known on the Bombay side as the Kulkarni or Talati, is appointed to the post with a remuneration a little higher than that paid to the Secretary who is a *bona fide* member In some places, where a suitable person is not available on this low pay, neighbouring societies are grouped together with a whole-time, well-paid, and competent Secretary This arrangement, which has its advantages, involves the drawback that the outsider working as Secretary does not naturally feel as much interest about the Society's working as a *bona fide* member does

Management —The Managing Committee consists of 5 to 9 intelligent members of the Society, the Chairman being usually the leading person in the village The daily work of the Society is carried on by the Secretary, but the Managing Committee supervises his work and has alone the power to admit new members, to receive deposits, arrange for outside loans, grant loans to members and take notice of defaulters The accounts of the Society are kept by the Secretary and the necessary forms, papers, and books are supplied from the Registrar's office to simplify the work of the Secretary They are kept according to the rules framed by the local governments and are open to inspection by important local officials and the Registrar and his staff The accounts are audited, at least once a year, by the Auditor of Co-operative Societies and inspected from time to time by specially appointed Inspectors The loans are mostly given on the security of two co-members, or, rarely, on the simple bond of the borrower, but mortgages are taken occasionally, especially in the case of long-termed loans and loans for the liquidation of old debts This feature is noteworthy as real credit, on a wholesale scale, is not quite compatible with the true spirit of co-operation At the Annual General Meeting, held within a month of the close of the Co-operative year, the accounts are submitted, the balance-sheet passed and a new Managing Committee with, if necessary, a new chairman and secretary is elected As these meetings are informal other local topics of public utility are sometimes discussed All the net profits of the Society are annually carried to the Reserve Fund which most societies utilise as an addition to their ordinary working capital Steps are being taken in some parts of the country to stop this practice and to insist on the Reserve being kept entirely apart from the working capital and invested in Government securities or placed as floating deposit in a reliable Central Bank As, however, the class of people forming a Co-operative Society have not thoroughly grasped the principles of co-operation it is difficult to convince them of the advisability of keeping the Reserve distinct from the Society's ordinary working capital The Government of India state in their resolution "that while there may be advantages in the earlier stages in using the reserve as part of the working capital of the Society, it should gradually, as it becomes more important, be set apart for separate investment"

Progress of the Movement —The following statement shows the progress in Agricultural Co-operation up to 31st March 1913

Agricultural Societies

Province	Number of Societies	Number of Members	Total Working Capital	Reserve Fund	Net Profit during the year 1912-13
			Rs	Rs	Rs
Madras	1,008	64,037	44,38,866		1,01,965
Bombay	420	29,276	22,75,154	92,306	60,874
Bengal	1 034	42,455	22,76,673	2,21,323	1,14,606
Bihar and Orissa	544	28,005	8,48,250	69,837	34,452
United Provinces	2,304	89,296	38,64,228	1,77,338	91,406
Punjab	2,780	1,29,662	97,07,480	2 32 200	6,96,581
Burma	1,043	26,033	28,38,035	1,53,184	1 31,088
Central Provinces	1,363	22,854	13,48,804	40,218	31,095
Assam	164	8 833	3 54,750	32,689	8,361
Coorg	28	2,556	80,515	15,101	5 872
Ajmer	278	8,115	5,03,205		6,402
Mysore	238	11,290	3,20,194	3,010	13,727
Baroda	178	4,966	2,82,480	21,757	22,002
Total	11, 382	4,67,378	2,90,18,634	10,58,943	13 18,431

The progress of the movement in different provinces varies according to the activity in organisation work as well as the special conditions of each province—the prevailing rates of interest being the most important of these. The only Native States which have introduced legislation similar to the Co-operative Credit Societies' Act in their territories are Mysore and Baroda, and the results of the experiment have been as satisfactory as in British India.

Non-agricultural Societies.—Just as rural societies are the means of resuscitating the agricultural and other small village industries, a class of societies called the Non-agricultural Societies has grown up in towns and cities for improving the economic and moral condition of artisans and small traders, members of particular castes and employees of big firms and Government Departments. These societies have usually a limited liability. This is due to the field of their work not being compact as in the case of agricultural societies where every member may be expected to know every other member. Their constitution is based on the 'Schulze Delitzsch' model and in most cases the management is honorary, though sometimes, when the sphere of a society's work is extended, a paid staff is employed. There is in all societies a substantial share capital, payments being made in instalments, and the rest of the working capital is obtained by local deposits from members and others and loans from Co-operative and Joint Stock Banks. At the end of every year one-fourth of the net profits must be carried to the Reserve Fund and the balance may be distributed as dividend or bonus. There are a few serious drawbacks in the working of these societies and complaints about them are noticeable in many of the Registrars' annual reports. The most serious of these complaints are that the spirit of co-operation is lacking in many Non-agricultural Societies, that there is too great a desire to go in for profits and dividends and a growing tendency to make the societies close preserves once they have started running on profitable lines. The rates of interest on loans are at times higher than they ought to be, and the men at the head of the societies are loth to admit new members who are in need of loans for fear of the latter cutting down the profits. Societies of employees of firms, railway companies and Government offices and societies for the redemption of debts of men of the so called depressed classes, however, work on sounder lines and provide good instance of the success of Non-agricultural Co-operation. A few Mill hands' Societies have been started in the Bombay Presidency but with these the spread of co-operation among the labouring class in industrial cities ends. There are, again, a few societies, on the lines of village Popular Banks of Europe to assist small Non-agricultural traders and artisans and some efficient societies comprising members of a particular community. Some of these Non-agricultural Societies, after meeting the needs of their members, have large balances on hand which they are allowed, with the previous sanction of the Registrar, to advance to smaller societies.

Progress of Non-agricultural Societies.—The following statement shows the progress of Non-agricultural Co-operation up to 31st March 1913 :—

Non-Agricultural Societies.

Province	Number of Societies	Number of Members	Total Working Capital	Reserve Fund	Net Profit during the year 1912-13
			Rs	Rs	Rs
Madras	59	17,841	10 70,258	20,990	53,548
Bombay	102	17,428	13,58,874	48,536	64,721
Bengal	68	11,962	95,858	42,401	35,933
Bihar & Orissa	41	1,983	77,007	5,941	5,475
United Provinces	175	4,746	3,67,718	12,486	9,179
Punjab	31	2,973	2,54,509	6,952	10,786
Burma	40	2,624	5,32,763	39,614	29,036
Central Provinces	51	1,439	85,680	11,029	6,381
Assam	15	1733	1,80,251	10,404	8,760
Coorg					
Ajmere					
Mysore	101	13,188	7,72,703	26,786	43,431
Baroda	8	461	46,238	117	940
TOTAL	691	76,378	48,41,859	2,25,256	2,68,190

Loans Advanced —The total amount of loans advanced to members by Agricultural and Non-agricultural Societies during the year 1911-12 were Rs 2,15,97,775 and Rs 54,44,479, respectively, as against a total of less than Rs 25 lakhs issued by both these classes of societies in the year 1906-7 Some of the Provincial Reports for the year 1911-12 analyse the purposes for which loans are usually advanced, and it is interesting to observe from the Madras Report, which may be taken as typical, that 38 13 per cent and 41 25 per cent of the total amount of loans advanced by the Non-Agricultural and Agricultural Societies, respectively, during the year 1911-12 were for paying off prior debts Some loans have been advanced for the redemption of the past debts of members, but as the movement progresses, it is being more and more realized that the early clearance of a member from previous debts after his admission to a Society is very desirable and greater attention is being bestowed by the Registrars on this question Only 12 77 per cent and 2 72 per cent, respectively, of the total amounts of loans made by Non-Agricultural and Agriculturals were for non-productive purposes, including marriage and other ceremonies and litigation The percentages of loans for productive purposes amounted to 49 10 and 56 02 for the two classes of societies respectively, thus showing that if we include loans for the liquidation of old debts, the total amount utilised in productive purposes works out at about 87 per cent in the case of Non-agricultural and 97 per cent in that of Agricultural on the loans advanced. These loans include those advanced for cultivation expenses, purchase of live-stock, fodder, seed, manure and agricultural implements, for land improvement and sinking of wells, for purchase of new lands and for maintenance in times of scarcity in the case of Agricultural societies, and those for purchase of raw materials for industries, for trade, for house-building and for food and other necessaries of life in the case of the Non-agriculturals The rates of interest on loans by primary societies to their members vary from 9½ % in Bombay and Madras to 12% in the Central Provinces and the Punjab 15% in the United Provinces and Burma and 18¾% in Bengal The terms of the loans are one year or less on those for current needs, whether for agriculture or petty trade, and upto 5 years or so on loans for the liquidation of old debts or for land improvement The societies are mostly punctual in their repayments to the Government or to Central Banks just as the members of the societies are regular in repaying their loans to the societies

Financing Agricultural Societies —As soon as the initial stage of the movement had passed, a very urgent problem faced the co-operators This was to finance the agricultural societies that were growing in all directions And the problem was solved in different provinces according to their special conditions and the stages of development the movement had attained therein In Madras a Central Bank, which first to Co-operative Societies in the Presidency, was started without Government aid as early as in 1907 In other Presidencies, District Banks were established, gradually finding money for societies within their districts, and in some places Joint Stock Banks were persuaded to make advances direct to agricultural societies or through the medium of District Central Banks A large number of prosperous Non-agricultural Societies, as stated above, could afford to lend to agricultural societies Government aid was also freely given and the advances under this head rose from Rs 2,84,738 in 1906-7 to Rs 9,34,663 in 1911-12 With the progress of the movement, however this aid was discontinued and the only province which continued the practice was Bombay—lending Rs 2,57,439 in 1911-12 An important cause which led to the continuance of State aid in Bombay was the paucity of Central Banks in the Presidency and the refusal of the Commercial Banks, though constantly approached, to help agricultural societies When, owing to this unwillingness of the ordinary banks to participate in the movement, the Registrar found it extremely difficult to have even the small number of societies in the Presidency properly financed, Sir Vithaldas Thackersey and the Hon'ble Mr Lalubhai Samaldas submitted to Government a scheme to establish a Central Bank for the Presidency, provided certain assistance was promised by Government As a result of the negotiations that followed, the Bombay Central Co-operative Bank was founded in October, 1911, with a share capital of 7 lakhs and with power to issue debentures at 4 per cent up to three times the amount of the paid-up share capital, the Government guaranteeing payment of interest on the debentures in case of default The Bank was authorised to lend only to registered Co-operative Societies in the Presidency with the previous sanction of the Registrar in the case of every individual loan As an indirect result of the establishment of the Bombay Central Bank a number of District Banks have been started and the Presidency is now as well provided in this respect as any other Province.

Bombay and Madras Banks —The chief point of distinction between the Bombay and the Madras Central Banks—which are both run more on commercial than on pure co-operative lines—is that, in the case of the Madras Bank, there are no restrictions on the rate of interest on loans and on the dividends, as there are in that of the Bombay Central Bank, where restrictions in these respects are imposed by the Bank's agreement with the Secretary of State Again in the Bombay Central Bank the majority of shareholders are either capitalists or persons not much interested in co-operation, whereas the Madras Bank has fortunately attracted more persons who are interested in the movement Another drawback of these two institutions is that neither of them is a Co-operative Central Bank in the true sense of the term as there are no District Central or Agricultural Societies that are members of, or affiliated to it and therefore interested in their success A Provincial Bank with central societies affiliated to it is in existence in Upper Burma and another has recently been started in the Central Provinces But the latter seems to be only a kind of immediate link between the well-managed District Central Banks in the Province and the Commercial Banks in Allahabad and elsewhere It has however worked

well and its success led to the establishment of a Provincial Bank in Behar and Orissa A scheme has also been set afoot for having a similar Provincial Bank in Bengal

Number of Central Banks—The following statement shows the number and the constitution of the Central Banks in the country up to 31st March 1913

Central Societies

Province	Number of Societies	Number of Members	Total Working Capital	Reserve Fund	Net Profit during the year 1912-13
			Rs	Rs	Rs
Madras	11	940	40,39,646	74,027	76,605
Bombay	4	1 205	13,31,172	1,471	15,318
Bengal	17	2,563	13,74,303	17,885	10,553
Bihar & Orissa	8	685	1 46,955	6,346	11,159
United Provinces	51	14 791	14,35 676	2, 37,222	1,33,948
Punjab	34	2,135	28,47,315	19,421	24,850
Burma	72	2,440	21,93,726	14,682	45,685
Central Provinces	35	3,903	20,08 906	8,003	49,630
Assam	9	379	1 41,097	4,109	4,621
Coorg					
Ajmer	3	496	4 92 244	2,231	11,381
Mysore	4	205	1 96,442	804	5,364
Baroda	3	98	7,894	67	376
TOTAL	251	29,780	1 95,15, 376	3,86,268	1,29,793

Creation of Unions—The ordinary types of Central Banks only finance agricultural societies but unless they form a part of the co-operative tree it is felt that the movement will not progress on real co-operative lines There is also the need for agencies which would not only provide funds for societies but also supervise over their working, inspect the affiliated societies and even take up the entire educational work now done by the Registrars and act as local organising centres They may also be expected to supplement, in lieu of a small fee to be paid by the societies, the auditing work done by the Registrars who now find it very difficult, owing to the increase in the number of societies, to cope with this work with the limited staff at their disposal. This need has been supplied to some extent by the creation of Unions—bodies with limited liability the majority of whose members are registered societies with, in some cases, a small number of well-to-do and public spirited persons as shareholders to supply the necessary educative force and arrange for the proper financing of the Unions The management of the Union is in the hands of a Board of Directors, or Managing Committee, consisting partly of some representatives of the ordinary shareholders, where there are any, and partly of delegates elected by the societies which are members of the Union Usually a Union is only possible for the whole of a district, as the personnel necessary for its successful working would be difficult to secure in a smaller area However, in different parts of the country we notice the existence of Unions for Talukas, and occasionally for smaller tracts comprising groups of societies The creation of such bodies has been facilitated by the amended Co-operative Societies' Act, which came into force in 1912 Previous to the passing of this Act, Unions were started unsystematically in various Provinces according to local ideas, but their formation has been made uniform by the new Act insisting on a limited liability in the case of a society of which a member is a registered society. In some provinces the ordinary Central Banks serve the purpose of Unions, having societies affiliated to them.

The following Statement exhibits the position of Unions in the various Presidencies —

Unions

Province	Number of Unions		Number of Affiliated Societies
	Central Banking	Supervising	
Madras	1	1	9
Bombay	2	1	1
Bengal	15		602
Behar and Orissa	8		243
United Provinces	13		2,209
Punjab	17		1,754
Burma		67	1,679
Central Provinces		9	1,424
Assam	4		79
Coorg			
Ajmer	3		278
Mysore	2		50
Baroda	1	1	
TOTAL	66	85	8,509

It may be mentioned that in most of the Provinces the work of organising and looking after the societies is done by the Registrar with the help of his assistants and a few honorary non-official workers The number of these honorary workers is steadily increasing and in some Presidencies there is a band of specially appointed Honorary Organisers who regularly assist the Registrars There is, however, scope for organisation Societies on the lines of similar institutions in England and Ireland and if the District Unions are affiliated to a real Co-operative Provincial Bank it may be possible to have an Organisation Department of the Bank with branches in the districts

New Act Introduced —As co-operation progressed in the country defects were noticed in the Co-operative Credit Societies' Act and these were brought to the notice of Government by the Provincial Conferences held under the auspices of Local Governments in various presidencies as well as by the Annual Conferences of the Registrars. The Government of India, recognising the need for removing these defects, decided to amend the old Act and a Bill embodying the essential alterations proposed was introduced in the Imperial Legislative Council and after a few amendments it emerged from the Council as the Co-operative Societies, Act (II of 1912) replacing Act X of 1904 The outstanding features of the new Act were as follows —

(*a*) It authorised the formation of societies for purposes other than credit, which was possible under the old Act only with the special permission of the Local Government This extension of co-operation to purposes other than credit marks an important stage in its development in India

(*b*) It defined in precise terms the objects for which Co-operative Societies could be organised

(*c*) It removed the arbitrary division of societies into Rural and Urban

(*d*) It facilitated the growth of sound Unions by insisting on a limited liability by means o a special Clause about the registration of society one of whose members is a registered society.

(*e*) It empowered the Local Governments to frame rules and alter bye-laws so as to put restrictions on the dividends to be declared by societies and allowed them the discretion to sanction distribution of profits in the case of unlimited liability societies to their members

(*f*) It allowed societies with the permission of the Registrar to contribute from their net profits, after the Reserve Fund was provided for, amounts up to 10 per cent of their remaining profits to any charitable purpose as defined in the Charitable Endowments Act This kept the movement in touch with local

life by permitting societies to lend assistance to local educational and charitable institutions.

(*q*) It prohibited the use of the word "Co-operative" as part of the title of any business concern except a registered society

Store Societies—After the passing of this Act the application of co-operation to purposes other than credit was greatly extended, but as yet there has been no general demand for productive and distributive co-operative societies as is noticeable in England and elsewhere At the end of the year 1912-14 there were only 14 store societies in the country, the Madras Presidency claiming 9 of these with a membership of 3,846 and a working capital of Rs 1,64,546 The United Provinces had two, Bengal also had two, and Assam one An important industry which flourished in India before the introduction of machinery was the Handloom Weaving Industry, and efforts have been made to revive it by the formation of productive co-operative societies of handloom weavers The weavers' societies are not merely Credit Societies but undertake the purchase of good yarn for members and in some cases have store branches to sell the cloth produced by them They have also been instrumental, in Bombay, in introducing improved looms and methods amongst the conservative weaving classes The total number of these societies in the country is 32, Bombay having 19, Bengal 2, Madras 1, the United Provinces 2, the Central Provinces 6, and Assam 2. The other Productive Societies are those for "gaolees" or milkmen, dyers, basket and brass workers in Central Provinces and "chhamars" and "dhors" in Bombay There are also a building and oil-producing society in Madras, a zemindari society in Bengal, and a Sugar Factory worked on co-operative lines in Benares There are a few dairy societies—one a well-managed society in Benares and another in Bengal, one in Assam Burma possesses a novel type of societies for the sale of paddy, having 9 such societies with a membership of 712 It is also a pioneer in the matter of Co-operative Insurance and has 57 Cattle Insurance Societies with a membership of 471 Six Cattle Insurance Societies have also been started in Coorg There are two manure purchasing societies in Bengal and 3 gram banks in Madras and 2 in Bombay

Agricultural Societies—These have until recently been engaged only in supplying cheap credit to their members but there are various other fields of work to which they may extend their activities Grain Banks may be started with advantage, receiving deposits in kind and allowing these to accumulate to be sold at profitable rates or distributed to the members in times of scarcity Such Banks have been started in Bombay and Madras Societies on a similar principle for the storage of fodder may assist in solving what is likely to become in the near future an important problem in rural economy. Another direction in which the Co-operative principle is being adopted is the starting of societies for purchase of and distribution among members of good unadulterated seed. A number of small seed societies have been organized in the Bombay Presidency Societies for the Co-operative purchase and sale of manure will also prove a great boon Manure stores have been established in Madras Bengal and Bombay Government has of late made attempts to bring the Co-operative movement in close touch with the Agricultural Department Co-operation has already been successful to a considerable extent in redeeming the chronic indebtedness of the agriculturist but if the improvement in his economic condition is to be permanent it is essential that he should be prevailed upon to adopt improved methods of production The Agricultural Department does undertake propagandist work with this object, but its efforts have not proved as successful as they ought to be A Co-operative Society provides just the effective agency to reach the agriculturists, and in many places societies have been the means of bringing home to the agriculturist the need for improved methods by distributing leaflets issued by the Agricultural Department and District Agricultural Associations to which they are sometimes affiliated The Department has also used the societies as centres for delivering lectures and for holding demonstration and shows As a result a few societies have been enterprising enough to purchase up-to-date agricultural implements recommended by the Department and to use the proper manures and the certified varieties of seeds If the reorganisation of Indian agriculture grows apace with the spread of co-operation there is no doubt that rural India will soon present a happier outlook than it does at present

Since the establishment of factories in India an important labouring class has grown up in big industrial towns and this class is as deeply indebted and as badly remunerated as the agriculturists Co-operation, if introduced among people of this class, would open a new life to them besides being the means of their economic regeneration No serious efforts have hitherto been made in this direction, as Urban co-operation has been confined more or less to middle class people A few Mill Hands' Societies have been organised in Bombay but these should be multiplied a hundredfold among all classes of factory labourers, so that if successful, they may become the forerunners of a healthy, Trade Unionism in India

In July 1914, the Government of India issued a lengthy Resolution on Co-operation in India, surveying its progress in the country during the last ten years Though the Resolution is optimistic in tone, it criticizes impartially the drawbacks of this new movement in India It particularly emphasises the urgency of a proper financial organisation of societies and states that "the responsibilities introduced by the addition to co-operative organization of central and provincial banks are of a serious character To supervise the relations of such institutions with the money market on the one hand, and with their constituent societies on the other is a task which requires a considerable degree of technical skill, and the administration of the whole co-operative movement in the stages above that of the individual society is a matter which must in the immediate future engage the serious attention of Government and of the people"

That this important question does engage the serious attention of Government is evident from the fact that in October, the Imperial Government appointed a strong Committee, under Sir Edward Maclagan, to examine and report on the financial organization of the co-operative movement It is to be hoped that the efforts of the Government of India will succeed in strengthening the position and resources of Co-operative Societies

Defective Education—It is the experience of those who have to deal with the organisation and management of Rural societies that the sad state of education among the agricultural population is not only a real hindrance to their development but seriously endangers their very existence There are villages where no schools exist and where there is hardly one individual who can read and write tolerably well In most villages a few literate people can be found and it is these that form the nuclei of co-operative societies Their ignorance in other matters is often so abysmal that it is hardly possible to instil into their minds even elementary notions of co-operation Happily there are different types of villages where about 30 to 40 per cent of the population are able to read and write and where one finds a dozen intelligent men who can understand the elements of co-operation In a large number of societies, as has been pointed out previously, the secretaries who are the real managers are not *bona fide* members This, it may be urged, is contrary to a fundamental principle of co-operation that there should be internal management of the business, but it can scarcely be helped in a country where there are only a few among the total village population able to keep their own accounts much less to undertake the management of a society It is true that co-operation provides a higher type of education, but when the ground work itself is lacking it is impossible to build up the superstructure

Social Reform—Co-operation has, in some places, stimulated the desire for education and members of rural societies have been known even at advanced ages to receive the elements of education to enable them to put their signatures on the society's papers, and to take a lively interest in the internal work of their societies There are a few cases where a society has set its face against drunkenness, expelled members notorious for their intemperate habits and has in other ways worked for a better morality by insisting a high standard of life Societies have occasionally condemned excessive and even heavy expenditure on marriages, and it is an encouraging fact that the percentage of loans advanced for this purpose is higher in the case of Urban than of Rural Societies Liquidation of old debts again has been possible to a great extent and many an agriculturist who was formerly in a state of chronic indebtedness has been relieved of all his old debts and freed from the necessity of incurring new ones Credit has been much cheapened and it is now possible for the agriculturist to borrow at 9 per cent what he could not borrow at less than 20 per cent formerly The village rates of interest have gone down considerably and the Sowcar is in most places not the terror and the force that he was Business habits have been inculcated with the beneficial result that the agriculturist has learnt to conduct his own work more efficiently Thrift has been encouraged and the value of savings better appreciated Participation in the management of societies has brought home to the members the important lessons of self-help, but the most important achievement of co-operation has been the instilling of a sense of communal life—a feeling of "all for each and each for all" amongst the members of a co-operative body

If these signs become as common as they are now rare, and if, over and above the economic benefits achieved by it, co-operation succeeds in its true aim—the building up of the character of the people and the promotion of their welfare by the inculcation of the ideas of thrift and the principles of self-help and above all, by showing the wisdom of mutual help and brotherliness amongst neighbours—is attained, a national regeneration will not be far off

WOMAN SUFFRAGE.

The movement in favour of woman suffrage has hitherto received little support in India On July 29, 1913, a meeting was held at the Grand Central Hotel, Mussorie, to inaugurate an All-India Branch of the National League for Opposing Woman Suffrage All wishing to join the All-India Branch of the National League are requested to send their names and subscriptions (one rupee per annum) to Mrs Ellys Walton, Couper Road, Lucknow, or to the General Secretary, Miss De Gruyther, Zephyr Lodge, Mussorie. Donations will be received and acknowledged by Mr. A Priestly, Alliance Bank of Simla, Mussorie, who has consented to act as treasurer

Shortly after the formation of the branch society recorded above, a meeting was held in the same hotel at Mussorie to inaugurate a branch of the National Union of Women's Suffrage Societies Mrs Hallowes was elected president, Mrs C Milne, Vice-president; Miss Weatherley, Hon. Secy, and Miss Michell, Hon. Treasurer.

The Tropical Diseases.

By Major Gordon Tucker, I M S

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If the principal scourges of the European in the tropics, namely, malaria, dysentery, and typhoid, could be removed, there would still remain the strain of climate as a source of disease and a cause of deteriorated health, not amounting for a time to actual illness, but eventually showing its effects in lessened resistance to the wear and tear of life, premature senility of the tissues, and diminished fertility. This results mainly from the transfer to a hot climate of an individual whose heat-regulating mechanism has previously adapted itself to conditions where the body temperature has to be maintained some 40° above that of the surrounding air. On arrival in a country where the temperature of the air is perhaps the same as that of the living tissues, it is obvious that there must be a sudden and violent disturbance of such mechanism. This mechanism is very complex and exists for the purpose of striking a balance between the heat formed by the changes in the tissues, and the heat lost from the lungs and by radiation from the surface of the skin. But beyond this there is no doubt a regulation of the temperature dependent in some way on the normal working of the central nervous system, as is shown by the remarkable alteration which may take place in the temperature of parts of the body when the brain has been subjected to some gross lesion.

In the tropics the amount of carbonic acid given off by the lungs is reduced about twenty per cent., the number of respirations per minute is reduced, and there is lessened activity of the lungs. This shows that there is less tissue change (or combustion) going on in the tissues, that is to say, diminished heat-production. The same is shown in the diminished amount of work done by the kidneys. As regards heat-loss, this is almost entirely effected through the skin, 70 per cent. of the heat of the body in temperate climates going off by radiation and conduction, and 15 per cent. by evaporation. When however the temperature of the tropical atmosphere rises, the loss by radiation falls to nothing, and all the heat has to be dissipated by evaporation from the surface. Consequently, practically all the work of losing heat, which strikes the balance with the heat production and maintains the body at a normal temperature, falls upon the sweat glands which are therefore in a state of continued and abnormal activity. In hot dry atmospheres the water evaporates as soon as formed, but in conditions of heat with great humidity, such as obtain during the worst months of the year in Calcutta and Bombay, the skin is kept continually moist by trickling beads of perspiration. Herein lies the comfort and healthiness of the punkah which removes excessive moisture. But it is obvious that in order to keep the temperature of the body normal there must be increased flow of blood to the surface of the body, a state quite different from the conditions under which the organs of the European have been trained. This favours those sudden chills to which Europeans are so subject, and acts prejudicially to the working of the internal organs, especially those subserving digestion. A blast of cold air coming on the congested skin in the early hours of the morning must chill the surface, causing a sudden contraction of the cutaneous vessels, and tending to produce a rapid flux of blood to the deeper parts, inducing a congestion of the mucous membrane of the bowels, and from that results the "morning diarrhœa" which is occasionally severe and exhausting. Such a state of affairs may become chronic, and so lead up to one of the climatic diarrhœas which are a frequent cause of invaliding. Moreover a sudden congestion of the liver and spleen in a person who has had malaria, may be followed by a malarial hepatitis or splenitis, and repeated attacks of these conditions may result in permanent enlargement of these organs, or at any rate, in the case of the stomach and liver, to derangement of function and so to chronic dyspepsia or insufficient manufacture of bile.

Again, the chronic hyperæmia of the skin favours the development of fungi and microbes. Hence the existence of ringworm of various kinds from which Europeans frequently suffer. There are microbes which, even in temperate climates, are found within the layers of the skin or on the surface. On account of the chronic congestion and moisture of the skin in tropical climates these microbes not only become abundant but virulent, and hence the Boils which are often a serious affliction in the hot months. We frequently come across most distressing cases where the patient is covered from head to foot with them. When the boil comes to a head and softens it is easy to afford relief by opening each, and so relieving tension; but the worst kind is the "blind boil" which forms as a hard red mass, intensely painful and not coming to a head, and here an incision gives little relief. Until lately these cases were very unsatisfactory to treat, and patient would recover after weeks of pain and much reduced in health. Fortunately we have in the vaccine treatment a most successful method, the vaccine used being either a stock one and generally acting like magic, or, in a small percentage of cases requiring to be made from the boils themselves. In still other cases the infection of the skin causes the formation of Carbuncles, which are more serious but require treatment on the same lines.

Another more common condition resulting from the congestion of the skin is Prickly Heat. This results from acute inflammation about the sweat glands and distention of their orifices, producing red papules and little vesicles, the site of intense itching. The trouble is believed to result from the proliferation of a particular microbe in the skin, which alters the reaction of the perspiration. Be this as it may, inoculation of the skin is likely to take place through scratching, and so to the formation of boils. In some cases the skin is so intensely inflammed that the region of the shoulders and neck feels like leather, or the surface gives the impression of sand-paper. It is a serious condition in young infants, as

the irritation prevents sleep, interferes with digestion and so promotes diarrhœa, so that this simple malady may be the starting point of a dangerous illness Flannel next to the skin should be avoided in the hot weather as it is so liable to start the irritation A good lotion consists of two teaspoonfuls of Eau-de-cologne in ten ounces of a 1 in 2000 solution of perchloride of mercury, dabbed on the skin and allowed to dry followed by dusting with equal parts of boric acid powder and talc

To avoid the heat the European flies to the punkah The electric punkah has been one of the greatest blessings introduced during recent years into Indian towns as its use insures a good night's rest in place of the weary hours of sleeplessness which formerly wore out the temper and the mental energy of the European during the hottest months Still this blessing is not without its attendant dangers Most common are attacks of muscular rheumatism, sudden internal chills causing diarrhœa, attacks of colic, ordinary nasal catarrh, and sometimes bronchitis or pneumonia The electric punkah does away with the mosquito curtain, which does not conduce to the free circulation of air, and gives good ventilation in its place

Finally, we have the effects of a continued high temperature on the working of the nervous system As has been remarked by the late Lt-Col Crombie, I M S, (in a valuable paper on "The measure of physical fitness for life in the Tropics," to which the writer is much indebted), "In the tropics there is going on continually and unconsciously a tax on the nervous system which is absent in temperate climates The nervous system, especially those parts of it which regulate the temperature of the body, are always on the strain, and the result is that in time it suffers from more or less exhaustion" The mean temperature of a European in India is always about half a degree higher than it is in a temperate climate, and it may be raised to 99° or 100° after severe bodily exertion When, under the strain of a severe hot moist and sultry season, the heat-centre gives out, or as it is said is "inhibited," we have all the serious phenomena of HEAT STROKE But in the less marked but long drawn out process of nervous exhaustion we have the common tropical effect of deficient mental energy, generally commencing with unnatural drowsiness or loss of appetite and a yearning for stimulants, which culminate in that lowering of nerve potential which we know so well as NEURASTHENIA This nervous disturbance due to climate is likely to be most marked, as Crombie points out, in two classes of persons, namely those who suffer from obesity, and those who are members of families which may be designated as "neuropathic," that is whose nervous systems are naturally unstable To these may be added persons with naturally defective digestion and those who have a predisposition to gout

To sum up, it will be seen that the effects of long residence in the tropics are real and permanent, not only in the direction of lowered bodily health, but in undue wear of the nervous system, which may not only be apparent during active service in duties involving strain, anxiety or responsibility, but also after retirement, so that the chances of longevity of the retired Indian official are not up to the normal, and the "extra" which the Insurance Office puts on such lives is not only to cover the risks incidental to life in the tropics, but also the diminished vitality of those who have survived to enjoy their pension and ease

But there are other Indian risks, and these are most likely to affect travellers, due to the effects of heat on food Microbes multiply with profusion in milk, and decomposition is liable to occur in meat within a very short time after killing Milk should always be boiled, and owing to the dirt in railway dining-rooms, and in many hotels, and the carelessness of the lower type of native servant employed therein, it would be better to rely on tinned milk or on a supply of Horlick's milk tablets, when travelling long journeys by rail and in the smaller towns Beef should never be eaten underdone, as it is a prolific source of tape-worm in India There is also liability to contamination of food by flies and dust Indian cooks, though among the best, have little regard for sanitation, and consequently the state of the cook-house should be carefully supervised

MALARIA.

Attacks of malaria, dysentery, and enteric represent the principal risks to the European travelling in India Malaria is the commonest cause of fever in the tropics and subtropics, but the risks therefrom have been greatly diminished by our complete knowledge of its causation which now permits an intelligent prophylaxis, that is, taking adequate precautions against infection The connection of certain kinds of fever with marshy soils has been recognised from ancient times, whence its old name of paludism, and the word "malaria" itself implies the belief in the existence of an emanation of poisonous air from the water-logged ground It is now realised that the poison is conveyed solely by mosquitoes, and by the anopheline species There are only a few of the many anophelines which carry malaria, but all are to be regarded as dangerous

The parasite of malaria is a delicate jelly-like body which invades the red cells of the blood, and lives at their expense It has two life-cycles, one within the blood of the human host (endogenous and asexual), the other in the stomach and tissues of the mosquito (exogenous and sexual) But the first part of the sexual cycle is prepared for in the blood of the human host

If the blood of a patient be taken about an hour before the occurrence of the "rigor," (the shivering-fit which marks the commencement of the attack), and examined in a thin film under a high power of the microscope, some of the red corpuscles will be found to contain bodies composed of delicate protoplasm showing minute granules of dark pigment in their substance These bodies are the parasites The granules represent the result of the destruction by the parasite of the red colouring-matter of the blood-cell. The

latter consequently appears paler than natural and is enlarged. In the parasite of the so-called benign tertian fever, if the blood be again examined when the rigor is commencing, the little mass of jelly is found to have divided into from twelve to twenty minute spheres all held together by the remains of the degenerated red cell, and with minute masses of pigment in the centre. Later the group of spherules has burst through the envelope that held them, and has appeared free in the blood-fluid. Many of these free spherules are attacked and absorbed by the phagocytes, but those which escape destruction effect their entrance into other red blood cells and go through the same process of sexual division, taking forty-eight hours for the process. On the time taken for this cycle to occur depends the periodicity of the fever, the attack appearing every third day, whence the name tertian fever. Another variety of malarial parasite, not very common in India, takes seventy-two hours to complete its cycle, hence called the "quartan" variety.

There is also a third kind of parasite called the "malignant tertian," called by the Italians the aestivo-autumnal parasite, which also takes forty-eight hours to go through its cycle, but which gives rise to a more irregular fever, and has more pernicious effects on the system and is also liable to produce severe nervous symptoms, such as unconsciousness, often ending in death with very high fever. Each kind of parasite has its special characteristics which can be observed by microscopical examination. Consequently expert examination of the blood is always advisable in cases of fever, not only to show that malaria is present, but also to distinguish the particular kind which is causing the trouble.

Within the blood there also appears the first stage of the sexual life of the parasite in the shape of male and female elements, which result from some of the parasites which do not undergo the usual segmentation described above, and which exist for the purpose of allowing further development in the non-human host, which in the case of this particular parasite is the mosquito. These sexual elements are especially in evidence in the blood of cases of the pernicious variety of malaria, in the form of crescentic bodies which obtain considerable protection from the phagocytes, and many therefore persist for some time in such blood. "Crescents" appear only in malignant fevers, and persons who harbour them are of course a danger to the community, inasmuch as the mosquitoes of the locality are infected from them, thus rendering such village or street unhealthy from malaria.

The sexual elements of the malarial parasites when taken into the stomach of the mosquito which sucks up the blood of its victim, undergo certain changes, the male element extruding flagellate or hair-like processes which fertilise the female. The latter thereupon changes into a body endowed with the property of locomotion, which makes its way into the coats of the stomach of the insect, and becomes divided up into a vast number of minute cysts, each of the latter becoming packed with minute rod-like bodies. The cysts rupture into the body-cavity of the mosquito, and the rods, thereby set free, become collected within the substance of the salivary glands, and ultimately make their way to the base of the proboscis. On such an infected mosquito pushing its proboscis into the human skin when it wishes to draw blood some of the rods are injected into the blood stream. They then enter red blood corpuscles and go through the various cycles described above.

From three to five days, or as long as a fortnight, after being bitten by such a mosquito the patient has an attack of fever, sometimes preceded by pains in the limbs, headache, and malaise. This is soon succeeded by a feeling of intense chill, perhaps associated with vomiting. The skin becomes cold and blue, the shivering is excessive and prolonged, constituting the "rigor" stage. In this state the patient is in great distress, and obtains little sense of relief from the blankets which he heaps up over himself. Although the surface of the body is very cold, the temperature, taken in the arm-pit or mouth, shows a rise to 103° or higher. In a quarter of an hour or more the "hot stage" comes on, the face becoming flushed, the surface of the body red and warm, the small quick pulse becoming full and bounding, and perhaps the patient complains of throbbing headache. He remains thus for a few hours and then occurs the "sweating stage," perspiration breaking out about the head and face, and soon extending to the whole body. Great relief is experienced when this is entered on, and is likely to be followed by a refreshing sleep. During the paroxysm the spleen is often enlarged and may be the seat of considerable pain. There is also often troublesome cough from a concomitant bronchitis. With repeated attacks the enlargement of the spleen is liable to become permanent, the organ coming to form a large heavy tumour with special characteristics, the so-called "ague cake," which is common among the children of malarious districts. Europeans who suffer from severe or repeated malaria are likely to suffer from permanent ill-health in the shape of anæmia, dyspepsia, or easily-induced mental fatigue.

Treatment.

The traveller in India should endeavour to guard himself against the bites of mosquitoes. This can be done to a great extent by the use of mosquito curtains, the mosquito seeking the blood of its victim mainly at night. But when travelling by train protection is difficult. There are some odours which mosquitoes appear to dislike. Sprinkling the pillows with lavender water is sometimes efficacious, or smearing the hands with lemon-grass oil. Camps should not be pitched in the neighbourhood of native villages, if it can be avoided. Travellers should provide themselves with thermometer and a supply of quinine tabloids.

During the cold stage the patient should be well covered, and hot fluids administered, unless vomiting is present. Quinine should not be taken in this stage as it increases the distress. A diaphoretic, or sweating mixture, should be administered every two or three hours until the skin becomes moist, and throughout the hot stage. this soon gives relief, and when the stage of perspiration has been reached, ten

grains of quinine should be given, and repeated in five grain doses every six hours until the temperature becomes normal. Thereafter the drug should be continued for a few days in doses of five grains twice a day This is calculated to ward off a second attack, or, at any rate, to reduce its severity and prevent a third If there is vomiting, quinine tabloids are not likely to be digested and absorbed; in such cases the drug should be given in a mixture dissolved in a dilute acid The advantage of quinine tabloids is that the unpleasant taste is avoided

There are some severe continuous malarial fevers which appear to resist the action of quinine These are the pernicious tertian fevers, which so often cause difficulty in diagnosis inasmuch as for a few days they may suggest enteric fever, especially to those inexperienced in tropical diseases In such cases large doses of quinine are required, the skin being kept moist meanwhile by a diaphoretic mixture Some of these fevers last for a week or longer, but the majority of them yield to quinine in three or four days. It is in such that an early examination of the blood is so useful. In certain cases of profound malarial poisoning or where, for any reason, quinine does not appear to be acting when administered by the mouth, recourse must be had to the injection of quinine into the tissues This should always be done by a skilful physician, and with special precautions, as some cases of tetanus have occurred after quinine injections taken from stock solutions, even when apparently given with every care The "vaporoles" prepared by Messrs Burroughs Wellcome & Co, which consist of little glass capsules containing preparations of the drug dissolved in sterile and non-irritating fluid, appear to be absolutely devoid of risk and are very efficacious.

TYPHOID FEVER.

By Typhoid or Enteric Fever is meant a continued fever, lasting for three weeks or longer, due to the entrance into the intestinal canal of a particular bacillus (the typhoid bacillus), which not only produces serious abdominal trouble but also symptoms referable to a generalised infection of the blood by the bacillus and the poisons which it engenders Formerly the scourge of the British Army in India, especially among the younger soldiers, it has been reduced to a very low point, through the prophylactic use of Sir Almroth Wright's vaccine, continuous attention to the sanitary condition of the soldiers' quarters, improvement of water supplies, and skilful medical treatment

"Paratyphoid" is a term applied to certain fevers which have all the characters of typhoid, but with a rather lower mortality, and which are due to infection by bacilli which are closely related to the typhoid bacillus.

The fact that typhoid more frequently attacks the new arrivals to the tropics renders this disease one of the risks which tourists have to face, but this can be minimised by knowledge of the manner in which the typhoid bacillus affects an entrance into the system

Typhoid Fever has now been shown to be a common affection among Indians, contrary to what was held some fifteen years ago In Bengal and the Punjab, according to Leonard Rogers (Fevers in the Tropics), the maximum of cases for all classes occurs during the hot months, while the maximum for Bombay is in the rainy season But taking the European cases only he finds that the largest number of cases falls within the dry, cold and hot seasons, and considers that this is due to the European being most frequently infected through contaminated dust, this class of person paying greater attention now-a-days to the condition of the water which he drinks unlike the Indian who will drink water out of the nearest tap.

As is well known, infection of typhoid is most commonly produced by contamination of drinking water Great care is therefore necessary in boiling and filtering drinking water, and in protecting the vessels in which it is kept from contamination by dust. In the neighbourhood of all native villages the soil is laden with animal dejecta which, of course, is very likely to be associated with disease-producing microbes Hence infection of the food in cook-houses and shops is easily produced by the wind carrying the dust from latrines and other foul areas Uncooked vegetables produced from gardens watered by sewage-containing fluid are also very dangerous, and should be avoided by the Indian traveller Lastly oysters taken from estuaries which receive rivers laden with organic matter from the villages on the banks are believed to afford special protection to the typhoid bacillus and when eaten raw are dangerous

In many cases the onset of the disease is sudden, with headache, shivering and vomiting, but in a little less than half the onset is insidious, the patient being out of sorts, slightly feverish, perhaps with occasional looseness of the bowels, loss of appetite and a little sickness He ultimately takes to his bed, generally dating the commencement of his illness from this event, and there forthwith begins a period of at least three weeks of anxiety for his friends and relatives, inasmuch as enteric fever, as seen among Europeans in India, is characterised by its greater severity and longer duration The temperature rises gradually day by day during the first week, remains at a fairly constant high level during the second, becomes irregular with daily remissions during the third, and in the majority of cases is succeeded by a period of convalescence, during the first part of which the greatest care in dealing with the patient is required The bacillus produces its most important effects on the lower portion of the small intestine, certain glandular structures in the wall of the bowel becoming inflamed, enlarged, and finally ulcerated. It is on the formation of these intestinal ulcers that many of the worst complications depend. The ulcerative process favours, first a looseness of the bowels, later an exhausting diarrhœa. Moreover the destruction of some of the coats of the bowel may open up an adjacent blood vessel and produce alarming or even fatal hemorrhage. And again the whole thickness of the bowel may be perforated, causing death

from collapse and peritonitis This is the danger which the physician has in view throughout the case It can only be guarded against by the most careful nursing and attention to the dietary Other dangers are bronchitis and failure of the heart, especially during the third week During the stage of convalescence the same care has to be taken with the dietary as the ulcers are undergoing healing, and an error might lead to the rupture of one of them when all danger may well be expected to have passed Finally, owing to the depressing effects of climate, convalescence is often attended with prolonged mental depression

In the matter of treatment it is absolutely essential that the patient should have the benefit of skilled nursing Fortunately highly-trained European nurses can now be obtained from any populous centre, though occasions arise when the demand exceeds the supply If possible two nurses should be obtained for day and night duty respectively Unless it is absolutely necessary to remove him, the patient should be nursed where he falls ill and not sent long distances by train At the most he should travel to the nearest large town where there is a Civil Surgeon Treatment mainly consists in keeping the fever within bounds, and thereby sparing the strain on the heart which is great during the three weeks of continued fever This is effected in great part by the system of hydrotherapy, that is, treating the patient by continued tepid baths or by frequent sponging with tepid water to which a little toilet vinegar should be added There is no special drug which is of any use in aborting the fever, but this does not mean that drugs are of no use in typhoid. On the contrary the complications, which are many, will be detected as they arise by the careful physician, and there is no disease which tries more than this the skill of the doctor and the care of the nurse, who will frequently bring to convalescence what seems to be an almost hopeless case. Abdominal distension, for instance, is a frequent and serious complication in Indian typhoid, and should be treated as soon as detected It results partly from the decomposition of the intestinal contents, partly from loss of the muscular tone of the bowel It hinders the respiration and the action of the heart, and favours the occurrence of perforation Diet consists almost entirely of milk, either pure, diluted with barley water or whey, or as a jelly

Lastly a word should be said about the importance of typhoid inoculation to those intending to travel in India or the tropics It is better to have Wright's prophylactic vaccine injected before leaving home, but if this is not done, it should be submitted to on arrival in Bombay In the majority of cases the only discomfort resulting is a little passing tenderness at the site of inoculation in some cases there are a few hours of fever and in the worst the patient feels out-of-sorts for twenty-four hours The inoculation (with a larger dose) should be repeated on the eighth day Attention to this small precaution as a routine measure would obviate most of the catastrophes which we witness on occasions among "globe-trotters" who have come to the country for pleasure or health

DYSENTERY

The term Dysentery is applied to several forms of infective inflammation of the large bowel, in which the principal symptoms are griping, abdominal pain, frequent straining, and the passage of a large number of evacuations characterised by the presence of blood and mucus The changes which take place occur in the mucous membrane of the large bowel, and are first an acute catarrh succeeded by ulceration more or less extensive, and sometimes going on to gangrene

The disease is endemic in India, and is in fact common in Eastern countries, and in Egypt. It is liable to arise in epidemic form especially among armies in the field It is caused by a contaminated water supply, and by the infection of food by dust and flies Dysentery is probably caused by several varieties of micro-organisms but for all practical purposes may be said to be divided into two great groups, one due to the amœba of dysentery, and the other caused by a bacillus described by Shiga and known as bacillary dysentery The latter form is more common in Japan and in the north-eastern side of the Indian peninsula; the amœbic form being that most commonly seen in the Bombay Presidency The bacillary form is characterised by the presence of a very large number of evacuations perhaps as many as a hundred or even more in the twenty-four hours. In the amœbic form there are seldom more than twenty evacuations in the day, and there is less fever and general depression than in the bacillary variety In the amœbic form there is greater tendency to thickening of the bowel wall, and to the dangerous complication or sequel of abscess of the liver.

After a few days of severe illness should the patient recover there is a danger that the disease may become chronic, a condition which is associated with emaciation and profound weakness The chronic form is also more likely to eventuate from the amœbic type.

The frequency with which it attacks Europeans in India may be judged from the admissions of the European soldiers into hospital, the figures of admissions for each of the years 1910 and 1911 being 7·7 per thousand of strength

The treatment of the bacillary form with an anti-dysenteric serum has had good results. In the amœbic form most Indian physicians still rely, and rightly so, on the use of ipecacuanha This has to be given with particular precautions and with a previous dose of opium to diminish the liability to vomiting Recently, thanks to the work of Leonard Rogers, a valuable drug has been placed in our hands, in the form of emetine, an alkaloid derived from the ipecacuanha root; and which when injected into the deeper layers of the skin, gives all the good results of ipecacuanha without its unpleasant effects. It is of special value in the case of children in whom acute dysentery is a very serious disease. We have hereby obtained one more efficient weapon in the contest with one of the common diseases of India.

ABSCESS OF THE LIVER.

There are several varieties and causes of abscess of the liver but the term is applied in India to the single abscess which frequently forms as the result of amœbic dysentery, the latter generally preceding but sometimes being concomitant with the formation of the abscess It is one of the scourges of the European in India, and is especially to be dreaded on account of the high mortality Taking all the cases together, including the acute and chronic and all classes of the community, the death rate is about sixty per cent, but this will probably be reduced by recent improvements in the methods of diagnosis and treatment The latest annual report of the Sanitary Commissioner with the Government of India states that next to enteric fever, hepatic abscess is the most frequent cause of death among European troops, but the admissions and deaths on account of it have decreased greatly during recent years The report also notes that the decrease in the number of cases of liver abscess is coincident with an equally steady fall in the number of admissions to hospital for alcoholism

The disease is most liable to attack those who, in addition to having had an attack of dysentery, have indulged, not necessarily to excess, in alcohol and general good living, and are at the same time somewhat sluggish in their habits It is often preceded by continued fever, malaise dyspepsia, and more or less uneasiness in the liver region, or the latter organ may be acutely enlarged and very tender In many cases the exact diagnosis is often a matter of anxiety, but greater precision is now possible as we have come to recognise what Rogers has called the presuppurative stage of amœbic hepatitis, which is very amenable to treatment by ipecacuanha or injections of emetine The use of this method will often prevent the case going on to the dangerous condition of abscess, which when it has once definitely formed can only be dealt with by prompt operation, which in itself has a high mortality Further aid is now obtained by special examination of the blood and by the use of the X-rays, which will often clear up a doubtful case

The abscess generally forms in the right lobe of the liver Should it form on the left side it is especially liable to rupture into one of the internal organs

The same complication may eventuate when the abscess forms on the right side Here the principal point of rupture is into the right lung, the contents of the abscess being suddenly evacuated, in some cases without much warning, and nature thereby effecting a cure Such a termination however is not desirable as healing will take place quicker by surgical means

There are some abscesses which are exceedingly insidious, it often happening that patients are sent home with a fever associated with general loss of health and weight, where the existence of a deep seated abscess may not even be suspected, but in which the symptoms of hepatic abscess suddenly occur and clear up the case or the correct diagnosis may obtrude itself by the sudden rupture as above described

PLAGUE.

Plague is a disease of very great antiquity, its ravages and symptoms have been described with remarkable accuracy by the old historians, such as Procopius Not many years ago it appeared to be a disease of historical interest only, but the present pandemic, which commenced about 1894, has made it a subject of the greatest importance to the inhabitants of the British Empire It was in March 1894 that it first became prominent in Canton, and thereafter it spread to Hongkong, Macao and Pakhoi, and so along the whole of the Southern China Coast It probably arrived in Bombay in March 1896, but it was not until the end of September that it became noticeable in that part of the native city known as Mandvi, in which the great grain supplies are collected, and wherein consequently there is an enormous rat population In October of the same year the presence of the pestilence was officially acknowledged Everything which the limited knowledge of the subject at that time suggested, was done to check its spread, but, in spite of all efforts, the pestilence spread from the infected city throughout the greater portion of the Peninsula, and while its ravages of late years have not been so terrible as at its first appearance yet the disease still takes its annual toll of human life, and it has apparently become one of the endemic diseases of India. According to the official figures, Plague since its appearance has been responsible for more than seven and a half million deaths within the limits of the Indian Empire. These figures should perhaps be increased by about fifteen to twenty per cent, due to defects in the registration of the causes of deaths and also to the fact that the disease often simulates other maladies for which it is likely to be mistaken by an uneducated population

Plague is an acute infection of the blood by a bacillus which was discovered by Kitasato in Hongkong in 1894 It generally affects its entry by the skin, on which it is deposited by the rat-flea At the site of deposit a small pustule is occasionally found which soon forms a superficial ulcer In such cases inflammation and distention of the lymphatics may be noticed running from the neighbourhood of the small and painful ulcer to the nearest group of glands These will be found to be enlarged and exquisitely tender, the tenderness being out of all proportion to the size of the glandular enlargement and to the amount of local inflammation This glandular enlargement is called the Bubo, which has given the name to the most common form of the pest—Bubonic Plague

With the appearance of the Bubo, or even a day or so before it, there is evidence of a general infection of the system, in the shape of extreme prostration, mental confusion, a furred tongue, and fever which is generally high The pulse is accelerated, and while at the outset, especially in full-blooded muscular adults, it is likely to be full and bounding, there is sooner or later, generally soon, evidence of early failure of the strength of the cardio-vascular system The pulse becomes quicker, smaller, and the heart

sounds feeble As the case progresses, the primary ulcer will enlarge and become of an angry appearance, the Bubo will also enlarge and the tissues around the inflamed lymphatics will be swollen and œdematous To this variety the term "cellulo-cutaneous plague" has been applied The spreading ulcer, which is really a local gangrene, has been described as the plague "carbuncle", these forming on the skin of those affected were often referred to by old historians as a prominent feature in many ancient epidemics

These cases however are somewhat uncommon The usual variety met with is the Acute Bubonic Plague In this the patient is attacked with fever, and all the general symptoms of an acute infection and on the first, second or sometimes the third day of the illness the characteristic bubo appears The common site is among the glands of the groin, for the reason that these glands receive the lymphatics from the lower limbs and from the lower portion of the trunk up to the level of the navel, a larger area than that drained by any other group of glands Other sites for Bubo formation are the arm-pits, the glands of the neck, those about the angle of the jaw and below the chin, and very rarely the little gland on the inner side and just above the elbow, and the small glands behind the knee joint In some cases, generally in association with Buboes in the groin, the deep glands of the abdomen can be felt to be enlarged

These Plague Buboes are of different kinds and it is a matter of some importance in connection with treatment and the outlook as regards recovery, to recognise the type of Bubo present in each particular case The common variety is the "softening bubo" The enlargement increases somewhat rapidly and the hard swelling gives place to a soft doughy mass around which is a limited amount of serous effusion into the subcutaneous tissues If the patient lives till the fifth day or thereabouts this bubo will feel like a tightly stuffed pincushion, or may give the experienced examiner the signs that the contents are of a fluid nature On incision, pus and shreds of the disorganised gland will be evacuated, and under suitable treatment the cavity, though large, will heal up within a week or so When these softening Buboes are allowed to rupture spontaneously a large foul cavity is produced, such are not unfrequently encountered among the poor, who have not received adequate attention during the stress of a plague epidemic

Another variety of bubo obtains when the glands inflame and harden, the inflammation being so acute that the blood supply of the part is obstructed and the whole of the affected area sloughs out, leaving a large superficial ulcer of a very unpleasant appearance These buboes are found where the inflamed glands are bound down beneath tense tissues, as in front of the ears and in the region of the groin To this kind the term "indurated bubo" has been applied. Another variety the "œdomatous bubo" occurs in the neck and the arm-pit and in them the serous effusion into the tissues around the glands, present to a less extent in the common type is the essential feature. The whole armpit or the side of the neck may be distended by the accumulation of fluid under the skin It is an extremely distressing kind of bubo, as the pain is great and nearly all the patients die Also there is a rare kind the 'hard late bubo," which appears after about a fortnight in cases simulating typhoid fever, and lastly there are some soft buboes which abort and shrink with the rapid subsidence of the fever—the "shrinking bubo" The fever continues from the outset with slight remissions, it is generally about 103° to 104°, but it may rise to a great height from almost the initial rigor On the third day the temperature tends to approach the normal, and almost immediately rises again Should it rise to a point above that of the maximum temperature preceding the remission the outlook is bad but in cases which are likely to do well it rises to a point which is less than that of the preceding maximum, and after about three days gradually falls to normal with slight daily oscillations depending on the amount of the suppuration in the buboes and their local condition

It is to be understood that this disease is of such great virulence to human beings, on account of the early appearance of the plague bacillus in the blood-stream, that there are many instances in which death occurs before the bubo has had time to undergo the changes described above or even to form The more acute cases are also liable to be atypical in their mode of onset Some are taken with a wild delirium in which they are likely to attack those about them others suffer from vomiting of blood followed by rapid failure of the heart and death pregnant women miscarry and practically all of them die and lastly there are cases where the general and local symptoms are slight and yet failure of the heart may suddenly ensue within a few hours of the onset These so-called "fulminant" cases are generally met with at the commencement of every epidemic in some of the descriptions of mediæval epidemics they seem to have been in the majority, and it is on account of these that plague epidemics appear so terrible to the occupants of the plague-stricken town Fortunately, however, there is a large majority of cases which allow some scope for medical skill The condition of the patient after the full development of the symptoms is always one which gives rise to great anxiety The mental condition becomes dulled, which, while it mitigates considerably the distress of the sufferer, is nevertheless an indication of the action of the plague poison on the nerve centres The eyes are suffused and often acutely congested There may be cough, which is a bad sign as it indicates either a secondary pneumonia or the onset of an acute bronchitis, the direct result of the failure of the heart If the latter progresses the breathing becomes more rapid, the pulse weak and almost uncountable at the wrist, the skin cold and clammy, and towards the end covered by profuse perspiration finally, the breathing becomes irregular, and after several long-drawn gasps the patient breathes his last

In other cases however improvement starts about the fourth day, the temperature gradually falls, and the mind clears: the bubo suppurates in due course and heals up, and the patient passes into a slow convalescence, but which is sometimes retarded by the formation of chronic

abscesses, boils, attacks of heart failure or of palpitation, or ulcers of the eyeball with infection of the whole globe and consequent loss of sight Some recover with permanent mental enfeeblement, or persistent tremors of the limbs with difficulty in speaking with clearness

Septicaemic Plague.

This term is applied to certain forms of acute plague where buboes do not form, or where there is uniform but slight enlargement of glands in various parts of the body with symptoms of a general blood infection The term is misleading, inasmuch as most cases of acute bubonic plague are really septicaemic from the outset These cases are either acute, ending fatally about the third day or sooner or are sub-acute, with symptoms simulating typhoid fever, ending fatally in about a fortnight In the acute cases large dusky patches of blood-effusions beneath the skin, the so-called plague spots, are sometimes found, and there may be hemorrhages from the stomach or bowels

Pneumonic Plague.

In this variety the plague bacillus proliferates in the lung and causes rapid consolidation of large patches of the lung tissue scattered irregularly throughout the organs, with a considerable amount of œdema, so that the lungs are engorged with blood, are large and heavy, and the bronchial tubes filled with reddish frothy fluid which contains the plague bacillus in almost pure culture The fever is very high and the interference with respiration immediate, and death occurs from the second to the fourth day A curious fact about pneumonic plague is that one such case is liable to give rise to others of the same type

Treatment of the Disease

No serum or antitoxin has so far proved of value in diminishing the mortality of the sick Much can, however, be done by medical treatment Absolute rest is required and the patient should not even be allowed to sit up in bed Drugs which act as heart stimulants are required almost from the outset, and frequently these have to be administered by the skin as well as the mouth The buboes should be fomented till they soften, and incised as soon as fluid is formed For the pneumonic condition the administration of oxygen gas gives relief. This can be obtained in India without much difficulty Careful nursing is essential, and fluid nourishment must be given regularly in an easily assimilable form, and complications have to be met as they arise As regards prophylaxis by means of Haffkine's Plague prophylactic which is manufactured in enormous quantities at the Bacteriological Government Laboratory at Parel, it may be said that its use gives a threefold chance of escape from attack and a reduction of case mortality by fifty per cent

DENGUE FEVER.

Dengue fever, otherwise known as Dandy fever or Breakbone fever, is rather common in India and is generally present in the larger towns, but as it appears in manifold forms and various writers describe it differently, its identity is not always recognised, and, therefore, by many medical men is thought to be less common than it really is On occasions it gives rise to very wide-spread epidemics In 1902 there was an extensive epidemic on the eastern side of the Indian Peninsula, and quite recently there has been a bad outbreak in Calcutta It is more common during the rainy season

The onset is abrupt, with fever, slight sore throat producing cough, rapidity of the pulse, sometimes a red rash which is so fugitive that it is often overlooked, and intense pain These pains constitute the patient's chief complaint They are generally pains in the bones, or in the small of the back, or in some of the joints either large or small Sometimes there is no complaint of pain in the limbs, but there is intense pain behind the eyes The fever lasts for three or four days, during which in rare cases there may be further symptoms due to the appearance of a pleurisy or even a pericarditis Sometimes there is intense shooting pain into the little finger. Though the intensity of the symptoms may give a very serious aspect to the case, yet a fatal issue is almost unknown. After the four days of intense suffering the fever subsides somewhat abruptly, and at about this time a second rash appears, most marked over the shoulders and neck, and on the backs of the arms, or else an universal rash It is of a dark red colour, often very like the rash of scarlet fever, or it may be like that of measles With its appearance the more severe symptoms subside During convalescence the patient is much depressed, and the pulse remains unduly rapid Sometimes also pain starts again in one of the joints, or he is crippled by stiffness of the back or of several of the joints. After a shorter or longer period, from two days to ten, a second attack of fever and pain comes on which runs the same course but as a rule less severe and prolonged; in very rare cases there is a third attack.

There is no drug which will cut short the disease From its likeness to rheumatism the salicylates are generally used, and perhaps relieve the pains This drug should be combined with an ordinary fever mixture large doses of bromide should be given for the headache, and the excruciating pains must be treated with morphia.

It is often impossible to distinguish the malady from influenza until the appearance of the rash

It is believed that the poison is conveyed by the bites of a mosquito, and that this poison has characters which are analogous to the virus of Yellow Fever.

CHOLERA.

This is one of the most important diseases of India, having been endemic therein for many hundreds of years. It is always present in the country, and sometimes extends over large districts generally from some crowded centre such as the site of a pilgrimage, from which it is dispersed over the country-side by the returning bands of pilgrims The deaths in British India from this disease in 1910 numbered four hundred and thirty thousand, and in the following year three hundred and fifty-four thousand. The disease is of special importance to the numerous

pilgrims both on going to and returning from Mecca.

It is essentially a water-borne disease and the exciting cause is the "comma bacillus" discovered by Koch, so called from its shape when isolated and stained. The dejecta of a person suffering from the disease, when contaminating the soil, are liable to get washed by the rains into some water-supply, which may become the source of almost unlimited infection. Such contaminated drinking water is rendered innocuous by boiling, or filtration through a Pasteur-Chamberland filter. The importance of Koch's discovery, therefore, lay in the recognition of the fact that the poison was essentially water-borne. It can also be conveyed by flies settling on food.

The disease has an incubation period of from two to seven days. After a premonitory diarrhœa with colicky pains lasting for half a day or longer, the nature of the illness is announced by violent purging and vomiting, the former having the peculiar character of rice-water. The poison may be so intense that death takes place before the purging appears, the so-called "cholera sicca." In the common form collapse is early and marked, the extremities are blue and cold, the skin shrunken, the heart weak, the surface temperature below normal, though the temperature taken in the mouth shows high fever to be present. There is curious pinched expression of the face with deeply sunken eyes, and the patient endeavours to communicate his wishes or fears in a hoarse whisper. He is further distressed by painful cramps in the muscles of the calf and abdomen, and there is suppression of the functions of the kidneys. Death generally takes place in this the algid state. Should the patient survive he passes into the stage of reaction, the unfavourable symptoms disappearing and gradually passing into convalescence. In some of these cases which give hopes of recovery there is a relapse, the conditions of the algid state re-appearing and death taking place. It has recently been recognised as a cause of the dissemination of the disease, that patients who have recovered will continue to discharge the bacillus for many weeks.

The prevention of cholera lies in attention to water supplies, and in boiling and filtering as a matter of routine in Indian life. All the discharges from the sick should be treated with disinfectants, and soiled clothing and linen destroyed. People who have to tour in cholera-stricken districts, or who go on shooting excursions, or who find themselves in the midst of a cholera outbreak should undergo inoculation with Haffkine's preventive vaccine. Two inoculations are required, the second being more intense in its effects. The temporary symptoms which may arise after the inoculation are sometimes severe, being always more marked than after inoculation against typhoid, but the protection afforded more than makes up for the temporary inconvenience endured.

During the cholera season the mildest cases of diarrhœa should be brought for treatment to a physician, as such persons are more liable than others to contract the disease.

Treatment mainly resolves itself into meeting the extreme collapse with stimulants and warmth. There is great temptation to administer opium but in some cases this is not unattended with danger, and in others there is no capacity left in the patient for the absorption of drugs administered by the mouth. The mortality has, however, been reduced by the injection of saline fluid into the skin or directly into the veins and also by the introduction of saline fluid of particular strength into the abdominal cavity.

Kala-Azar.

This is a slowly progressive disease associated with great enlargement of the spleen and some enlargement of the liver, extreme emaciation, and a fever of a peculiar type characterised by remissions for short periods, and due to infection by a parasite of remarkable characters which have only recently been worked out. It is attended with a very high mortality, about 96 per cent., and has up to the present resisted all methods of treatment, although some patients appear to improve for a time, only in the majority of cases to relapse later.

It is endemic in Assam, from which it has invaded Bengal, and is now often seen in Calcutta. It is also fairly often met with in Madras, though it is said that the cases are imported ones. It is very rarely seen in Bombay, and then only in immigrants from infected localities, though there appears to be a mild endemic centre in Jabalpur in the Central Provinces, so it is likely to be more frequently met with on the western side of India. It has caused great mortality among the coolies on the tea-plantations of Assam, especially among the children, but under the recent measures of prophylaxis which have been put into force since knowledge has been acquired about its real nature and method of spread, the ravages of the disease are likely to be limited. It is very rare among Europeans and then almost entirely among those who have been long in India or who have been born and bred in the country.

Infection seems generally to start in the cold weather. There is fever with rigors, and progressive wasting and loss of energy. The temperature chart is a curious one, the fever showing two remissions during the twenty-four hours. Diarrhœa is common, especially during the later stages of the disease. The spleen enlarges early and is generally of enormous size producing bulging of the abdomen. A remarkable feature is the tendency to the formation of ulcers, which in many cases, especially in children, takes the form of a gangrenous ulceration of the mouth and cheek. Death usually occurs from some intercurrent inflammatory condition, often pneumonia.

The parasite is found in the spleen and liver during life, and can be obtained by puncture of these organs. As thus obtained it is a minute round body of special characters. In this state it is known as the Leishman-Donovan body from its discoverers. This small body has been cultivated by Leonard Rogers in suitable media and under low temperatures, and found to develop into a flagellated, that is tail-possessing, organism. How this peculiar

organism develops outside the human host is not yet completely known. It is certainly a house-infection, which accounts for the manner in which whole families have been swept off, one member after another. Its progress has been stayed by moving families from their infected houses and burning down their former quarters. This, and other facts connected with its spread, have suggested that the agent for conveying the poison from man to man is the common bed-bug, and Patton has succeeded in developing the flagellate stage in this creature when fed on the blood of the sick.

There is a severe form of ulceration of the skin known as "Delhi Boil" from which organisms very similar to the Leishman-Donovan body were obtained many years ago. These bodies have also been cultivated outside the human host and found to develop into a flagellated organism. The two parasites, though closely allied, are nevertheless distinct.

DRUG CULTURE.

Two monographs on the cultivation of drugs in India, by Mr. David Hooper, of the Indian Museum, Calcutta, and by Mr. Puran Singh, of the Indian Forest Department, Dehra Dun, have lately been published. Mr. Hooper, in his paper, states that one-half of the drugs in the British Pharmacopœia are indigenous to the East Indies, and nearly the whole of the rest could be cultivated or exploited. The following are given as those that could be grown in quantity and as worthy of the attention of cultivators and capitalists:—

Belladonna, most of which is still imported, grows well in the Western Himalayas from Simla to Kashmir, the Indian-grown plant containing 0·4 to 0·45 per cent. of alkaloid.

Digitalis is quite acclimatised on the Nilgiris, growing there without any attention. The Madras Store Department obtains all its requirements from Ootacamund, and the leaf has been found equally active to that grown in England.

Henbane is a native of the temperate Himalayas from 8,000 to 11,000 ft. It was introduced into the Botanic Gardens, Saharanpur, in 1840, and it has been steadily cultivated there up to the present time, and the products supplied to medical depots satisfy the annual demand.

Ipecacuanha has been raised with a small measure of success in the hilly parts of India, and it only requires care and attention to raise it in sufficient amount to make it commercially remunerative.

Jalap-root grows as easily as potatoes in the Nilgiris, and there is no reason why the annual requirements (about 4,000 lbs.) for the Medical Stores of Bengal, Bombay and Madras should not be obtained from Ootacamund.

Mr. Puran Singh discusses the subject in a number of the "Indian Forester" he states that recent most of the drugs in the British Pharmacopœia grow wild in India, and that there is already a large export trade for some of them. He adds, however, that materials collected at random cannot be expected to fetch full prices, as they seldom come up to standard quality, and he adds: "The few drugs that are not indigenous to India could easily be made to grow in some part or other of this vast land. The great advantage accruing from the systematic cultivation of drugs is that a regular supply of genuine drugs of standard quality is assured. The variation in the quality of wild-grown drugs is sometimes a very serious drawback to finding a profitable market for them. The quality of *Podophyllum Emodi* growing wild in India is an illustration in point. This plant was discovered by Sir George Watt in the year 1888, and now, even after twenty-four years, in which it has been shown to be identical with the American drug that is being employed for pharmaceutical purposes, it still remains unrecognised by the British Pharmacopœia, which, as explained by the "Chemist and Druggist" some time ago, is solely due to the uncertainty which still exists as to its physiological activity.

Mr. Singh also points out that the Indian consumers of medicine depend mostly on herbs growing wild in the Forests, the more important of these probably numbering at least 1,000. This inland trade is very large, the possibilities in the Punjab only being put at Rs. 50,00,000. He mentions saffron, liquorice, and salep as products exotic to India, whose cultivation in that country looks full of promise. Mr. Singh suggests that a complete survey be made of the extent of the inland trade in medicinal products found growing wild in Indian forests in order to arrive at the figures of annual consumption, and that the forest areas where the most important drugs grow should be preserved. Inquiries should be instituted as to the best methods of cultivation, and if need be, the means of extending the artificial propagation. It is to provide data to induce the private capitalist to embark on such enterprises that Mr. Singh advocates the formation of some body to go into the matter. He suggests that India is well worthy of attention by those in this country who are interested in extending the culture of drugs in the British Empire. The Forest Department has already begun the cultivation of Indian podophyllum-root in the Punjab, United Provinces and the North-Western Frontier, and that several maunds of dried rhizome are sold annually for local consumption. Mr. Hooper also shows that a start has been made in regard to the cultivation of belladonna, henbane and digitalis. One of the principal difficulties to be overcome is to ensure a ready market, and there is also always the danger of overproduction to be considered.

Essential Oils.

SANDALWOOD OIL is, by far the most important perfumery product of India. The sandalwood tree is a root parasite, obtaining its nourishment from the roots of other trees by means of suckers. It grows best in loose volcanic soil mixed with rocks, and preferably ferruginous in character. Although in rich

soil it grows more luxuriantly, less scented wood is formed, and at an altitude of 700 feet it is said to be totally devoid of scent The best yield of oil is obtained from trees growing at an altitude of 1,500 to 4,000 feet, but the tree requires plenty of room so as to enable it to select vigorous hosts to feed it

PALMAROSA OIL, also known as Indian geranium or "Turkish geranium oil" is another of the principal perfume products of India It is derived from the grass, *Cymbopogon Martini*, which is widely distributed in India, where it is known as "Motya" Gingergrass is an oil of inferior quality, possibly derived from older grasses or from a different variety of the same species Both oils contain geraniol, the proportion in palmarosa being from 75 to 95 per cent and in gingergrass generally less than 70 per cent These oils are used in soap perfumery and for scenting hair oils, pomades

LEMONGRASS OIL is derived from *Cymbopogon citratus* and *Cymbopogon flexuosus* The former is a native of Bengal, and is largely cultivated all over India, but the oil distilled on the Malabar Coast and Cochin is derived principally from *C flexuosus*

VETIVER, OR CUS-CUS, is a perennial grass, *Vetivera zizanoides*, found along the Coromandel Coast and in Mysore, Bengal and Burma, in most heavy soil along the banks of rivers The leaves are practically odourless and only used for thatching and weaving purposes The roots are used in perfumery and in the manufacture of mats and baskets

THE MALABAR CARDAMOM, *Elettaria cardamomum*, is the source of the seeds official in the British and other Pharmacopœias Cardamom oil of commerce is, however, not distilled from this variety on account of the high price, but is obtained almost exclusively from the long cardamom found growing wild and cultivated in Ceylon The oil is used medicinally as a carminative and is also employed by perfumers in France and America

COSTUS ROOT (the root of *Saussurea lappa*) is a native of Kashmir, where about 2,000,000 lbs are collected annually It is exported in large quantities to China where it is used for incense It is also used to protect shawls and clothes from the attacks of insects Its odour resembles that of orris root

BLUMEA BALSAMIFERA is the source of the Nagai camphor used in China for ritualistic and medicinal purposes This shrubby composite is found in the Himalayas and is indigenous to India It is widely distributed in India and is used by the natives against flies and other insects

EUCALYPTUS plantations are situated chiefly in the neighbourhood of Ootacamund, Coonoor, and Wellington, at elevations varying from 5,500 to 8,400 feet, the best being at from 7,200 to 8,000 feet The climate of this region is fairly cool, equable and moist, with a well-distributed rainfall of about 50 to 80 inches, although frosts occur, the winters are mild on the whole, and snow is unknown The soil, a red clay overlying gneissose rock, is rich and deep in some parts, shallow and poorer in others A large factory is being built for the distillation of eucalyptus oil at Ootacamund. It is believed there is a considerable future for the undertaking provided a sufficient supply of the leaves is available

Manufacture of Quinine.

Government Cinchona plantations were started in India in 1862 from seed introduced by Sir Clements Markham from South America of which the plant is a native There are two main centres, Darjeeling and the Nilgiri Hills In both localities a portion of the area is owned by tea or coffee planters, and the bark they produce is either sold to the Government or exported Several species of cinchona are cultivated in India namely, *Cinchona succirubra* (red bark), *C calisaya* and *ledgeriana* (yellow bark), and *C officinalis* (crown bark) The commonest species in Darjeeling is *C ledgeriana*, and in Southern India *C. officinalis* A hybrid form is also largely grown and yields a good bark At the Government factories both cinchona febrifuge and quinine are made Thanks to these factories, practically no quinine is nowadays imported for Government purposes Private imports of quinine amounted in 1911 to lbs 128,149 valued at £72,084 One of the most far-reaching measures of modern times for the benefit of the health of the people of India has been Sir George King's system of having quinine locally produced from cinchona, made up in 7-grain packets and sold (since 1896-7) for a quarter anna (one farthing) at every post office in India This scheme has proved a commercial success, and has been of immense benefit to the inhabitants of fever-stricken tracks In the year 1912-13 10 694 lbs of quinine were sold at the post offices

The Quinine Ring —A report issued in April, 1914, by the Superintendent of the Royal Botanic Garden, Calcutta states — "Towards the middle of 1912 negotiations were commenced between the Java planters, who produce about 80 per cent of the world's bark and the European bark importers and quinine manufacturers with a view to an agreement as to the minimum unit price to be given for bark The price of quinine in the bark had been going down steadily for a number of years, and had reached a point that threatened the conversion of much cinchona land in Java into coffee tea or sugar-producing areas At present the negotiations between these bodies still drag on but it seems probable that an agreement will be arrived at whereby, among other conditions, the minimum rate for bark will be raised to 5 Dutch cents per unit" The quinine ring is now an established fact The effect of this agreement may be far reaching Already, after less than a year's working, the price for bark has risen from the minimum 5 cents imposed to 6 20 Dutch cents per unit and there is every likelihood, according to latest advices of a further rise This has had the effect of nearly doubling the price of quinine within the last three years and has at once made the production of the alkaloid a profitable concern The agreement would appear to be working smoothly and already there are hints that it will be ratified at the end of the contract period nor is the world's production in excess of the growing market's demand Unless unforeseen circumstances such as the displacement of quinine by other drugs or increased acreages pointing to greatly increased production ensue, quinine is likely to remain at its present high level for some time

The Cocaine Traffic.

The form of cocaine chiefly used in India is Cocaine Hydrochloride This salt forms light shining crystals, with a bitterish taste, and is soluble in half its weight of water The alkaloid cocaine—of which this is a salt—is obtained from the dried leaves of the Erythroxylon Coca which grows in Bolivia, Peru, Java, Brazil and other parts of South America The leaves are most active when freshly dried and are much used by the Natives as a stimulant Tea made from them has a taste similar to green tea and is said to be very effectual in keeping people awake In India the Coca plant seems never to have been cultivated on a commercial scale It has been grown experimentally in the tea districts of Ceylon, Bengal and Southern India and has been found to produce a good quality and quantity of cocaine As the plant has not been seriously cultivated and as there is no possibility for the present of the drug being manufactured in India, no restrictions have as yet been placed on its cultivation

Spread of the habit —The cocaine traffic in India which seems to be reaching alarming proportions in spite of legislation and strict preventive measures is of comparatively recent growth, though it is impossible to estimate how widespread it was in 1903 when the Bombay High Court for the first time decided that cocaine was a drug included within the definition of an intoxicating drug in the Bombay Abkari Act Since that date the illegal sale of cocaine in India has largely increased and the various provincial Excise Reports bear witness to the spread of the "Cocaine habit" The consumers of the drug, which is notoriously harmful, are to be found in all classes of society and in Burma even school children are reported to be its victims, but in India as in Paris the drug is mostly used by prostitutes or by men as an aphrodisiac The habit has spread chiefly to those classes which are prohibited by religion or caste rules from partaking of liquor and the well known Indian intoxicating drugs.

Imports from Europe —Cocaine and its allied drugs are not manufactured in India, but are imported from Germany, France, England and Italy Most of the drug which is smuggled into India, comes from Germany and bears the mark of the well-known house of E Merck, Darmstadt This firm issues cocaine in flat packets of various sizes ranging from 1 to 3 ounces which are easily packed away with other articles and greatly favour the methods of smugglers. Owing to its strength and purity cocaine eaters prefer this brand to any other in the market Restrictions on export from Europe have been under consideration for some time but as yet no international scheme devised to that end has been agreed upon. This is to be regretted for, according to a Press Note issued by the Government of Bombay in April, 1918, "the cocaine habit appears to be extending and unless concerted measures are taken to cut off the supply of the drug at its source in Europe it is not possible for a preventive staff in Bombay to do more than put from time to time a temporary check on the nefarious traffic."

Smuggling.—So far as the cases already detected show, the persons who smuggle the drug by sea from Europe and places outside India, into India, are chiefly sailors, stewards, firemen and sometimes engineers and officers of the Austrian Lloyd and Florio Rubattino S S Companies The crews of German and English ships, calling direct at Marmagoa, are also known to import the drug in large quantities. Cases are also on record of the drug having been smuggled in from the Persian Gulf and the Far East The chief ports through which cocaine enters India are Bombay, Karachi, Calcutta, Madras, Marmagoa and Pondicherry The main inland distributing centres are Delhi, Lucknow, Meerut, Lahore, Mooltan, Surat and Ahmedabad Delhi especially is notorious for the cocaine trade Great ingenuity is employed in smuggling cocaine through the Custom houses It is packed in parcels of newspapers, books, toys and piece-goods and in trunks which have secret compartments. The retail trade in the towns is very cunningly organized and controlled In addition to the actual retailers, there is a whole army of watchmen and patrols whose duty is to shadow the Excise and Police Officials and give the alarm when a raid is contemplated In spite of these precautions many big seizures have been made in Bombay, Calcutta, Karachi and elsewhere In Bombay all Austrian and German ships are watched day and night by special officers during the whole time the vessels are in port This has resulted in smaller quantities being landed The total quantity of cocaine seized in the Bombay Presidency during 1913-14 consequently fell to about 850 ounces Many large seizures have been made during the current year, *i e*, 1914-15

Price —The cocaine seized is either given to Hospitals in India or destroyed It is no longer possible to buy cocaine from any betel-nut seller as it was ten years ago, but scores of cases in the Police Courts show that the retail trade thrives, though to a diminished extent, in Bombay High profits ensure the continuance of the trade At present the English quotation is 12 shillings per ounce and the price as sold by licensed chemists in India is about Rs 17 per ounce Owing to the war and the consequent stoppage of illicit importations from Austria and Germany it is not possible to buy the smuggled drug from the wholesale dealers for less than Rs 25 to 30 per ounce and when sold by the grain the price realized varies from Rs 120 to Rs 180 per ounce. These profits are further enhanced by adulteration with phenacetin and inferior quinine. Major A Tuke, I M S, in an article in the *Indian Medical Gazette* states that in Bombay the cocaine habit is prevalent among the upper as well as the lower classes, and Mahomedans are the greater consumers. "Apart from the physical harm done to the victim this habit is producing endless petty thefts and crime. The confirmed cocaine-eater consumes as much as 60 grains a day the price being about 3 annas per grain. Once having acquired the habit he cannot endure even a reduction of his daily dose, much less do without it altogether Somehow he must find 180 annas a day to satisfy his craving. In the case of the poorer victims the usual resort is theft"

The law in regard to Cocaine —This varies in different provinces. A summary of the law In Bombay is as follows No cocaine can be imported except by a licensed dealer and importation by means of the post is entirely prohibited The sale, possession, transport and export of cocaine are prohibited except under a license or permit from the Collector of the District A duly qualified and licensed Medical practitioner is allowed to transport or remove 20 grains in the exercise of his profession, and as far as 6 grains may be possessed by any person if covered by a *bona fide* prescription from a duly qualified Medical practitioner The maximum punishment for illegal sale, possession, transport, etc under Act V of 1878 as amended by Act XII of 1912 is as follows Imprisonment for a term which may extend to one year or fine which may extend to Rs 2,000 or both and on any subsequent conviction imprisonment for a term which may extend to 2 years or fine which may extend to Rs 4,000 or both In Bengal the maximum imprisonment awardable at present for importation or possession of cocaine is 3 months' imprisonment under the Excise Act with or without a fine up to Rs 1,000 In Madras so far as information is available the maximum imprisonment awardable for cocaine offences is six months and the maximum fine Rs 1,000

Indian Tobacco.

The tobacco plant was introduced into India by the Portuguese about the year 1605 As in other parts of the world, it passed through a period of persecution, but its ultimate distribution over India is one of the numerous examples of the avidity with which advantageous new crops or appliances are adopted by the Indian agriculturist. Five or six species of *Nicotiana* are cultivated, but only two are found in India, namely, *N. Tabacum* and *N. rustica* The former is a native of South or Central America, and is the common tobacco of India About the year 1829 experiments were conducted by the East India Company towards improving the quality of leaf and perfecting the native methods of curing and manufacturing tobacco These were often repeated, and gradually the industry became identified with three great centres namely, (1) Eastern and Northern Bengal (more especially the District of Rangpur); (2) Madras, Trichinopoly, Dindigul, Coconada and Calicut in Southern India, and (3) Rangoon and Moulmein in Burma Bengal is the chief tobacco growing Province, but little or no tobacco is manufactured there The chief factories are near Dindigul in the Madras Presidency, though, owing to the imposition of heavy import duties on the foreign leaf used as a cigar wrapper, some cigar factories have been moved to the French territory of Pondicherry

The question of improving the quality of Indian tobaccos has received the attention of the Botanical section of the Agricultural Research Institute, Pusa, and three Memoirs have been published recording the results of investigations in that direction The immediate problem at Pusa is the production of a good cigarette tobacco Many attempts have been made in the past to introduce into India the best varieties of cigarette tobacco from America, but the results have been disappointing It is now hoped to build up by hybridization new kinds of tobacco, suited to Indian conditions of growth, which possess in addition the qualities necessary to obtain a better price

The Women's Medical Service for India.

This Service which was recently inaugurated under the auspices of the late Lady Hardinge, is included in the National Association for supplying female medical aid to the Women of India, generally known as the Countess of the Dufferin's Funds and is administered by the Central Committee of that Fund The Government of India has so far allotted the sum of £10,000 per annum towards its maintenance The present sanctioned cadre is twenty-five first class medical women, of which number five is for the purpose of forming a leave reserve Recruitment of the service is made (*a*) in India by a medical sub-committee of the Central Committee which includes the Director-General, Indian Medical Service, the Honorary Secretary to the Central Committee, and a first-class medical woman, (*b*) in England, by a sub-committee, consisting of a medical man and two medical women conversant with conditions in India, to be nominated by the Home Committee of the Countess of Dufferin's Fund. These sub-committees perform the duties of a medical board examining candidates for physical fitness, and for return to duty after invaliding

The Central Committee determines what proportions of the members of the Service is to be recruited in England and in India respectively In the original constitution of the Service, duly qualified medical women who are in the service of, or who have rendered approved service to, the Countess of Dufferin's Fund, are to have the first claim to appointment, and thereafter special consideration is to be paid to the claims of candidates who have qualified in local institutions and of those who are natives of India

Qualifications.—The qualifications are that the candidate must be (*a*) a British Subject resident in the United Kingdom or in a British Colony or in British India, or a person resident in any territory of any Native Prince or Chief under the suzerainty of His Majesty exercised through the Governor-General of India or through any Governor or other officer subordinate to the Governor-General of India. (*b*) Must be between the ages of twenty-four and thirty at entry. (*c*) She must be a first-class Medical Woman, *i.e.*, she must possess a medical qualification registerable in the United Kingdom under the Medical Act,

or an Indian or Colonial qualification other than L M &S or Licentiate of a Medical College in India registerable in the United Kingdom under that Act but this condition does not apply at the original constitution of the Service to medical women in charge of hospitals who, in the opinion of the Central Committee, are of proved experience and ability (*d*) The candidate must produce a certificate of health and character But the Central Committee reserves the power to promote to the service ladies not possessing the above qualifications, but who have shown marked capacity Members of the Service are required to engage for duty anywhere in India or Burma Those recruited in England serve for six months, and those recruited in India for three months, in a General Hospital of the Province to which they are deputed After this period of probation has been satisfactorily passed their appointments are confirmed The services of Members may be lent to Local or Municipal bodies, or to special Institutions, which may be responsible for whole or part of the pay

Pay.—The rates of pay are as follows — During probation Rs 350 per month thereafter Rs 400 up to the end of the 4th year Rs 450 from the 5th to the 7th year Rs 500 from the 8th to the 10th year and Rs 550 after the 10th year But no member can be confirmed in the 400 rupee grade unless she has passed an examination in such vernacular as the Provincial Committee shall prescribe, within one year of her appointment In addition suitable quarters are provided free of rent or a house rent allowance to be determined by the Provincial Committee may be granted in lieu of it

Members of the Service are permitted to engage in private practice provided it does not interfere with their official duties, and the Provincial Committee has the power to determine whether such duties are thus interfered with Except in very special cases retirement is compulsory at the age of forty-eight A member whose appointment is not confirmed, or who is dismissed, is granted an allowance sufficient to pay her passage to England

Leave Rules.—(*a*) Casual Leave, which is occasional leave on full pay for a few days, and is not supposed to interrupt duty (*b*) Privilege Leave, which is leave on full pay and is meant to provide a month's holiday in the year. If it cannot be granted during the year, it can be accumulated up to a limit of three months. (*c*) Furlough, at the rate of two months for each year of duty, the latter including privilege leave and casual leave First furlough is not granted till after four years' of duty, and more than eight months furlough is not granted at one time Study leave may also be granted not exceeding three months at a time and up to nine months during the whole service (*d*) Sick leave, up to a maximum of two years (*e*) Extraordinary leave at any time at the discretion of the Central Committee When on furlough or sick leave the allowances are half the average monthly pay of the six months presence on duty immediately preceding the taking of the leave There are no allowances during extraordinary leave. A Lady appointed in England receives a sum of £70 to cover her passage and incidental expenses There are also allowances to cover the cost of journeys by rail and road

There is also to be a Provident Fund, each member contributing monthly thereto five per cent of her salary, the Association contributing an equal amount, and each subscriber's account being granted interest on the amount standing to credit at the rate of 4 per cent. per annum, "or at such rate as the Central Committee can invest without risk to the funds of the Association"

The Member loses her contributions if she resign (except on account of ill-health) before completing five years' service, or in the event of dismissal. On retirement after approved service the sum which has accumulated to the credit of the subscriber is handed over to her

DEFECTS IN THE SCHEME.—The above are the regulations as last published It is probable that they will have to be altered in details as the authorities who have drawn up the scheme do not appear to have taken into consideration the great increase in the cost of living which of late years has pressed heavily on Europeans in India with limited salaries The initial salary is inadequate for English ladies in India, and those who enter the service without private means may find themselves unable to resign the service should they find it uncongenial, though not having been able to save sufficient to pay the expensive journey by ship to Europe, the cost of which (second class) is equivalent to a little more than a month's pay The same low rate of pay may also prevent the members taking the furlough due to them, a matter of great importance seeing that the Indian climate is especially trying to Englishwomen The furlough rules compare unfavourably with those granted to Englishmen in the corresponding Indian Medical Service, who are entitled to calculate one-fourth of their active service for furlough, whereas the women are only to be granted one-sixth Moreover the men can accumulate furlough up to two years, the women only accumulating eight months It is also to be noted that there is only a lump-sum on retirement, nothing in the shape of a pension It is also to be pointed out that private practice for the English doctor in India, whether man or woman, is always precarious and often unobtainable.

Supplying Medical Aid to the Women of India.

This Association, at once one of the most efficient as it is among the most useful and benevolent institutions in India, is the outcome of the work of the Countess of Dufferin and Ava during the time of her husband's Viceroyalty. The late Queen Victoria drew the attention of the Countess, on the departure of the latter for India, to the question of supplying medical aid to women in this country, and asked her to take a practical interest in the subject As the result of her enquiries she found that, though certain great efforts were being made in a few places to provide female attendance in hospitals, training schools, and dispensaries for women, and although missionary effort had done much, and had

indeed for many years been sending out pioneers into the field, yet taking India as a whole, its women owing to the "purdah" system, were undoubtedly without that medical aid which European women were accustomed to consider as absolutely necessary In the Countess' own words written in 1886 after the movement had been started "I found that even in cases where nature, if left to herself, would be the best doctor, the ignorant practice of the so-called midwife led to infinite mischief, which might often be characterised as abominably cruel It seemed to me, then, that if only the people of India could be made to realise that their women have to bear more than their necessary share of human suffering, and that it rests with the men of this country and with the women of other nationalities to relieve them of that unnecessary burden, then surely the men would put their shoulders to the wheel and would determine that wives, mothers, and sisters, and daughters dependent upon them should, in times of sickness and pain, have every relief that human skill and tender nursing could afford them I thought that if an association could be formed which should set before itself this one single object, to bring medical knowledge and medical relief to the women of India, and which should carefully avoid compromising the simplicity of its aim by keeping clear of all controversial subjects and by working in a strictly unsectarian spirit, then it might become national, and ought to command the support and sympathy of every one in the country who has women dependent upon him"

Initiation of the Scheme—Lady Dufferin's plans were warmly received by the public all over India The scheme was drawn out and published in the different dialects The association was named "The National Association for Supplying Female Medical Aid to the Women of India," and the money for its support, as it was received, was credited to the Countess of Dufferin's Fund" The affairs of the Association were managed by a central committee of which the Countess of Dufferin during her stay in India was President Branch Associations, each independent for financial and administrative purposes, but linked with the central committee, were formed in most parts of the country, and the work may be said to have started from August 1885 The objects of the Association are thus set-forth in its publications—I Medical tuition, including the teaching and training in India of women as doctors, hospital assistants, nurses, and midwives. II Medical relief, including the establishing under female superintendence, of dispensaries and hospitals for the treatment of women and children, the opening of female wards under women superintendents in the existing hospitals and dispensaries, the provision of female medical officers and attendants for existing female wards, and the founding of hospitals for women where specially funds or endowments are forthcoming III The supply of trained female nurses and midwives for women, and nurses for children in hospitals and private houses

Within four years from its inception there were in existence twelve hospitals for women and fifteen dispensaries, most of which were officered by women, and all more or less closely connected with the Association. From the subscriptions collected there was enough to set aside a substantial sum as an endowment fund, and also six medical, twelve nursing and two hospital assistant scholarships had been provided for

Growth of Scheme—The first regular training school in India for the instruction of native pupils in medical and surgical nursing, and in midwifery was established in 1886 by the Bombay Branch of the Association in connection with the Cama Hospital in Bombay This is a civil institution under Government management, and is solely for women and children of all castes and denominations In connection therewith is the Allbless Obstetrical Hospital and the Jaffer Sulemian dispensary for women and children. The present physician-in-charge is Miss A M Benson M D, Lond

By the end of 1910 there were thirteen Provincial Branches working under the central committee, and attached in some manner, or affiliated to the provincial branches, there were about one hundred and forty Local and District Associations or Committees engaged in furthering the work of the Association There were one hundred and fifty-eight hospitals, wards, or dispensaries of various kinds for the medical relief of close on one and a quarter million women and children, and the value of the institutions engaged in the work of the Association was estimated at close on fifty lakhs of rupees

Annual Report—The Report of the Association is published annually, and can be obtained either from the Superintendent of Government Printing, Calcutta, or from the leading booksellers, the price being one rupee The map of India published therewith shows the centres worked by the Dufferin Fund uniformly scattered over the Indian Peninsula, and illustrates how the Association has taken root in the country The Honorary Secretary is Lt-Col Sir James Roberts, I M.S., Surgeon to the Viceroy.

NURSING.

Whilst India cannot show the complete chain of efficiently-nursed hospitals which exists in England, there has been a great development of skilled nursing of recent years This activity is principally centered in the Bengal, Madras, and Bombay Presidencies, where the chief hospitals in the Presidency towns are well nursed, and where large private staffs are maintained, available to the general public on payment of a prescribed scale of fees These hospitals also act as training institutions, and turn out a yearly supply of fully trained nurses, both to meet their own demands and those of outside institutions and private agencies In this way the supply of trained nurses, English, Anglo-Indian and Indian, is being steadily increased In Bombay the organisation has gone a step farther, through the establishment of the Bombay Presidency Nursing Association, c/o St. George's Hospital

Bombay. This is composed of representatives of the various Nursing Associations in charge of individual hospitals, and works under the Government The principle on which the relations of this Association with the Local Associations is governed is that there shall be central examination and control combined with complete individual autonomy in administration.

Nursing Bodies—The Honorary Secretary of the Calcutta Nursing Association is Mr R. A B Reynolds, the Presidency General Hospital. The address of the Mayo Hospital Nursing Association is in Strand Road In **Madras** there is the General Hospital, with a staff of 62 nurses, the Government Maternity Hospital, the Caste and Gosha Hospital at Killpauk, the Royappeta Hospital and the Ophthalmic Hospital

Bombay Presidency—The Bombay Presidency was amongst the first in India to realise the value of nursing in connection with hospital work. The first steps were taken on the initiative of Mr L R W Forrest at St George's Hospital, Bombay, where a regular nursing cadre for the hospital was established together with a small staff of nurses for private cases This was followed by a similar movement at the J J and Allied Hospitals and afterwards spread to other hospitals in the Presidency Ultimately the Government laid down a definite principle with regard to the financial aid which they would give to such institutions, agreeing to contribute a sum equal to that raised from private sources Afterwards, as the work grew, it was decided by Government that each nursing association attached to a hospital should have a definite constitution, and consequently these bodies have all been registered as Associations under Act 21 of 1860 By degrees substantial endowments have been built up, although the Associations are still largely dependent upon annual subscriptions towards the maintenance of their work The chief of these Associations are —

St George's Hospital Nursing Association Secretary · D W Wilson, St George's Hospital, Bombay

J J Hospital Nursing Association Secretary · A G Gray, Jamsetji Jijibhai Hospital, Bombay

Goksldas Tejpal Hospital Nursing Association. Secretary Rahimtullah Currimbhoy.

Cama Hospital Nursing Association Address—Cama Hospital, Bombay

Sassoon Hospital Nursing Association Address—Sassoon Hospital, Poona

After further experience it was felt that it is undesirable to have a considerable number of detached and independent nursing associations, training and certifying nurses, without any common standard of entrance, examination, or certification It was therefore decided to establish the Bombay Presidency Nursing Association which came into existence in the year 1910. This is an Association formed partly of representatives of all affiliated associations and partly of direct representatives of Government, the Surgeon-General with the Government of Bombay always being the chairman It is financed partly from the product of endowments and partly from the contributons from the Government of India. If subsequently further funds are needed they are to be provided by contributions from the affiliated Associations

The principle on which the Bombay Presidency Nursing Association works is a central system of examination, certification and control It is now the only nursing examining and certifying body in the Bombay Presidency At the same time, the local associations retain entire charge of their local funds and also entire control of the nurses when they are in their employment In a sentence, the principle is central examination and certification and local control By degrees it is hoped to be able to establish the principle that none but nurses certified by this association shall be employed in any Government institution

The Association commenced its operations on the 1st April 1911 The institutions recognized under the by-laws for the training of nurses at present are—St George's Hospital, J J Hospital, Cama and Allbless Hospitals in Bombay and the Sassoon Hospital in Poona and the following for the training of midwives —The Cama and Allbless Hospitals and the Bai Motibai Hospital in Bombay, and the Sassoon Hospital in Poona

Address—The Secretary, Bombay Presidency Nursing Association, St. George's Hospital, Bombay

Lady Minto Nursing Service—In 1905 there was one organization existing in the Punjab and the United Provinces called the Up-Country Nursing Association for Europeans in India which was established in 1892 This Association carried out very useful work in certain parts of India, but was hampered by want of funds For this reason it was found impossible to extend their organisation and the urgent need for a larger number of trained nurses at charges within the reach of all classes was much required The late Lady Curzon worked energetically to provide an enlarged nursing organization, but principally for financial reasons, was unable before leaving India to bring her scheme to fruition The Home Committee of the existing Association recognizing the need of expansion approached Lady Minto before she left England in 1905 and begged her assistance and co-operation After much consideration and discussion with the Government of India, Lieutenant-Governors and Commissioners of Provinces the present Association was established In 1906 an appeal was made by Lady Minto to the public both in England and India to start an endowment fund This appeal was most generously responded to Each year the endowment fund has gradually increased, and with the assistance of a Government grant, homes for nurses have been established in seven Provinces of India and Burma, of which the original Association formed the nucleus To avoid confusion with other Associations, the enlarged organisation, by request of the Home Committee, was named "Lady Minto's Indian Nursing Association" carrying on the same work as before, namely, that of selecting suitably trained nurses in England, and making the necessary arrangements for their transfer to India. The report for 1913

shows that the Nursing Sisters attended 505 cases, 288 of which were medical, of which 68 were cases of enteric fever The total income was Rs. 1,15,942, of which Rs 35,000 was the Government subsidy, and Rs 49,611 fees earned by Nursing Sisters, Hon. Secretary, Lieut.-Col Sir J R Roberts, C I E , I M S., Simla, Hon Secretary, Home Branch, Lieut.-Col Sir Warren Crooke- Lawless, Kilkrone, Cloyne, Co. & Cork.

Nurses' Organizations —The Trained Nurses' Association of India and the Association of Nursing Superintendents of India are not Associations to employ or to supply nurses, but are organizations with a membership wholly of nurses with the avowed objects of improving and unifying nursing education, promoting *esprit de corps* among nurses, and upholding the dignity and honour of the nursing profession The Associations have a membership of 202, including nurses trained in ten or more different countries, Europeans, Americans, New Zealanders, Australians and Indians The Association of Superintendents was started in 1905 as the Association of Nursing Superintendents of the United Provinces and the Panjab, but by the next year its membership had spread over the country to such an extent that the name was changed to include the whole of India The Trained Nurses' Association was started in 1908, and a monthly Journal of Nursing began to be published by the two Associations in February, 1910. The Associations have since become affiliated with the International Council of Nurses

Below are given names of Officers, of the Associations —

Trained Nursing Association of India.

President, Miss Bartleet, Parsee General Hospital, Bombay, *Hon Secretary and Treasurer*, Mrs Davies Simon, Sandhurst House, Bombay

Association of Nursing Superintendents

President, Miss C R Mill, St. George's Hospital' Bombay, *Hon Secretary and Treasurer*, Miss Hawkins, Mission Hospital, Palwal.

Indians Abroad.

The Indian is naturally averse from emigration beyond the seas Nevertheless there are some hundreds of thousands of Indians resident in other lands as labourers, shopkeepers or professional men Their total number relatively to the population of the Indian Empire is very small being something under two million In itself, however, it is considerable, and it acquires an extrinsic importance from the social and political issues involved in the settlement of Indians, either as indentured labourers in Crown Colonies, or as free residents in self-governing countries

The right to migrate —From the Imperial standpoint the case of Indian migration to the self-governing Colonies is much the more important During the last two years the problems arising therefrom became acute There were two centres of difficulty—South Africa and British Columbia In each country the situation involved particular local problems of extreme difficulty But before passing to a discussion of them it is necessary to refer to the larger question of the right of migration within the Empire The intense feeling aroused in India by the disabilities suffered by Indians in the two countries named was primarily due to the belief that Indians were being denied the common rights of British citizenship Without attempting to define the term "British citizenship," which is not so easily susceptible of definition as may be imagined, it must suffice to observe that unrestricted migration within the Empire does not appear to be the common right of His Majesty's subjects The laws of the Dominion of Canada and the Commonwealth of Australia confer powers of exclusion of would-be immigrants hailing from any part of the Empire These laws have been enforced against Englishmen on various grounds The ground of exclusion is usually economic, and it is on that ground that the Colonial objection to unrestricted immigration from India operates It is unfortunately inevitable that the problem assumes in the popular mind a racial complexion But in actual experience it is the clash of economic interests and the possible political difficulties involved in the settlement of Indians in large numbers in the self-governing Colonies which the statesmen of the Empire have to take into account

In South Africa the trouble gathered round the disabilities of Indians already settled there The question of immigration restrictions, though important, held a less prominent place in the agitation The most acute point of the controversy was the annual £ 3 head tax in Natal Restrictions on the migration of Indians from one State of the Union to another was another sore point The requirement to take out trading licenses was also felt to be a vexatious and invidious distinction between Indian and European traders While the controversy was at its height, an Act was passed in the Union Parliament, restricting entry into South Africa to the wife or child of a lawful immigrant or resident who was the wife or child of a monogamous marriage In a case brought before the courts it was decided that the only wife of a marriage solemnised according to the rites of a religion permitting polygamous marriages could not be admitted The leaders of the agitation in South Africa adopted passive resistance tactics, which brought large bodies of Indian workmen in Natal into conflict with the police The situation became acute, and a strong demand arose in India for the appointment of a Government Commission to enquire into the whole question The Union Government appointed a Commission, and invited the Government of India to send a representative Sir Benjamin Robertson, Chief Commissioner of the Central Provinces, was selected The Commission reported on the whole favourably to the Indians It recommended the repeal of the £ 3 head tax and the removal of restrictions on migration within the Union

In British Columbia, the trouble over Indian immigration came to a head in the early part of this year, when a ship-load of Indians was despatched direct from the Far East to Vancouver. It was held up in the harbour there for several weeks. The passengers were

not allowed to land. An appeal to the Canadian courts resulted in the rejection of their claim, and eventually they were shipped back to India The arrival of the Komagata Maru in Calcutta on September 26, 1914, was the occasion of a most lamentable incident. Anticipating an attempt to organise a political demonstration, the authorities provided special trains to convey the returned immigrants to their homes in the Punjab, and had taken power, under Ordinance V of 1914, to require them to do so, some sixty men immediately proceeded to their homes, but the balance under the leader, Gurdit Singh, endeavoured to force their way to Calcutta They were turned back by the Military, and whilst arrangements were being made for a second special train, opened fire on the Police and Officials The Military dispersed the immigrants by fire, and the majority were afterwards arrested Sergt Eastwood, Calcutta Police, and Mr Temax, of the E B S Railway, were killed, the Punjab Police had one killed and six injured, sixteen rioters were killed, as well as two onlookers The Government of India appointed a commission under the Presidency of Sir William Vincent to investigate the matter and it took evidence in Calcutta and the Punjab

There are some 4,000 Indians already settled in British Columbia, chiefly Sikhs They work as agricultural labourers, in factories and lumber yards, and also on the railways The desire amongst them to bring their wives and families out from India points to the fact that they are fairly prosperous and find the conditions of life in the Colony agreeable The attitude of the Colonial authorities towards them is governed by the general objection to Asiatic immigration It is felt that the unrestricted entry of Asiatics would threaten the existence of British Columbia as a "White man's country" The immigration of Japanese and Chinese is regulated by special treaties with their Governments The number of Japanese is limited to a few hundreds annually Chinese immigrants pay a head tax of 500 dollars on entry In a speech before the Indian Legislative Council in August of this year H E the Viceroy foreshadowed a policy of negotiation with the British Columbia authorities with a view to an arrangement on similar lines to that existing with Japan

An exaggerated danger —Making every allowance for the Colonial standpoint, those acquainted with the internal condition of India cannot but feel that the fears that the self-governing colonies may be deluged by Indian immigration are greatly exaggerated The total number of Indians resident out of India is under two millions, and of these the majority are to be found in tropical countries Ceylon alone has 900,000 of them There is a quarter of a million in Mauritius, about another quarter of a million in British Guiana and the West Indies, and 230,000 in the Straits Settlements and Malay States Of the self-governing Colonies South Africa has by far the largest share, her Indian population being a little under 160,000, Natal alone accounting for 133,000. But this is not the result of ordinary migration The nucleus of the South African Indian community was formed artificially by Natal herself. Until 1911, when it was stopped by the Goverment of India, there was for many years a steady stream of indentured immigration into Natal to supply labour to the sugar and other industries of that colony The natural increase of the Indian population in South Africa is now much larger than the increase by immigration In the whole Australian Commonwealth there are not more than 7,000 Indians. The Dominion of Canada has 4,500 in all The significance of these trifling totals must be viewed in the light of the conditions prevailing in India Here, it is true, there is a vast population. Were these 300 millions subjected to the economic conditions of Europe, and were they imbued by the adventurous and ambitious spirit of Europeans, there would be good ground for alarm in the Colonies at the possibility of an overwhelming influx of Indians But those are precisely the conditions that do not obtain in the Indian Empire The demand for labour in India is always greatly in excess of the supply The tea-planters of Assam are obliged to compete with the Crown Colonies in an elaborate system of cooly recruitment Labour-shortage is a chronic difficulty with the cotton mills of Bombay As industrial expansion proceeds and agricultural methods improve, as more land is brought under cultivation, there must be a diminishing likelihood of emigration from India on any large scale Add to this the inherent reluctance of the Indian to go far from home, and it will be apparent that the danger of "white men's countries" being swamped by Indian immigrants is at the least remote It is never likely to assume such proportions as would pass the wit of statesmen to control

Indentured Emigration —The institution of indentured labour in the tropical colonies of the Empire is one of long-standing As far back as 1864 indentured emigration from India to the British West Indies was in progress under Government control In the case of several of the tropical colonies there has been no interruption since then in the steady inflow of several thousands of Indian labourers annually In Mauritius, the Straits Settlements, the Federated Malay States and Natal the system for various reasons has come to an end, but in all those countries there is now a large population of Indians, permanent or temporary, engaged as free labourers or in independent positions The principal colonies in which indentured emigration still prevails are British Guiana, Trinidad and Fiji Even here, however, there has been a progressive decline during recent years, owing in part to the increased difficulty of recruiting in India This difficulty arises entirely from the growing demand for labour within the Indian Empire, consequent upon industrial expansion

The indentured system has been the subject of much controversy It is disliked in India and by some people in England, because it seems to present features analogous to slavery—in that for the term of his indenture the labourer is not a free agent, he is *ad scriptus glebae*, and bound to serve the employer to whom he is assigned on terms which are absolutely fixed In the colonies themselves the system is unpopular on two grounds—(1) it tends to depress the current rate of wages, (2) only a minority of the time-expired coolies become permanent settlers, the majority claim-

ing their return passage and taking money out of the colony in the form of savings From the point of view of the labourer himself, the indentured system, if it has any true resemblance to slavery, is a kind of bondage that is easily supportable He is supplied with a free dwelling under highly sanitary conditions, his wages are fixed on the basis of the rate prevailing in the open market, no deductions are to be made therefrom for rent, hospital accommodation, medical attendance or medicine, which the estate proprietors are bound to provide Free schooling is available for his children, and if, at the end of his indenture, he elects to remain in the Colony he is given a free grant of Government land These are the conditions prevailing in British Guiana, but, with the exception of the grant of land, they are similar to those in other colonies where indentured immigration is in force The permanent Indian population in British Guiana is 127,000, in Trinidad 113,000, in Fiji 40,000, in Mauritius 258,000 and 113,000 in Natal Other colonies, such as Jamaica and Dutch Guiana (Surinam) have small communities, amounting in each to a few thousand only of time-expired Indian coolies Ceylon, the Straits Settlements and the Federated Malay States continue to attract Indian labourers, chiefly from Southern India, although no indenture system now exists in those countries

The Recruitment of indentured coolies in India is carried on by agents employed by the colonies Each colony, or group of colonies, maintains an Emigration Agent in India at a fixed salary These Agents are officially recognised by the Government of India They have a staff of sub-agents under whom a number of recruiters are constantly at work The most active recruitment is carried on in the United Provinces and the more thickly populated parts of Madras Presidency Each recruiter is licensed by the Protector of Emigrants appointed by the Provincial Government in India The licenses are renewable annually, and they must be countersigned by the Magistrate of the District in which the license operates The Magistrate's countersignature may be cancelled at any time for a breach of the recruiting regulations The sub-agent receives from the colony employing him Rs 25 for every man and Rs 35 for every woman engaged From this sum the sub-agent has to pay the recruiter himself The recruits are first drafted to a sub-depot in their own part of the country They are conveyed thence to the main depot at the port of embarkation. These depots are under the control of the Protector of Emigrants, whose duty it is to ascertain whether the coolies are willing to emigrate and understand the nature of the contract into which they have entered He is required to assist and advise them to the best of his powers He must also inspect the ships chartered for the conveyance of the coolies to their destination, and to see that the regulations governing the accommodation on board are duly complied with Each emigrant undergoes a medical examination before embarking On arrival at the port of destination the emigrants are met by an official of the colony, who is styled the Immigration-Agent-General His duties are similar to those of the Protector of Emigrants in India with the important addition of supervising the conditions of labour on the plantations The Government of India may prohibit emigration to any colony in which the rate of mortality amongst the indentured coolies is unduly high, or where proper measures for their protection have been neglected, or the agreements made with the coolies have not been fulfilled Indentured emigration to Natal has been stopped by the Government of India in consequence of complaints received from that country as to the treatment of the coolies

Emigrant Ports —The ports at present used for the despatch of the emigrants are Calcutta, Madras, Bombay, and Karachi Up till 1884 emigrants were despatched from the two French Settlements of Pondicherry and Karikal, but since that date, with the exception of the year 1888-89, emigration has not been carried on at these Settlements In 1912-13, 8,208 emigrants, or 65 per cent of the total number leaving India, were shipped from Calcutta By far the greater part of these came from the United Provinces of Agra and Oudh, which accounted for some 6,400 Trinidad, Fiji, Demerara and Jamaica are the principal countries to which emigrants from Calcutta were sent The number of coolies who left Madras was 3,677 or 29 per cent of the total, all for Fiji They were drawn from a large number of districts in Madras, the largest number being supplied by Malabar, North Arcot, Vizagapatam, and Godavari For several years now the number of emigrants leaving India *via* Bombay has been insignificant In 1912-13 the total number was only 250, of whom only 12 went to Mombasa and 225 to the Persian Gulf Ports Karachi appeared for the first time as an emigration port in the year 1897-98, when 330 emigrants were despatched to Mombasa for work on the Uganda Railway In the three following years over 27,000 male labourers left Karachi for this purpose. Since then only a few artisans recruited for the Uganda Railway have left Karachi The emmigrants from Karachi come mainly from the Punjab and Sind

The number of emigrants leaving in any one year appears to be based on the demand for labour rather than on any internal causes in India, for no close connection can be traced between the prices of food-grains in India or the birth-rate in the different provinces and the number of emigrants

INDENTURED EMIGRATION STATISTICS.

STATISTICS relating to indentured emigration, carried on under the **Indian Emigration Act** (XXI of 1883 repealed by XVII of 1908) and rules framed thereunder relating to the emigration of natives of India, are given below. It may be explained that certain persons who proceed to the colonies or other foreign countries without coming under the operation of the Emigration Act, as for instance, in the capacity of shop assistants or personal domestic servants, are included in the statistics The figures take no account of the numbers who leave India as passengers under the Native Passenger Ships Act, nor of persons who leave

India on pilgrimage to the holy places in Arabia under the Pilgrim Ships Act (of whom small but uncertain numbers settle out of India), nor of persons who go out of or come out to India by ship as ordinary passengers every year

The number of "Emigrants" in the sense explained above, who left annually during the twenty-seven years 1886-87 to 1912-13 and the number of returned emigrants during the same period, amounted to—

	Number emigrated	Number returned
Average of five years ending 1890-91	12,466	7,839
Average of five years ending 1895-96	14,820	6,061
Average of five years ending 1900-01	19,123	6,237
Average of five years ending 1905-06	17,728	9,668
Average of five years ending 1910-11	15,009	7,117
In the year 1911-12	14,192	6,299
" " 1912-13	12,658	4,641

The **Average Annual Number of Emigrants** for the 27 years is 15,651, and the average number of emigrants that returned in these years is 7,242 Natal has received the largest number of emigrants—an average of 4,518 a year, but emigration to that colony has been prohibited by the Government of India with effect from 1st July, 1911 The second largest number has gone to Demerara, which has received over 3,200 a year. Trinidad receives the next largest number, over 2,400 a year Mauritius has received about 1,150 coolies a year on the average, but the variations between one year and another are very great Indians and their descendants now constitute 70 per cent of the population of Mauritius—2,58,000 out of a population of 369,000 There has been no emigration to the colony since 1912, it having been decided by the Secretary of State for the Colonies, after consideration of the recommendations of the Committee on Emigration from India to the Crown Colonies, in regard to Mauritius, that the system of introducing Indian labourers into that colony under indenture should be discontinued Over 1,700 emigrants go annually to the Fiji Islands.

Indians in Great Britain.

Close on sixty years have gone by since the Parsi community, in the persons of Mr Dadabhai Naoroji and other members of the firm of Cama and Co, led the way in the residence of Indians in England for business purposes This lead it has since maintained, though there are both Hindu and Mahommedan business men firmly established there Nor are the professions unrepresented, for there are in London practising barristers and solicitors of Indian birth, and at least one Indian successful in the Civil Service examination elected to work in England instead of returning to his native land. The early years of the present century have seen the gathering of a new Indian element in permanent residence—that of retired officials (particularly of the I M S) and business men, or people of independent means who from preference, or in order to have their children educated in England, leave the land of their birth and seldom if ever visit it again Further, the increasing stream of Indian summer visitors, includes wealthy people who return as regularly as the swallows in spring, and spend as much time in England or on the Continent as in their native land While the men adopt European dress so fully that a turban is a rare sight even at Indian gatherings, the ladies wisely retain their graceful Eastern habiliments, and it is astonishing to note on occasions how large is the number of Indian women so attired it is possible to collect together at the Criterion or at 21 Cromwell Road.

The Students.

But it is the student community which constitutes the greatly preponderating element and creates an Indian problem Its numbers have multiplied ten or twelvefold in the last quarter of a century, the increase being especially rapid since 1904 or 1905 There was indeed an artificial inflation some four years ago, when many youths (some of them ill-prepared) were hurried off to the Inns of Court in order to be entered before more stringent rules for admission from the oversea dominions came into force While this sudden expansion has been worked off to a large extent, there has been growth of numbers in other directions, and particularly that of the technical and engineering schools and classes, with the result that the aggregate numbers (allowing for the temporary check caused by the European War) may be estimated at between 1,500 and 1,600 This total does not include more than a few of the growing number of youths of good family, some of them heirs of Native States, admitted into our public schools, including Eton and Harrow It does not comprehend Burmese students of whom there are about 80 Nor does it take full account of female students in schools and colleges While it is not possible to obtain exact and complete records, it is certain that the young Indians of both sexes and all ages under instruction in the British Isles is well over 2,000

It is, however, with the 1,500 or 1,600 young men, almost all far removed from parental oversight and control that the organization set up by the Secretary of State for India has to deal Of these on 30th June last 288 were at the Middle Temple, 173 at Lincoln's Inn, 98 at Gray's Inn and 50 at the Inner Temple, Altogether, including technical and medical students, there must be 700 or 800 in London. Edinburgh comes next with over 200, Cambridge with 100, Oxford with 60, Glasgow with 70 and Manchester with 30, while there are smaller numbers at Birmingham, Leeds, Sheffield and other centres

The Bureau.

It is well known that until a few years ago the young Indians, apart from inadequately-supported unofficial effort and the chance of coming under the influence of English friends of their families, were practically left to their own devices But in April 1909 Lord Morley, as a result of the investigations of an India Office Committee, created for their benefit a Bureau of Information and appointed Mr T. W. Arnold to the charge of it under the title of Educational Adviser The Bureau was located in due time at 21 Cromwell Road, together with the National Indian Association and the Northbrook Society, which were thus given spacious quarters for their social work among the young men, without incurring what would otherwise have been the prohibitive cost of heavy rent Lord Morley also established an Advisory Committee, with Lord Ampthill as chairman, mainly composed of influential Indian residents, and in India corresponding provincial and district committees were formed to help and advise intending students The work of the Bureau rapidly expanded, and in consequence Lord Crewe in 1912 re-organised the arrangements under the general charge of a Secretary for Indian Students, Mr C E Mallet While Mr Arnold continued to look after the Indian students and to act as guardian when so desired by the parents, local Advisers were appointed at the provincial universities Owing to pressure of work connected with the War, Lord Ampthill has resigned his Chairmanship of the Advisory Committee

Two strange delusions (in some cases they may be called deliberate misrepresentations) have been propagated in reference to these arrangements One is that the India Office set up the Bureau in order to track down the wave of seditious sentiment which culminated in the assassination of Sir Curzon Wyllie four years ago As a matter of fact the Bureau was established three months before the commission of that crime, and was proposed at least a year previously The object as *The Times* observed in September 1908 was not "to put these young men into political leading strings, nor officially to restrict their liberty It lies in doing all that is possible to facilitate their educational progress and their general welfare, and in bringing them under wholesome and helpful influence" Mr. Arnold accepted his appointment on the distinct understanding that there would be no sort of kind of espionage, and Mr Mallet told a gathering of students in 1913 that it was a complete delusion to regard the Bureau as an instrument of espionage He would never have anything to do with it if that were its character

Opening Closed Doors.

It is no less of a delusion for the students to hold, as some of their elder fellow-countrymen have encouraged them to do, that the Bureau is responsible for restrictive rules and regulations of colleges and other institutions, or at any rate for their continuance in spite of protests. The fact of the matter is that in consequence of the wave of disaffection to which reference has been made, as well as of various practical difficulties arising from the growth in numbers of Indian applications for admission, many of the universities and other educational institutions had passed restrictive, and in some cases almost prohibitive, regulations affecting Indians when the Bureau came into being The authorities in question are independent of outside control, and of no department in Whitehall are they more so than of the India Office The Bureau cannot do more than approach them with requests and suggestions for the benefit of Indians, or with undertakings to afford the sponsorship which in many cases is made a condition of admission

Since Mr Mallet told the students face to face that so far from blocking the way, as hostile observers have alleged, the Bureau has been singularly successful in opening closed doors and mitigating any real grievances, there has been no serious effort to question the many proofs he gave He intimated he would welcome the co-operation of any organization for promoting the educational interests of the students But it is easier to make eloquent speeches and pass resolutions than to study rules and regulations and represent to the authorities with moderation and clearness where they need amendment, and such organizations have so far been infructuous A more hopeful project, is the London Indian Association, established to combine the students together in efforts for their social and intellectual welfare originated by Mr Jinnah, and which has the co-operation of leading permanent residents

It is also satisfactory that the careful inquiries of Sir T Morison's Committee on State Technical Scholarships have shown that the difficulties encountered by young Indians in supplementing academic instruction by technical experience in factories and workshops are general in character, being also applicable to their English contemporaries, and that there is "on the whole very little evidence of a racial prejudice against Indians" And no youth need come here (as was so frequently the case in the past) under any misapprehension as to the facilities for his education and their limitations The excellent "Handbook of Information for Indian Students" issued by the National Indian Association and the Advisory Committee, now in its fifteenth edition (1914) supplies all relevant facts and advice, and on personal details, the local Advisory Committees can be consulted

Persuasion not Coercion.

Another mistaken notion, held by some Anglo-Indians of the old type, is that the Bureau could easily exercise disciplinary control over all young Indians in London The fact is that except to holders of Government and some Native State Scholarships it has no disciplinary authority save when parents place their sons under guardianship of Mr Arnold or a provincial Adviser, and even in these cases the control can only be exercised in connection with the administration of the regular allowances Undoubtedly the Bureau has had a most beneficial influence in saving scores of young men from falling into debt, intemperance or marital folly; but this has been exercised not coercively but by friendly

personal contact and keeping before them the obligation and necessity from every point of view of adhering to the purposes of educational equipment for which they have gone to England. From the first there has been no thought of exercising compulsion direct or indirect, to bring students under the Educational Adviser, the keynote of the scheme has been that of enabling them to make use of facilities for their welfare at their own discretion without any apprehension of constraint or coercion From this point of view the re-constitution on a more definite and systematic basis of the Advisory Committee, and its careful investigation of complaints through a Sub-Committee are satisfactory Generally it may be said that considering the difficulties of the problem, the success attending the arrangements initiated in April 1909 has been considerable, and that they have in them the promise of increasing good in the light of accumulated experience.

The removal of misunderstanding and prejudice should be materially promoted by the changed angle of vision on both sides India's magnificent response to the call of Empire in the European War is bringing about. Largely under the influence of Mr M K Gandhi, who arrived from South Africa at the outbreak of the war, many students offered their services unconditionally to the authorities, with the result that an Indian Field Ambulance Corps was organised and sent to the front to serve with the Indian troops In several instances young Indians enlisted in "Lord Kitchener's army," being readily admitted on satisfying the usual physical tests, and at some of the universities, departing from previous restrictions, Indians were attached to the Red Cross section of the Officers' Training Corps

MILITARY FLYING SCHOOL.

The Government of India have sanctioned the establishment of an India Central Flying School, at Sitapur, with effect from the 1st October, 1913 The object of this school is to gain experience in aviation under Indian conditions with a view to its ultimate expansion as a training establishment The Commandant has entire control of the school under the direct orders of Army Headquarters The school consists of a commandant and three flying officers with the necessary medical and subordinate *personnel* The British and Indian subordinate staff consists of civilians only engaged on contract for specified periods

Conditions of appointment —The qualifying conditions of appointment for the commandant, and flying officers, are as follows —

(1) To hold a Royal Aero Club's pilot certificate, (2) to be recommended by his Commanding officer, (3) medical fitness (as stated below), (4) not less than two years' service (British service), three years' service (Indian Army) In addition Indian Army officers must have qualified for "final retention", (5) not above the rank of Captain, (6) a natural bent for the mechanical, (7) to be unmarried

Officers are appointed to the staff of the school for a period of four years from the date of joining, the appointment being probationary for the first six months, they will be seconded in their regiments An officer who is found at any time to be unfitted for the duties of the appointment will be required to rejoin his Regiment If injured on flying duty the Commandant and flying officers will be eligible for gratuities and pensions under the conditions and at the rates laid down in Army Regulations, India, Volume 1, Paragraph 748 *et seq* For officers who have been wounded in action in the event of death within seven years as the result of injuries so received pensions, etc, may be awarded under the conditions applicable to the case of officers killed in action or dying of wounds received in action

Equipment —The Maharaja of Rewah has generously presented an aeroplane to the Central Flying School This is of Royal Aircraft factory design and has a 70 h p Renault air cooled motor, giving a machine speed of 72 miles per hour Other machines consist of two 80 h p Gnome and two Maurice Farman biplanes (70 h p Renault) The school possesses a portable hangar which will remain erected on the aerodrome until permanent sheds are ready for occupation The portable hangar will then become available for housing machines The aerodrome at Sitapur is an area roughly of 400 acres The first flight were made on February 24, 1914, when a Rewah aeroplane was used and each officer flew in turn for a short time

Staff of the school —The staff of the Indian Central Flying School consists of — 1 Commandant at Rs 1 200 per mensem and 3 flying officers at Rs 800 each per mensem

British Subordinates 1 engineer, 1 sailmaker, 2 machinists, 2 riggers, and 1 repair shop mechanic

Indian Subordinates 1 carpenter, 1 sailmaker, 6 fitters, 2 riggers, 2 repair shop mechanics, and 1 storekeeper

Commandant, Capt S D Massy, 29th Punjabis

Instructors—

Capt C G Hoare, 39th Horse.

Lt. H L Reilly, 82 Punjabis.

Lt C L N. Newwall, 2nd Gurkha Rifles.

Appointments to the Indian Services.

Full details of the regulations governing appointments to the Indian Services are published in the India Office List The more essential particulars, except as regards the Civil Service and Police,—of which fuller details are given elsewhere in this book—are given below

Indian Agricultural Service.

The appointments in the Indian Agricultural Service include those of Deputy Director of Agriculture, Agricultural Chemist, Economic Botanist, Mycologist, Entomologist, Professors of Agriculture, Chemistry and Botany at Agricultural Colleges, and the like Some of these are included in the Imperial Department of Agriculture under the direct control of the Government of India, but the majority are included in the Departments of Agriculture of the several provinces of India In some cases candidates will be appointed direct to these posts, but in most cases they will be appointed as supernumeraries, will undergo a further course of training in India in Indian agriculture, and will be appointed to posts, for which in the opinion of the Government they are considered suitable, on the regular establishment as vacancies occur Appointments are made by the Secretary of State for India as occasion may require Candidates must, as a rule, be not less than 23, nor more than 30 years of age In selecting Candidates for appointment, weight will be given to the possession of (*a*) a University degree in honours in science or the diploma of a recognised school of agriculture or other like distinction, (*b*) qualifications in a special science according to the nature of the vacancy to be filled, (*c*) practical experience Importance is also attached to bodily activity and ability to ride, and selected Candidates have to undergo an examination by the Medical Board of the India Office as to their physical fitness for service in India

The salary attached to posts in the Indian Agricultural Service will ordinarily be —

	Rs
For the first year	400 per mensem
,, second year	430 ,,
,, third year	460 ,,
,, fourth and subsequent years	500 rising by annual increments of Rs 50 a month to Rs 1,000 a month.

Candidates who are required to undergo a further course of training in India as explained above will be appointed on this scale of salary, commencing on a pay of Rs 400 Where, for special reasons, a Candidate is recruited for direct appointment to one of the regular posts under paragraph 1, his initial pay will be determined with reference to the special qualifications on the length of European experience required for the appointment for which he is specially selected, but his subsequent increments of salary will be regulated by the foregoing scale In addition to this scale of pay, officers filling appointments directly under the Government of India, as distinguished from appointments under Local Governments (but not including officers holding supernumerary posts, the post of Inspector-General, or the post of Director of the Pusa Institute) will be eligible for local allowances conditional on approved good work, and the Government reserves to itself the fullest discretion as to granting, withholding, or withdrawing them

Indian Civil Veterinary Department.

The officers of the Indian Civil Veterinary Department perform or supervise all official veterinary work in India, other than that of the Army, and are debarred from private professional practice in India Their duties may be divided into three classes, under the following heads —

(*a*) Educational work in veterinary colleges,
(*b*) Horse and mule breeding,
(*c*) Cattle disease and cattle breeding

Appointments to this Department are made, as vacancies occur, by the Secretary of State for India Candidates must not (except on special grounds to be approved by the Secretary of State) be over 26 years of age, and must possess a diploma from the Royal College of Veterinary Surgeons Evidence of a knowledge of bacteriology, and of capacity for carrying out original research, will be specially taken into account in estimating the claims of candidates. Good health, a sound constitution, and active habits are essential, and candidates must be certified by the Medical Board of the India Office to be physically fit for service in India

Pay will be as follows —On arrival in India Rs 500 a month, rising by Rs 40 each year to Rs 1,100, which rate will continue from the beginning of the 16th to the end of the 20th year of service, after the beginning of the 21st year Rs 1,200 a month

Ecclesiastical Establishments (Church of England).

Appointments of Chaplains on Probation are made from time to time by the Secretary of State for India, as vacancies occur Candidates for these appointments must be Priests who are between the ages of twenty-seven and thirty-four years, and have been for three years altogether in Holy Orders Applications for nominations should be submitted to the Secretary of State

A Chaplain will be on probation for three years (*a*); if confirmed in his appointment at the end of that period, he will be admitted as a Junior Chaplain

The salaries of Chaplains are —

Senior Chaplains, Rs 10,200 per annum for five years, and then Rs 12,000 per annum

Junior Chaplains, Rs 6,360 per annum for five years, and thereafter Rs 8,160 per annum until promoted to be Senior Chaplains

Chaplains on Probation, Rs. 5,760 per annum

A Junior Chaplain becomes a Senior Chaplain after ten years' service, excluding the period of probation

The retiring pay of Chaplains is regulated by the following scale:—

	Per annum £ s. d.
After 23 years' service, with an actual residence in India of 20 years, including the period of probation	365 0 0
On Medical Certificate.	
After 18 years' actual residence in India, including the period of probation	292 0 0
After 13 years ditto .	173 7 6
After 10 years ditto	127 15 0

Ecclesiastical Establishments (Church of Scotland).

The appointments of Chaplains of the Church of Scotland on probation are made from time to time by the Secretary of State for India, according as vacancies occur Candidates for these appointments must have been licensed for three years and be under thirty-four years of age Applications for nominations should be submitted to the General Assembly's Committee on Indian Churches along with testimonials based on a personal knowledge of the candidate's qualifications Chaplains will be on probation for three years (*a*), if confirmed in their appointment at the end of that period, they will be admitted as Junior Chaplains

The salaries of Chaplains are —

Senior Chaplains, Rs 10,200 per annum, and then Rs 12,000 per annum.

Junior Chaplains, Rs 6,360 per annum for five years, and thereafter Rs 8,160 until promoted to be Senior Chaplains

Chaplains on probation, Rs. 5,760 per annum.

A Junior Chaplain becomes a Senior Chaplain after 10 years' service, excluding the period of probation

The retiring pay of Chaplains is regulated by the following scale —

	Per annum £ s d
After 23 years' service, with an actual residence in India of 20 years, including the period of probation . .	365 0 0
On Medical Certificate	
After 18 years' actual residence in India, including the period of probation . .	292 0 0
After 13 years' ditto	173 7 6
After 10 years' ditto	127 15 0

Educational Appointments.

The Indian Educational Service comprises those posts in the Educational Department to which appointments are made in England by the Secretary of State, and is thus distinguished from the Provincial Educational Services, which are recruited exclusively in India It consists of two branches, the teaching, including Principalships and Professorships in the various Government Colleges and Head Masterships in certain High Schools, and the inspecting, including Inspectorships of Schools, but officers may be transferred at the discretion of Government from one branch to the other, and the conditions of pay and service are the same for both It also includes certain special appointments, such as those of Superintendents of Schools of Art, for which special qualifications are required and special terms of engagement are prescribed Officers of the teaching branch may be required to undertake duties in connection with the supervision of students in hostels or boarding houses, and with the direction of their studies and recreations Appointments are made by the Secretary of State as occasion may require Only laymen are eligible, candidates must as a rule be not less than 23, nor more than 30 years of age, but exceptions are sometimes made as regards the maximum limit only Candidates must be British subjects, and must furnish evidence of having received a liberal education

In selecting candidates for appointment, weight will be given to the possession of (*a*) a University degree in Honours, or equivalent distinction; (*b*) experience as a teacher; (*c*) qualifications in special subjects, depending on the nature of the vacancy to be filled. In selecting candidates for inspecting appointments, weight is given to linguistic talent, capacity for organisation and knowledge, practical or theoretical, of educational methods.

The salaries paid are as follows.—A newly appointed Inspector or Professor receives Rs 500 a month, rising by annual increments of Rs 50 a month to Rs 1,000 a month When this point has been reached, the increase of his emoluments depends upon his promotion, and takes the form of allowances ranging from Rs. 200 to Rs 500, in addition to the salary of Rs 1,000 There are at present 30 such allowances There is in every Province a Director of Public Instruction The posts of Director of Public Instruction are reserved for the Indian Educational Service so long as members of that Service can be found well qualified to fill them Their pay differs in different Provinces —

Three receive a salary of Rs 2,000—100—2,500 a month

Two receive a salary of Rs 2,000 a month.

One receives a salary of Rs. 1,750—50—2,000 a month.

Two receive a salary of Rs 1,500—100—2,000 a month.

One receives a salary of Rs. 1,250 rising to Rs 1,500 a month.

Head Masters are appointed on an initial pay of Rs 500, rising by annual increments of Rs. 50 a month to Rs 1,000 a month, except in cases in which Local Governments may prefer to recruit on the scale of Rs 500 a month, rising by annual increments of Rs 50 a month to Rs 750 a month. Head Masters are eligible for subsequent transfer to inspectorships or, if qualified, professorships. In all cases, increments o salary are given for approved service only.

For the appointments dealt with above men only are eligible. There are, however, some posts in the Indian Educational Service which are open to women and these comprise appointments as Inspectresses of Girls' Schools, Princi-

pals of Training Colleges, and occasionally Headmistresses of Schools. The salary attached to these appointments is ordinarily Rs. 400 a month rising by annual increments of Rs 20 a month to Rs. 500 a month

The Secretary of State is sometimes requested by the Government of India to supply persons to fill temporary vacancies in the Indian Educational Service, generally professorships in Colleges. Such appointments are made for not less than a university year (about nine months), with a prospect, in the case of thoroughly approved service, of future selection to fill either a temporary or a permanent appointment. The salary is Rs 500 a month, rising by annual increments of Rs 50 a month.

Indian Forest Service.

The Secretary of State for India in Council makes appointments of Probationers for the Indian Forest Service, according to the numbers annually required

Candidates must be not less than 19 but under the age of 22 years

Candidates must have obtained a degree with Honours in some branch of Natural Science in a University of England, Wales or Ireland, or have passed the Final Bachelor of Science Examination in Pure Science in one of the Universities of Scotland A degree in Applied Science will not be considered as fulfilling these conditions Candidates will be required to produce evidence that they have a fair knowledge of either German or French

The ordinary period of probation will be two years During that time probationers will be required to pass through the Forestry course at one of the following Universities—Oxford, Cambridge or Edinburgh (subject to the arrangement of a suitable course)—becoming members of that University, if not so already, to obtain the Degree or Diploma in Forestry which it grants, and to satisfy such other tests of proficiency as may be deemed necessary

During the vacations, the Probationers will, under the direction and supervision of the Director of Indian Forest Studies appointed by the Secretary of State for India in Council, receive practical instruction in such British and Continental forests as may be selected for the purpose.

The Secretary of State for India in Council will make payments to each Probationer at the rate of £120 annually, not exceeding a total of £240.

Probationers who obtain a Degree or Diploma in Forestry, and also satisfy such other tests of proficiency as may be prescribed, will be appointed Assistant Conservators in the Indian Forest Department, provided they are of sound constitution and free from physical defects which would render them unsuitable for employment in the Indian Forest Service.

The sanctioned scale of the service at present is —

		Rs.
1	Inspector-General of Forests	2,650 a month.
1	Assistant Inspector-General of Forests	
2	Chief Conservators (Burma and Central Provinces)	2,150
22	Conservators, in three grades (including President, Forest Research Institute and College)	1,900 / 1,700 / 1,500 (Respectively.)
187	Deputy and Assistant Conservators	

An Assistant Conservator of Forests will draw pay at the rate of Rs 380 a month from the date of his reporting his arrival in India rising by annual increments of Rs 40 a month to Rs 700 a month, thereafter by annual increments of Rs 50 a month to Rs. 1,250 a month in the 20th year of service.

After a service of not less than 20 years, a retiring pension is granted not exceeding the following amounts —

Scale of Pension		Maximum Limit of Pension.
Years of Completed Service	Sixtieths of Average Emoluments	
20 to 24		Rs 4,000 a year.
25 and above	30	Rs. 5,000 a year.

Indian Geological Survey.

The Geological Survey Department is at present constituted as follows —

		Monthly Salary. Rs				
1	Director . .	2,000		Rs	Rs.	
3	Superintendents .. .	1,000	rising by	80	to 1,400	
15	Assistant Superintendents :—					
	For the first five years .. .	350	,,	30	,, 500	
	Thereafter	500	,,	50	,, 1,000	
1	Chemist	500	,,	50	,, 1,000	

Appointments to the Department are made by the Secretary of State for India They will usually be made about July of each year, and the probable number of appointments will, if possible, be announced about two years in advance. The age of candidates should not exceed 23. Besides a good general education, a sound education in geology is essential: a University degree and a knowledge of French or German will be regarded as important qualifications, and certificates of a high moral character will be required Candidates must also have had one or two years' practical training in mines, or in technical laboratories, as may be required by the Government of India. First appointments are probationary for two years.

India Office.

Vacancies in the clerical establishment of the Secretary of State for India are filled from among the successful candidates at the General Examinations (Class I, and Second Division), which are held from time to time by the Civil Service Commissioners for appointments in the Home Civil Service The Examination for Class I Clerkships is the same as the open Competitive Examination for the Civil Service of India Further particulars may be obtained upon application to the Secretary, Civil Service Commission, Burlington Gardens, London, W

Indian Public Works Department.

The Secretary of State for India in Council makes appointments of Assistant Engineers in the Public Works Department of the Government of India

Candidates must have attained the age of 21, and not attained the age of 24 years

Candidates must produce evidence that they have (1) obtained one of the University degrees mentioned in Appendix I, or (2) passed the A M I C E examination, or (3) obtained such diploma or other distinction in Engineering as may, in the opinion of the Selection Committee, be accepted as approximately equivalent to the degrees mentioned

The Engineer Establishment of the Indian Public Works Department consists of a staff of engineers, military and civil, engaged on the construction and maintenance of the various public works undertaken by the State in India

2 The permanent establishment of the Department is recruited from the following sources —

(1) Officers of Royal Engineers

(2) Persons appointed to the Imperial Service by the Secretary of State by selection from the United Kingdom

(3) Persons educated at the Government Civil Engineering Colleges in India, and appointed to the Provincial Services by the Government of India

(4) Occasional admission of other qualified persons

3 The various ranks of the department are as follows —

		Salary per annum (Imperial Service) Rs
Chief Engineer, First Class		33,000
,, ,, Second Class		30,000
Superintending Engineer, First Class		24,000
,, ,, Second Class		21,000
,, ,, Third Class		18,000
Executive Engineer, 20th year of service and following years		15,000
Executive Engineer, 19th year of service		14,400
,, ,, 18th ,,		13,800
,, ,, 17th ,,		13,200
,, ,, 16th ,,		12,600
,, ,, 15th ,,		12,000
,, ,, 14th ,,		11,400
,, ,, 13th ,,		10,800
,, ,, 12th ,,		10,200
,, ,, 11th ,,		9,600
Assistant Engineer, 10th ,,		9,000
,, ,, 9th ,,		8,400
,, ,, 8th ,,		7,920
,, ,, 7th ,,		7,440
,, ,, 6th ,,		6,960
,, ,, 5th ,,		6,480
,, ,, 4th ,,		6,000
,, ,, 3rd ,,		5,520
,, ,, 2nd ,,		5,040
,, ,, 1st ,,		4,560

The increments will be given for approved service only and in accordance with the rules of the Department

Exchange compensation allowance will not be granted to future entrants

Promotions above the grade of Executive Engineer are dependent on the occurrence of vacancies in the sanctioned establishment, and are made wholly by selection, mere seniority is considered to confer no claim to promotion

State Railways.

The Secretary of State for India in Council will, from time to time as may be required, make appointments of Assistant Traffic Superintendent on Indian State Railways

Candidates must possess one or other of the following qualifications, viz —

(*a*) Not less than two years' practical experience of work in the Traffic Department of a British or Colonial Railway together with evidence of a sound general education.

(*b*) A degree or diploma of any teaching University in the United Kingdom granted after not less than three years' study in that University, or a technical diploma or certificate recognized by the Secretary of State

The establishment of the Superior Traffic Department of Indian State Railways consists of a staff of officers, military and civil, engaged on the various railways administered by the State in India This establishment is recruited from the following sources —

(i) Officers of Royal Engineers,

(ii) Persons appointed by the Secretary of State by selection from the United Kingdom;

(iii) Persons appointed in India,

(iv) Occasional admission of other qualified persons

The various ranks of the Department are as follows —

	Salary per annum Rs
Traffic Managers	24,000
Deputy Traffic Managers	18,000
District Superintendents —	
Class II, Grade 1	13,200
,, Grade 2	12,000
,, Grade 3	10,800
,, Grade 4	9,600
,, Grade 5	8,400
Assistant Superintendents	
Class III, Grade 1	6,600
,, Grade 2	5,400
,, Grade 3	4,800
,, Grade 4	3,600
,, Grade 5	2,400-3,000

The establishments of the Superior Locomotive and Carriage and Wagons Departments of Indian State Railways consist of officers engaged on the various railways administered by the State in India These establishments are recruited from the following sources —

(i) Persons appointed by the Secretary of State by selection from the United Kingdom,

(ii) Persons appointed in India,

(iii) Occasional admission of other qualified persons

The various ranks of the Departments are as follows —

	Salary per annum Rs
Locomotive Superintendents	24,000
Deputy Locomotive Superintendent	18,000
Carriage and Wagon Superintendents	18,000 or 21,000
Deputy Carriage and Wagon Superintendents	15,000
Both Departments — District Superintendents —	
Class II, Grade 1	13,200
,, Grade 2	12,000
,, Grade 3	10,800
,, Grade 4	9,600
,, Grade 5	8,400
Both Departments — Assistant Superintendents —	
Class III, Grade 1	6,600
,, Grade 2	5,400
,, Grade 3	4,800
,, Grade 4	3,600
,, Grade 5	2,400-3,000

Telegraph Department.

The Superior Establishment of the Indian Telegraph Department is engaged on the construction and maintenance of the various telegraph lines belonging to the Government of India, and in the supervision of the offices in connection therewith

The Department is chiefly recruited from the United Kingdom. The various ranks of the Superior Establishment are as follows —

	Maximum Salary per mensem Rs.
Director-General	3,000
Deputy Director-General	2,000
Directors	1,800
Deputy Directors	1,600
Chief Superintendents, 1st Class	1,400
Chief Superintendents, 2nd class	1,250
Superintendents, 1st Grade	1,000
,, 2nd Grade	850
Assistant Superintendents, 1st Grade	700
,, ,, 2nd Grade	550
,, ,, 3rd Grade	450
,, ,, 4th Grade	350

His Majesty's Indian Army.

A certain number of appointments to the Indian Army are offered to Cadets of the Royal Military College, and a certain number to candidates from the Universities All King's Cadets (British and Indian) and Honorary King's Cadets nominated by the Secretary of State for India in Council have the option, during their last term at the Royal Military College, of electing for appointment to the Unattached List for the Indian Army or for appointment to commissions in British Cavalry or Infantry The appointments to the Unattached List for the Indian Army remaining after the claims of the King's Cadets and Honorary King's Cadets (Indian) have been satisfied are allotted in order of merit to Cadets who satisfy the requirements of the Regulations respecting admission to the Royal Military College, and who elect to compete for such appointments, at each final Examination at Sandhurst

King's India Cadetships.

Ten King's India Cadets are nominated each half-year from among the sons of persons who have served in India in the Military or Civil Service of His Majesty or of the East India Company A Candidate is not eligible for nomination as a King's India Cadet if he be under 17 or over 19½

A Candidate is not eligible for nomination and his claims will in no circumstances be considered until he has obtained (*a*) a Leaving Certificate or a Qualifying Certificate, as required by the Regulations for Admission to the Royal Military College, Sandhurst, in force prior to 1912, or (*b*) has qualified at the Army Entrance Examination; or (*c*) is prepared to attend the next examination The fees of King's India Cadets at the Royal Military College are not payable by the State, except in cases where, after due inquiry, their pecuniary circumstances are ascertained to be such as to justify the payment

Honorary King's India Cadetships.

Three Honorary King's India Cadets are nominated annually by the Secretary of State for India. Such Cadets are appointed from—

(*a*) The sons of officers of the Indian Army who were killed in action, or who have died of wounds received in action within six

months of such wounds having been received, or from illness brought on by fatigue, privation, or exposure, incident to active operations in the field before an enemy, within six months after their having been first certified to be ill.

(*b*) The sons of officers of the Indian Army, who have obtained the brevet substantive rank of Major or Lieutenant-Colonel, and have performed long or distinguished service.

An Honorary King's Cadetship carries with it no pecuniary advantage.

Queen Alexandra's Military Nursing Service for India.

The Nursing establishment is for duty with British officers and soldiers, and at present consists of —

4 Lady Superintendents

16 Senior Nursing Sisters

71 Nursing Sisters.

The numbers in these grades are subject to alteration

Nursing Sisters at the time of appointment must be over 27 and under 32 years of age Candidates for the Service must have had at least three years' preliminary training and service combined in the wards of a British general hospital or hospitals of not less than 100 beds in which adult male patients receive medical and surgical treatment, and in which a staff of Nursing Sisters is maintained

The duration of a term of service, for all grades of lady nurses, is five years. A lady nurse who has been pronounced by a medical Board to be physically fit for further service in India, may be permitted to re-engage for a second and third term at the option of the Government, and again for a fourth term, or until the age of compulsory retirement, if in all respects efficient and if specially recommended by the Commander-in-Chief in India But a lady nurse will not under any circumstances be permitted to remain in the service in the grade of Lady Superintendent beyond the age of 55 years, or in either of the other grades beyond the age of 50 years

Rates of Pay.

(In addition to free quarters, fuel, light, and punkah-pullers)

	Rs	per mensem
Lady Superintendent	300	,,
Senior Nursing Sister over five years in grade	225	,,
Senior Nursing Sister under five years in grade	200	,,
Nursing Sister over five years in grade	200	,,
Nursing Sister under five years in grade	175	,,

Royal Indian Marine.

All first appointments of executive officers in the Royal Indian Marine are made by the Secretary of State for India

The limits of age for appointment to the junior executive rank, that of Sub-Lieutenant, are 17 and 22 years, and no candidate will be appointed who does not possess the full ordinary Board of Trade certificate of a Second Mate, certificates for foreign-going *steamships* will not be accepted

PAY AND ALLOWANCES

The present establishment of officers of the Royal Indian Marine and their allowances are as follows —

32	Commanders on pay ranging from Rs 350 to Rs 500, in addition to staff or command pay	per mensem
72	Lieutenants on completing eight years' seniority	On Rs. 300
	Lieutenants on completing six years' seniority	On Rs. 250
	Lieutenants on completing three years' seniority	On Rs 200
	Lieutenants under three years' seniority	On Rs 150
	Sub-Lieutenants	On Rs 125
	Sub-Lieutenants	On Rs 100
Total 104		

In addition, 3 Commanders and 8 Lieutenants are at present employed in the Marine Survey of India

A certain number of Shore, Port, and Marine Survey appointments are usually reserved for officers of the Royal Indian Marine. The numbers so reserved and the allowances attached (in addition to pay of grade), are as follows .—

	Allowances per mensem. Rs.
4 Shore appointments	400—1000
16 Port appointments	320— 870 per diem.
11 Marine Survey appointments	4—20

The sanctioned establishment of the Engineers branch of the Marine numbers 81, of whom, at present, 9 are Chief Engineers, and the remainder Engineers and Assistant Engineers.

Sterling Equivalents.

N.B.—In calculating the sterling equivalents of rupee salaries drawn by Europeans appointed in England to permanent service in India, it is necessary to bear in mind that in some cases Exchange Compensation Allowance is drawn in addition to salary. This allowance is at present at the rate of 6¼ per cent on the salary, subject to a maximum of Rs 138-14-3 a month, but the rate is subject to alteration in the event of any material variation in the average rate of exchange between England and India

The following table shows the approximate equivalent in sterling of the rupee Salaries stated, (*a*) when Exchange Compensation Allowance is not granted, (*b*) when it is granted at the rate just mentioned —

Rupees per Mensem.	Rupees per Annum	(*a*) Equivalent without E C A	(*b*) Equivalent with E C A	Rupees per Mensem	Rupees per Annum	(*a*) Equivalent without E C A	(*b*) Equivalent with E C A	Rupees per Mensem	Rupees per Annum	(*a*) Equivalent without E C A	(*b*) Equivalent with E C A	Rupees per Mensem	Rupees per Annum	(*a*) Equivalent without E C A	(*b*) Equivalent with E C A.
		£	£			£	£			£	£			£	£
100	1,200	80	85	650	7,800	520	552	1,600	19,200	1,280	1,360	2,900	34,800	2,320	2,431
125	1,500	100	106	700	8,400	560	595	1,700	20,400	1,360	1,445	3,000	36,000	2,400	2,511
150	1,800	120	127	750	9,000	600	637	1,800	21,600	1,440	1,530	3,100	37,200	2,480	2,591
175	2,100	140	149	800	9,600	640	680	1,900	22,800	1,520	1,615	3,200	38,400	2,560	2,671
200	2,400	160	170	850	10,200	680	722	2 000	24,000	1,600	1 700	3,300	39,600	2,640	2,751
250	3,000	200	212	900	10,800	720	765	2,100	25,200	1 680	1 785	3 400	40,800	2,720	2,831
300	3,600	240	255	950	11,400	760	807	2,200	26,400	1,760	1,870	3,500	42,000	2,800	2,911
350	4,200	280	297	1,000	12,000	800	850	2,300	27,600	1,840	1,951	3,600	43,200	2,880	2,991
400	4,800	320	340	1,100	13,200	880	935	2,400	28,800	1,920	2,031	3,700	44,400	2,960	3,071
450	5,400	360	382	1,200	14,400	960	1,020	2,500	30,000	2,000	2,111	3,800	45,600	3,040	3,151
500	6,000	400	425	1,300	15,600	1,040	1,105	2,600	31,200	2,080	2,191	3,900	46,800	3,120	3,231
550	6,600	440	467	1,400	16,800	1,120	1,190	2,700	32,400	2,160	2,271	4,000	48,000	3,200	3,311
600	7,200	480	510	1,500	18,000	1,200	1,275	2,800	33,600	2,240	2,351	5,000	60,000	4,000	4,111

The Indian Civil Service.

In the early years of the eighteenth century the East India Company was still little more than a body of traders The genesis of the Indian Civil Service is to be sought in the modifications which the Company underwent as it found itself year by year more involved in the government of the country with which it was trading It was gradually realised that neither the pay nor the training of the Writers Factors and Merchants of the Company was adequate to the administrative work which they were called on to perform As a result this work was often indifferently done, and corruption was rife To Lord Cornwallis is due the credit of having reorganized the administrative branch of the Company's service, in accordance with **three main principles** from which there has been hitherto no deviation These were that every civil servant should covenant neither to engage in trade nor to receive presents, that the Company on their side should provide salaries sufficiently handsome to remove the temptation to supplement them by illegitimate means, and that, in order that the best men might be attracted the principal administrative posts under the Council should be reserved for members of the Covenanted Civil Service as it was called The first of these principles is embodied not only in the covenant which every member of the service still has to sign on appointment, but also in the "Government Servants' Conduct Rules," which are applicable to every civil department, however recruited As regards the second, the scale of salaries originally prescribed was so handsome that it has not yet been considered expedient to undertake any general revision of it The list of reserved posts remains, too much the same as in 1793, though certain modifications have been introduced to meet Indian aspirations

At first nominations to the service were made by the Directors, but this right was withdrawn by Act of Parliament in 1853, and since 1855 **appointments** have been open to public competition, all natural-born subjects of the Crown being eligible The age-limits and other conditions of examination have varied considerably from time to time, but at present candidates are examined between the ages of 22 and 24 At first young officers were sent straight to their appointments on recruitment, but in 1800 Lord Wellesley established a college at Fort William for their preliminary training This was not a success and in 1805 a college at Haileybury was substituted, and for 53 years nominees underwent a two years' training there before proceeding to India At present a year's course at a British University is prescribed, and at the close of this year there is a further examination Failure to pass this means final loss of appointment, and seniority in the service is determined by combining the result of the open competition and this final compulsory examination

The Statute of 1793 (33 Geo cap 52) modified in 1861, sets forth the list of **offices reserved** for members of the Indian Civil Service It includes among others the offices of secretaries and under-secretaries to governments, commissioners of revenue, Civil and Sessions Judges, Magistrates and Collectors* of Districts (in the regulation provinces) and joint and assistant Magistrates and Collectors In the non-regulation provinces, many of the above posts are held by military officers In addition to these reserved posts there are many other appointments which the Indian Civilian can hold He is now, however, debarred from permanent appointment as Governor-General or Governor the highest office he can attain being those of Lieutenant-Governor and Member of the Viceroy's Council

Despite the complete eligibility of **natives of India**, and despite the numbers of Indians who now seek their education in England, comparatively few have succeeded in obtaining appointments by open competition On the 1st of April 1913 only 46 of the 1,319 civilians on the cadre were natives of India In 1870 an important Act (33 Vict cap 33) was added to the statute book which allowed the appointment of "natives of India of proved merit and ability" to any of the offices reserved by law to members of the Covenanted Civil Service, such officers were known as Statutory or Uncovenanted Civilians This method of appointment was dropped in 1889, and facilities were afforded to Indians for promotion through the ranks of the Provincial Service

The young civilian, on joining his appointment in India, is attached to a district as **assistant to the Collector.** He is given limited magisterial powers and after passing examinations in the vernacular and in departmental matters he attains to full magisterial powers and holds charge of a revenue subdivision During this period he is liable to be selected for the judicial branch and become an Assistant Judge In course of time promotion occurs and he becomes either Collector and District Magistrate, or District and Sessions Judge this promotion does not generally occur before he has served for at least ten years The District Judge is the principal civil tribunal of the district and wields extensive appellate powers In his capacity as Sessions Judge he tries the more important criminal cases of the district

The **Collector** is not merely chief magistrate and revenue officer of his district He also

* The Chief Revenue Officer of a District is known as the Collector in the "regulation provinces" of Bengal, Madras, Bombay, Agra and Behar and Orissa. Elsewhere he is the Deputy Commissioner, and his assistants are Assistant Commissioners.

forms a court of appeal from subordinate magistrates, supervises municipalities and local boards, is chief excise officer and district registrar, and in general represents Government in the eyes of the people The Collector and his assistants are expected to travel over their charges, touring rules vary in different provinces, but in Bombay the Collector spends four and his assistants seven months in the year on tour

By the time the highest grades in the offices of Collector or Judge are reached the Civilian has, as a rule, nearly completed the 25 years which are necessary before he can retire Should he elect to continue in service there are still posts to which he can look forward for promotion On the one hand, he may become a Commissioner or even a Member of Council, and on the other there are Judicial Commissionerships and seats on High Court Benches Such is the normal career of a Civilian, but this, by no means, completes the account of his prospects, for nearly one-fourth of the service is, as a rule, employed in posts—some reserved and some not—out of the regular line A number of Civilians are employed in the Imperial and Provincial Secretariats, some are in political employ in the Native States, others hold responsible positions in the Customs, Police, Salt, Post Office and other departments, or supervise big municipalities and public trusts

The Civilian may retire after 25 years' service and in the ordinary way must retire on reaching the age of 55 He contributes throughout his service to a pension which is fixed, regardless of whether he has risen to be a Lieutenant-Governor, or has remained at the foot of the ladder Every Civilian, moreover married or single, subscribes to an annuity fund which provides for the widows and orphans of deceased members of the service

The conditions of recruitment, training, pay, leave, pension and other matters affecting the Indian Civil Service are at present under enquiry by the Royal Commission, of which Lord Islington is President Special attention is being paid to the question of the feasibility of increasing facilities for the admission of natives of India to the service and the report of the Commission is awaited with considerable interest

Public Services Commission

In July, 1912, it was announced that the King had been pleased to approve the appointment of a Royal Commission to examine and report upon the Public Services in India. The Royal Commission was constituted as follows :—

Chairman —The Right Hon Lord Islington, K C.M G

The Earl of Ronaldshay, M P

Sir Murray Hammick, K C S I , C I E , Indian Civil Service.

Sir Theodore Morison, K C I E , Member of the Council of India

Sir Valentine Chirol

Frank George Sly, Esq , C S I , Indian Civil Service

Mahadev Bhaskar Chaubal, Esq , C S I Member of the Governor of Bombay's Executive Council.

Gopal Krishna Gokhale, Esq , C I E , Member of the Viceroy's Legislative Council

Walter Culley Madge, Esq , C I E , Member of the Viceroy's Legislative Council

Abdur Rahim, Esq , Judge of the Madras High Court

James Ramsay Mac Donald, Esq , M P.

Herbert Albert Laurens Fisher, Esq , Fellow and Tutor of New College, Oxford

The Terms of Reference were as follows :—

To examine and report upon the following matters in connexion with the Indian Civil Service, and other civil services, Imperial and Provincial —

(1) The methods of recruitment and the systems of training and probation,

(2) The conditions of service, salary, leave, and pension

(3) Such limitations as still exist in the employment of non-Europeans and the working of the existing system of division of services into Imperial and Provincial,

and generally to consider the requirements of the Public Service, and to recommend such changes as may seem expedient

Work of the Commission—The Royal Commission visited India in the cold weather of 1912-13, and toured extensively in India, including Burma, confining their attention mostly to hearing the evidence of and relating to the Indian Civil Service They subsequently sat in London and in October, 1913, again left for India to enquire into 28 Services other than the Indian Civil and the Provincial Services They assembled first at Delhi on November 3rd, and examined Imperial officers and witnesses from the United Provinces, the Punjab and the North-West Frontier Province They then assembled at Calcutta in the middle of December, to hear witnesses from Bengal, Bihar and Orissa, and Burma

Early in February the Royal Commission went to Madras, and completed the tour at Bombay, where witnesses from Western India and the Central Provinces were heard,

The Commission returned to England in the spring of 1914, and has drawn up a report which, it is understood, has been signed, but publication of it may be delayed on account of the war

THE INDIAN MEDICAL SERVICE.

The Medical Service under the control of the Government of India consists of some seven hundred and sixty-eight medical men recruited in England by competitive examination; and has as its primary duty the care of the native troops and of the British Officers and their families, attached to them. But in the course of rather more than a century and a half other duties and responsibilities have accrued to it, so that there are in addi-

tion the provision of medical aid to Civil Servants and their families, the administration of the civil hospitals of the large towns, and the supervision of the numerous small dispensaries provided either by the Government or private charity for the inhabitants of the larger villages. Moreover the Service provides for the sanitary control of large areas, dealing with the sanitation of towns, protection of water supplies and the prevention of epidemic disease It is also represented in the Native States by the Residency Surgeon, and in Persia by the Medical Officers to the British Consulates The Jail Department is also administered in great part by Indian Medical Officers, generally in the dual capacity of Medical Officer and Superintendent, and up to quite recently the Officers in the Mints have been recruited from members of the medical profession Lastly the Service provides the men who are engaged in original research on diseases of tropical importance at the Bacteriological Laboratories which have arisen in India during the last fifteen years, and others who as Professors at the large medical schools have had the task of creating an indigenous medical profession which will make permanent throughout the Indian Empire the civilising influence of Western Medicine

This remarkable combination of duties and responsibilities in a single Service has slowly evolved from the system, initiated in quite early days by the old East India Company, of providing "Chirurgeons" from England, on the nomination of the Board of Directors in London, for the care of the people and soldiers in the Indian "Factories", and on the ships trading with the East Besides these men the Company maintained several medical services, including those of St Helena, the West Coast of Sumatra, Prince of Wales Island, and the China Coast The Surgeons on the Company's Indiamen were frequently utilised for emergent work in India, as in the case of the Mahratta War of 1780 and other military operations of that time, for duty with troops, and sometimes to fill vacancies occurring among those who would now be styled "civil surgeons"

Organisation.—The Indian Medical Service practically dates from the year 1764 when the scattered medical officers serving in India were united into one body later this was divided into the three medical "Establishments" of Bengal, Madras, and Bombay. In 1766 the Medical Service was divided into two branches, military and civil, the latter being regarded as primarily army medical officers, lent temporarily for civil duties, in which they formed a reserve for the Indian Army, and were consequently liable to recall at any time This position was confirmed by the Council of Lord Cornwallis in 1788, and has been in existence ever since with great advantage to the military authorities in times of military stress In 1898 the officers of the Service were given military rank, and since 1906 all the names have been borne on one list, though men on entering the service are allowed to elect a Presidency in which they will serve on entering the Civil Department

The Service was thrown open to Indians by the India Act of 1853, the first competitive examination being held in January 1855, when the list was headed by a Bengalee student who subsequently attained distinction. It was calculated by Lt-Col Crawford, I. M. S., (the talented historian of the Service) that from January 1855 to the end of 1910, eighty-nine men of pure Indian extraction had entered the Service The proportion now shows signs of yearly increase The total number of Indians at present in the Service is a little more than five per cent of the whole while, of the successful candidates during the past five years, 17 6 per cent have been men born and bred in the country.

Method of Entry.—Entrance into the Service is now determined on the results of competitive examinations held twice a year in London, the Regulations regarding which, and the rates of pay, rules for promotion and pension relating thereto, may be obtained on application to the Military Secretary at the India Office Candidates must be natural-born subjects of His Majesty, of European or East Indian descent, of sound bodily health, and, in the opinion of the Secretary of State for India in Council, in all respects suitable to hold commissions in the Indian Medical Service They may be married or unmarried They must possess, under the Medical Acts in force at the time of their appointment, a qualification registrable in Great Britain and Ireland No candidate will be permitted to compete more than three times Candidates for the January examination in each year must be between 21 and 28 years of age on the 1st February in that year, and candidates for the July examination must be between 21 and 28 years of age on the 1st August

The candidate will be examined by the Examining Board in the following subjects, and the highest number of marks obtainable will be distributed as follows:—

(1) Medicine, including Therapeutics	1,200	Marks.
(2) Surgery, including diseases of the eye	1,200	,,
(3) Applied Anatomy and Physiology	600	,,
(4) Pathology and Bacteriology	900	,,
(5) Midwifery and Diseases of Women and Children	600	,,
(6) Materia Medica, Pharmacology and Toxicology	600	,,

N B—The Examination in Medicine and Surgery will be in part practical, and will include operations on the dead body, the application of surgical apparatus, and the examination of medical and surgical patients at the bedside.

Having gained a place at the entrance examination, the successful candidates will be commissioned as Lieutenants on probation, and will be granted about a month's leave. They will then be required to attend two successive courses of two months each at the Royal Army Medical College, and at Aldershot respectively.

Officers appointed to the Indian Medical Service will be placed on one list, their position

on it being determined by the combined results of the preliminary and final examinations They will be liable for military employment in any part of India, but with a view to future transfers to civil employment, they will stand posted to one of the following civil areas —(1) Madras and Burma, (2) Bombay, with Aden; (3) Upper Provinces, *i.e.*, United Provinces, Punjab and Central Provinces, (4) Lower Provinces, *i.e.*, Bengal, Bihar and Orissa and Assam.

The allocation of officers to these areas of employment will be determined upon a consideration of all the circumstances, including as far as possible the candidate's own wishes

The whole course lasts for four months, after which the duly gazetted Lieutenants proceed to India, and for the first years of their service are attached to native regiments in any part of the country The doctor is an officer of the regiment, as was the case in the old days of the Army Medical Department Of late years it has been proposed to form the members of the Service into a corps on the lines of the British Medical Service, by forming station hospitals for native troops, thereby releasing the doctor from regimental life This reform appears to have fallen through for the present, but is likely to be brought into operation within a very few years Several appointments in the Civil Department are now reserved for Indians recruited in the country

Organisation —The Head of the Service is the Director General, who is an official of the Government of India and its adviser on medical matters He is also concerned with questions of promotion of officers to administrative rank, and of the selection of men for admission to the civil department Attached to his office and under his general supervision is the Sanitary Commissioner with the Government of India, who is to have the control of the new Sanitary Service, a department which is undergoing enlargement and re-arrangement In each Presidency or Province there is a local head of the civil medical service and medical adviser of the local administration, who is either a Surgeon General, or an Inspector of Civil Hospitals of the rank of Colonel The medical service in each province consists of the Sanitary Branch and the purely professional The former is composed of Sanitary Commissioners of Districts, who by keeping large tracts of country under observation are in a position to advise their respective governments of the existence of epidemics, and on the proper methods of dealing with them and of preventing their spread It is, however, through the Civil Surgeon that the visitor to India will come in contact with the Service. This official is something more than a general practitioner, as he is expected to be the leading medical and surgical authority in a large district consisting of a million or more of souls. Owing to the varied experience obtained in India by the members of the Civil Medical Department, this official is generally a man of the highest professional attainments, especially so in the case of those senior men holding appointments in the larger towns. His duties are to give medical aid to the civil servants and their families, and to administer the hospital which has been provided by Government in each headquarter town In many cases too he will have the additional charge of the local jail, and be the Sanitary adviser of the Municipality Accustomed to meet the most serious emergencies of his profession, and to rely entirely on his own skill and judgment, the Civil Surgeon in India has given to the Indian Medical Service a reputation for professional efficiency which cannot be excelled by any other public medical service Travellers in India falling sick within call of any of the larger towns can therefore rely on obtaining the highest professional skill in the shape of the ordinary Civil Surgeon of the I M S There have lately been signs that the popularity of the medical service of India is waning in the medical schools of the United Kingdom, and consequently there is a suspicion that a class of man is now entering it of a somewhat lower type than that which has made the Service famous

A Parliamentary Paper containing correspondence between the Government of India and the Secretary of State, on the promotion of an **independent medical profession** in India and the possibility of limiting or reducing the cadre of the Indian Medical Service was published during 1914 Writing in 1910 the Government of India said that it was impracticable to make any reduction in the number of Indian Medical Service officers employed solely on civil duties, that is to say, those not belonging to the war reserve An independent profession trained on western lines was growing up in India but had to overcome its universal rival in the shape of *hakims* and others trained in indigenous methods Government could do much to encourage the growth of this profession by making provision for the registration of medical practitioners qualified according to western methods The Secretary of State replying in November 1912, said that he was unable to contemplate any substantial reduction in the Indian Medical Service As for the independent profession, he trusted that the experience of the working of the Bombay Registration Act might justify the introduction of similar legislation for other Provinces He considered that the Indian Medical Service should be restricted to the military needs of the country both on account of economy and in order to increase as far as possible the number of important posts held by Indians, he was prepared to consider each new appointment on its merits, but any proposal for an increase in the civil posts included in the cadre of the Indian Medical Service would be subjected to the closest scrutiny In reply to that despatch, the Government of India wrote in March, 1914 :—"In view of the growing medical needs of the country which necessitate the employment of a larger staff of medical officers, some expansion of the Indian Medical Service is inevitable, and such expansion should not, in our opinion, be regarded from a different standpoint from the enlargement of any other cadre in response to the development of the work to be performed."

Pay and Allowance —The following are the monthly rates of Indian pay drawn by officers of the Indian Medical Service when employed on the military side

Rank	Unemployed Pay	Grade Pay.	Staff Pay.	In Officiating Medical Charge of a Regiment	In Permanent Medical Charge of a Regiment.
	Rs	Rs	Rs	Rs	Rs
Lieutenant ..	420	350	150	425	500
Captain	475	400	150	475	550
,, after 5 years' service	475	450	150	525	600
,, after 7 years' service		500	150	575	650
,, after 10 years' service		550	150	625	700
Major		650	150	725	800
,, after 15 years' service		750	150	825	900
Lieutenant-Colonel		900	350	1,075	1,250
,, ,, after 25 years' service		900	400	1,100	1,300
,, ,, specially selected for increased pay		1,000	400	1,200	1,400

Pensions and Half-Pay —Officers are allowed to retire on pension on completing 17 years service, the amount they receive varying with the precise number of years they have served The lowest rate for 17 years' service is £300 per annum, and the rate for 30 years £700 per annum. The increases in pension for each additional year's service over 17 are somewhat higher in the last 5 than in the first 8 of the 13 years between the shortest and longest periods of pensionable service All officers of the rank of lieutenant-colonel and major are placed on the retired list on attaining the age of 55 years the greatest age to which any officer can serve being 62

Principal Civil Appointments	Approximate Number of Appointments in each Class	Salary per Mensem			
		When held by a Lieutenant Colonel	When held by a Major	When held by Captain.	When held by Lieutenant
		Rs	Rs	Rs.	Rs
Inspectors-General of Civil Hospitals	6	2,250–2,500			
Sanitary Commissioner with Government of India.	1	2,000–2,500			
Inspectors-General of Prisons	8	1,500–2,000			
Principals of Medical Colleges .	5	1,650–1,800	1,200–1,300		
Professorial Appointments	32	1,500–1,650	1,050–1,150	800–950	750
Sanitary Commissioners .	8	1,250–1,800			
Deputy Sanitary Commissioners	13	1,450–1,600	1,000–1,100	750–900	700
Bacteriological Appointments	11	1,500–1,600	1,050–1,150	700–900	60
Superintendents of Central Lunatic Asylums	6	1,400–1,550	1,050–1,150	700–900	550
Superintendents of Central Gaols .	31	1,300–1,550	850–1,150	600–750	550
Civil Surgeoncies (First Class) .. .	37	1,300–1,450	850–950	600–750	550
Civil Surgeoncies (Second Class) ..	171	1,200–1,350	750–850	500–650	450
Probationary Chemical Examiner ..	1	..	.	600–750	550
Officers deputed to Plague Duty ..	..	1,450	1,000–1,100	750–900	700

Pilot Services.

Appointments to the Bengal Pilot Service are made by the Secretary of State for India and by the Government of Bengal, the latter appointments are limited to Anglo-Indians and Eurasians, and are made under separate regulations In the case of appointments made by the Secretary of State, preference is given, *caeteris paribus*, to candidates who have passed through one of the training ships "Worcester" and "Conway"

Candidates for the Secretary of State's appointments must not be less than 18 and not more than 22 years of age They must produce a Board of Trade or Colonial Certificate of Competency as a Second Mate, or any higher grade, for a foreign-going ship, and evidence of having served at sea not less than two years in a square-rigged sailing vessel of over 300 tons The rates of pay and allowances of Leadsmen Apprentices while on duty are as follows, without exchange compensation allowance —

When on the running list —

	Rs	
Junior Leadsmen	107 a month	Plus 50 per cent of the lead money collected from the ships on which they do duty
Second Mate Leadsmen	135 a month	
First Mate Leadsmen	160 a month	

When employed as Chief and Second Officer — Chief Officers of pilot vessels Rs 160 a month

As Second Officers of pilot vessels Rs 135 a month

Plus a mess allowance of Rs 40 a month

After five years' service a **Leadsman** Apprentice is allowed to appear at an examination to qualify him for appointment as **Mate Pilot,** but if he shows exceptional ability, and has passed each previous examination on his first attempt, bears a very good character, and is otherwise well reported on, this period may, with the special sanction of Government, be reduced to 4½ years After three years' service as Mate Pilot, he is permitted to go up for an examination to qualify for appointment as **Master Pilot,** and, if successful, is promoted to that grade on the occurrence of a vacancy Vacancies which occur in the grade of Branch Pilot are filled by promotion from the Master Pilots' grade, of men who have passed the Branch Pilots' examination If the Local Government has reason to believe that a Pilot, is, owing to physical unfitness of any kind, incapable of discharging his duties properly, it arranges for his medical examination and takes such action as may seem desirable when the results of that examination are communicated In particular, Pilots are medically examined after the occurrence of any accident to the vessel in their pilotage charge, if the circumstances tend to show that the accident was in any way attributable to physical unfitness on the part of the Pilot

Pilots are not entitled to any salary while on pilotage duty, but receive as their remuneration a share, at present 50 per cent, but liable to alteration at the discretion of the Government of Bengal, of the pilotage dues paid by ships piloted by them The Government of Bengal reserves to itself the right to require all Pilots to obtain a Home Trade Master Mariner's Certificate before they are promoted to be Senior Master Pilots Every member of the Pilot Service is subject to such rules as the Government of India or as the Government of Bengal under the control of the Government of India, may from time to time respectively make in regard to discipline, leave, leave allowances, number of officers in the service, distribution into grades, tonnage of ships to be allotted to the several grades, etc , and in all respects he is amenable to such orders as may be passed by the Government of Bengal, and is liable to degradation, suspension and dismissal by the Government of Bengal for any breach of such rules or orders, or for misconduct

Other Pilot Services.—Bengal is the only province that has a covenanted pilot service elsewhere pilotage is under the control of the local Port Trust In **Bombay,** for example, the Port Trust have drawn up the following rules for entry into the service

To be eligible for admission to the Bombay Pilot Service, candidates must be British Subjects, and at least 21 years of age but not more than 32 They must hold certificates of competency as Master and excellent testimonials as regards conduct, character and ability They will be examined in the Port Office for form and colour vision as prescribed by the Board of Trade, and also an extra form vision test of each eye separately and must undergo an examination by, and produce a certificate from, the Medical Officer appointed by the Port Trustees that they are physically fit, and are of a sufficiently hardy or strong constitution to perform a Pilot's duty and that they, to all appearance, enjoy good health. Any Probationer may, with the sanction of the Port Officer go before the Examining Committee, and if he passes he will be eligible for appointment as a 3rd Grade Pilot when a vacancy occurs A Probationer, not passing the required examination to qualify for performing a Pilot's duties within six months after the date of his appointment, is liable to be struck off the list Promotion to the various grades in the Pilot service is generally given by seniority, but the Port Trustees reserve to themselves the right of passing over any Pilot. There are 18 Pilots, six in each grade, who are paid according to the number of vessels piloted. The average pay of a 1st Grade Pilot is about Rs. 850, 2nd Grade about Rs. 750 and 3rd Grade about Rs. 650.

The Indian National Congress.

BY D. E. WACHA

The Congress was practically founded in 1885 by the late Mr. Allan Octavian Hume, a retired member of the Indian Civil Service, and the son of the distinguished Joseph Hume, M. P., whose radicalism is so well known and who was one of the chief advocates of Retrenchment and Reform in the House of Commons in the forties or fifties Mr Hume had a distinguished career in the service In his younger days when Collector and Magistrate at Etawah, he had rendered invaluable service in quelling the Mutiny in its incipient stage For this service he was created a Civil Companion of the Bath, a rare honour in those days for a young Anglo-Indian Civil Servant He retired from the service in 1883 after having honourably filled several high offices, the last of which was the Home Secretaryship of the Government of India The policy of Lord Lytton's Government (1876-80) had aroused discontent in the country The imposition of the Vernacular Press Act, commonly known as the Black Act, and the uncalled for hostilities with the Amir Sheie Ali of Afghanistan which culminated in the Second Afghan War were the subject of much adverse criticism among the most moderate but enlightened Indians in all parts of the country It was recognised in all quarters that the people should organise themselves by way of a conference to ventilate their grievances Correspondence was passing among the Indian leaders of thought in the different provinces as to the formation of such a conference on a sound and permanent footing The viceroyalty of Lord Ripon (1880-84) gave the necessary stimulus and encouragement Thus by 1883, when Mr Hume retired, the idea of the Conference had so far taken body and form that, with the sympathetic support of Mr. Hume, a Union was established after he had in 1883 the genuine support of many sterling friends of India in Parliament, especially John Bright and Mr Stagg Mr Hume had been a silent but watchful observer of events and felt that he must give his active support to the movement, his heart being fully prepared to ameliorate the social, economical and political condition of the Indians He was in close communication with the leaders in various provinces. Here it may also be worth while recording the fact that during the preliminary stage of the inception of the Congress, Mr Hume, who had retired to Simla, had had the opportunity of consulting Lord Dufferin on the subject and it is a fact that his Lordship was at one with the object and greatly encouraged Mr Hume in his mission Subsequently after 1888 his Lordship, for reasons of his own, which have never been authoritatively declared, chose to assume a hostile attitude toward the organisation but it was effectually met by the speech which Mr George Yule made in December 1888 at the Congress of Allahabad.

First Session.

Progress was so far made as to formulate the programme of a first meeting in Poona which at the time was the seat of great political activity. The Christmas week of 1885 was resolved upon for the inauguration of the Conference. Unfortunately, when the preparations were being made cholera broke out in the City of Poona and it was deemed unsafe to invite delegates there Accordingly the seat of the first assembly was hurriedly transferred to Bombay under the auspices of the Bombay Presidency Association, with its then active honorary secretaries, Messrs Pherozeshah M Mehta, Kashinath Trimbuk Telang and Dinsha Edulji Wacha It was at the same time resolved to christen it "The Indian National Congress," having regard to the fact that its principal aim was faithfully to echo the public opinion of all India So many misleading statements were made during the earliest years of the Congress as to its aims and objects that it may be useful to relate what they are as laid down by Mr Hume himself in a speech he made at Allahabad in 1888, on the eve of the session of the Fourth Congress at that centre Firstly, he prefaced his enumeration of the objects by stating that "no movement in modern historical times has ever acquired, in so short a period, such an appreciable hold on the minds of India, none has ever promised such wide reaching and beneficent results' Further on, it was observed that "the Congress movement is only one outcome, though at the moment the most prominent and tangible, of the labours of a body of cultured men, mostly born natives of India, who some years ago banded themselves together to labour silently for the good of India" As to the fundamental principles of the Congress they are —

Firstly, the fusion into one national whole of all the different and discordant elements that constitute the population of India,

Secondly, the gradual regeneration along all lines, mental, moral, social and political of the nation thus evolved, and,

Thirdly, the consolidation of union between England and India by securing the modification of such of the conditions as may be unjust or injurious to the latter country

The Split.

It was on the fundamental principles above stated that the Congress carried out its appointed work midst much misrepresentation, obloquy and even abuse, till 1907 when an extreme faction of delegates deliberately chose to raise a split in the united camp At the Congress held in Surat in that year the session had to be abandoned owing to the violent outbreak of the factional spirit of those who since have been known as "Extremists," in contrast with the overwhelming majority of those entertaining sober views who are called "Moderates," but if the proceedings were for the time abandoned, it was not without the leading men immediately organising themselves on the spot to take ways and means for the holding of future congresses and for the purpose of framing a written constitution of which the most important part was the creed of the Congress. In other words, the unwritten aims and objects of the Congress were reduced to writing in a crystallised form. As such it may

be repeated here, as it should dispel all doubts, misgivings or misunderstandings of the true aims and objects of the Congress

"The objects of the Indian National Congress are the attainment by the people of India of a system of Government similar to that enjoyed by the self-governing members of the British Empire, and a participation by them in the rights and responsibilities of the Empire on equal terms with those members. These objects are to be achieved by constitutional means by bringing about a steady reform of the existing system of administration and by promoting national unity, fostering public spirit and developing and organising the intellectual, moral, economic and industrial resources of the country"

Every delegate to the National Congress is obliged by the Congress Committee of the province from which he is sent to express in writing his acceptance of the above creed and his willingness to abide by the Constitution and the rules framed under it

The Constitution.

This Constitution has been in full working order since 1908 It is unalterable save by a Resolution of a majority in Congress assembled It provides a guiding or directing staff of chosen leaders selected by each province and annually confirmed from the platform of the Congress by the President Ex-Presidents, Secretaries and other office-bearers are nominated *ex-officio* members and the whole Committee is known by the name of the All India Congress Committee The provinces are the same as the territorial divisions of the Government of India The Committee of each Province is called the Provincial Congress Committee on whom devolves the duty, under the constitution and the rules, of calling meetings for the election of delegates, suggesting subjects to be brought forward for the consideration of the Congress and all cognate matters. The Congress declares each year at the close of the session where the next Congress is to be held The town or city where it is to be held begins to make all preparations fully six months before the date of the holding of the session which has hitherto invariably been during the three days immediately succeeding Christmas Day That period is specially selected owing to the great convenience it affords to all classes of delegates in the country to attend—a convenience not offered at any other time during a year A Reception Committee is formed with a leading person as its Chairman That Committee divides its work among various sub-committees such as finance, correspondence, housing, feeding and so on. A band of active young persons volunteer to serve the different sub-committees. Formerly they were chiefly selected from among the student class but owing to the orders of Government in the Education Department, that students should take no active part in politics, volunteers are now wholly recruited from the circle of men of business or profession They are well disciplined and have to obey the orders of their chief or 'captain.' They have a heavy duty to discharge during the active session, besides receiving delegates from various centres on railway platforms and taking them down to their appointed lodgings Volunteers are also posted among delegates to carry their messages or do such other work as may be needed Thus they discharge honorarily a very important service with enthusiasm and alacrity and in a way learn discipline and the spirit of self-sacrifice In his concluding address a President invariably makes honourable mention of the services of these Congress volunteers The hardest work of a sub-committee consists of erecting the pendal or marquee for the holding of the Congress Apart from the delegates who generally number from 500 as a minimum to 1,000 or so as a maximum there is always a large number of visitors So that the pendal is erected to contain at least 5,000 seats There have been some notable Congresses when the number seated has come to as many as 10,000. That was the number which congregated in Bombay in 1889 when Sir William Wedderburn presided and was accompanied from London by the late Mr Charles Bradlaugh who afterwards introduced the first Reform Bill of the expanded Legislative Councils in Parliament in 1890 Delegates had had to pay a fee of Rs 20 for attendance up till 1912, but the fee has since been reduced to Rs 15 They are charged a very moderate fee for the days they are lodged and boarded Some well-to-do delegates hire bungalows at their own expense, but the majority of delegates outside those of the province where a Congress is held, generally accept Congress accommodation which in smaller towns becomes a very serious and uphill task indeed The supply of chairs and other paraphernalia is also a heavy task, but they all undertake it cheerfully as a matter of duty

A Session.

The spectacular effect of a large gathering in a capital town like Bombay or Calcutta or Madras is exceedingly pleasing, while the audience is invariably well-behaved During the five hours a day of each of the three days proceedings, the stranger visiting the Congress, whether he is accommodated on the dais or the visitors' gallery, can hear every word of a good speaker And generally, the pavilion is carefully erected so as to allow the voice of the speaker to reach every part of it. Care also is taken that there are as many ingresses and egresses as possible A special gallery is generally reserved for purdah ladies who now-a-days are keen to attend the congress and watch its deliberations Congress expenses at the very lowest estimate come to between Rs. 25,000 and Rs 30,000 per annum The funds are collected. (*a*) from donations of wealthy sympathisers of the Congress Movement in the province where the Congress is held; (*b*) from delegation fees, half of which is shared by the London organisation of the Congress known as the British Congress Committee; and (*c*) from issue of visitors' tickets All expenses come out of these funds There is rarely a balance left, sometimes there is a deficiency The Reception Committee, as soon as convenient, issues a full report of the three days proceedings of the Congress together with a list of the delegates who attended. For a few years an industrial exhibition was opened in

connection with the Congress which is the parent of the Industrial Conference They were all very successful the most notable being the one held in Bombay on the occasion of the Congress Meeting there in 1904

The most important function of the Reception Committee under the Constitution is to elicit the opinion of the different Provincial Congress Committees as to the selection of a capable President, a well known Congressman who has taken an active part from year to year in the work of the Congress, not only on the Congress platform, but in his own part of the country by way of propagating the aims and objects of the Congress and educating the people The Provincial Committees are enjoined to send the names of the person or persons whom they would select, say, by the end of September of each year, to the Reception Committee of the place where the Congress is to be held The name selected by the majority of that committee is accepted and is announced to all centres The President-Elect receives official intimation of his selection and thereafter begins to prepare his "Address" reviewing the principal political events of the year and suggesting what important resolutions the Congress should pass The President is always the honoured guest of the Reception Committee who provide a suitable lodging for him and cater for his comfort and convenience He is waited upon by two or four volunteers who deem it a personal honour to have so waited on him On his arrival he is generally received with an ovation and a public demonstration in the form of a procession There have been distinguished presidents who have been so conveyed to their destination midst the most enthusiastic cheers of the population, men, women and children

On the opening day the President reaches the dais accompanied and followed by the Congress officers, namely, the General Secretaries, the Secretaries and Chairmen of the Reception Committee and the ex-Presidents who may be attending the Congress As soon as they are seated, a gong is heard to announce the commencement of the sessions The Chairman of the Reception Committee begins the proceedings by welcoming the delegates and touching upon the peculiarities of his city and on some provincial and other problems Immediately thereafter the President is formally installed in the chair in terms of the Constitution The chief proposer generally introduces him to the audience in a brief speech enumerating what he is and what he has done for the country Next the President rises in his place midst cheers and applause Generally, the speech is written and printed. It is read, the reading generally occupying an hour and a half. He surveys the prevailing political situation, echoes Indian public opinion as expressed in the various organs during the year on problems of administration, and winds up with recommendations and suggestions for further reforms.

On the conclusion of the address a Subjects Committee from among the delegates is selected and announced from the Chair. Within half an hour or an hour at the most the Subjects Committee meet in a secluded part of the pendal, strangers and delegates not on the Subjects Committee are requested to withdraw The President becomes ex-officio the chairman of the Subjects Committee, Then they discuss the most important topics needing resolutions to be passed the following day. Here you see Congress delegates earnestly at their work It is a kind of select committee of the House of Commons Debaters, most eloquent debaters, are often to the fore and make short speeches A draft resolution is hewed, hacked and eventually knocked into shape, votes being always taken by a show of hands, and the chairman announcing the ayes or the noes as the case may be In this way generally half a dozen important resolutions are passed It is the duty of the Congress Secretaries to see that they immediately go to the press and are ready after correction and revision for the next day's session at noon The general duration of a Subjects Committee for two days in succession is fully three hours Sometimes disputed or exceedingly controversial matters prolong it by another hour Thus it will be seen that the real solid work of a Congress session is done at the meetings of the Subjects Committee which contains the pick of the delegates attending a Congress.

The proceedings of the session in open Congress are regulated by the rules of order and procedure adopted under the constitution Amendments are permitted to any delegate provided he gives notice to the President on the days during the course of the particular resolution which may be moved Votes by a show of hands are taken for and against There are rules for special voting but these are rarely invoked, the fact being that harmony generally prevails owing to the merits of a resolution having been fully threshed out at the Subjects Committee meeting The principal speakers and supporters are all selected by the Subjects Committee, but a President may permit a speaker not named in the agenda Generally speaking the speeches are mediocre Rhetoric is absent save in some cases There is ample eloquence and nine-tenths of the speeches are all extempore, of course the speakers preparing their principal observations beforehand But what is known as 'manuscript eloquence' is exceedingly rare At the close of the proceedings, generally on the evening of the third day, the President is voted thanks and he makes a suitable reply The session is then dissolved after the customary announcement of the next place where it is to be held

Results.

Of the oldest class of Congress-men, say since its institution in 1885, there are a few only, say, Sir Pherozeshah M Mehta, the Hon'ble Mr. Surendranath Banerji, the Hon Mr M M Malavya, the Hon Mr Gangaprasad Varma, Mr. D E Wacha, Mr. P. N Mudholkar, Mr. D. A. Khare and a few others The composition of the Congress undergoes a change every few years. Looking back at the quarter of a century and more, it must be acknowledged that on the whole the Congress has done good solid work for the greater pro-

gress of the people. In reality it is a body of "Advanced Liberals" as Lord Lansdowne called it when he was Viceroy in India As such its programme is always for Liberal reforms It cannot be gainsaid that the two reforms between 1885 and 1909 for the Legislative Councils are principally owing to the continuous vigorous agitation of the Congress The first reform took place in 1892 but it was discovered in a few years that the popular elective representation was inadequate, that there was no free discussion of the budget on the principle of taxation and representation, and that the privilege of interpellation, given in 1892, needed improvement and expansion The Morley-Minto Reforms are entirely owing to the initiation and subsequent agitation of the Congress It was also owing to the same organisation that the salt duty has eventually been reduced from 2½ to Re 1 per maund The higher limit of exemption from the income tax was also recommended by the Congress It uniformly advocated the importance of the construction of irrigation works in preference to railways Its strictures on the past management of famine relief have been instrumental in bringing the Famine Relief arrangements almost to perfection It is, again, almost wholly owing to Congress agitation that education of all kinds, especially primary and technical, have undergone an unprecedented development Sanitation owes its present condition partly to the Congress The hardships involved in the original drastic codes on excise and forests have been somewhat mitigated by reason of the earnest prayers of the Congress Land revenue assessments have received continual attention from the Congress, which is more or less in favour of a settlement as near to permanency as possible But the voice of the Congress is still crying in the wilderness as far as simultaneous examinations and the separation of judicial and executive functions are concerned. Its agitation is consistent and persistent Its appeals on behalf of Indians in South Africa and elsewhere have always been earnest and accompanied by moderation On currency problems it has hitherto failed to see eye to eye with the State In short, it may be correctly said that a fairly large number of grievances of the people which the Congress has voiced during the last 28 years have been redressed. The principal planks of its platform for some time are a great extension of the employment of Indians in the higher offices of the administration in reference to which the Public Services Commission has taken evidence, retrenchment of military expenditure, fiscal independence, notably in the matter of the excise duty on indigenous cotton manufactures, reform in the administration of criminal justice, in which is included the separation of judicial from executive functions, and the equal privilege of Indians as citizens of the British Empire in all parts of His Majesty's Dominions.

British Committee.

It may be observed in conclusion that the Congress has an organisation also in London which is called the British Committee of the Congress. It is furnished with funds provided by the Indian National Congress. It has an establishment of its own and attached to it though with independent income, an organ of opinion, called "India", which echoes the salient events of what may have happened every week in India As such it performs useful service It is well informed and is liberally circulated among members of Parliament who sympathise with Indian aspirations or take interest in the general progress and welfare of India The Committee consists of retired Anglo-Indians and has been for years presided over by that well-wisher and disinterested friend of India, Sir William Wedderburn, who was twice elected President of the Congress The Committee invariably invites distinguished or leading Indians when in London to take part in its deliberations The Committee itself is in constant touch with all proceedings in the House of Commons on Indian affairs and often helps members to put questions when needed Some years ago it formed a standing committee of members of the House of Commons and an attempt is about to be made to revive it The Committee also keeps itself in communication with the India Office and often acts as a vehicle of conveying Indian opinion to the Secretary of State As such the organisation renders valuable service to Indian cause in England

The 1914 Session of the Congress was held at Karachi, under the Presidency of the Hon Nawab Syed Muhammed Bahadur, of Madras Whilst there were some notable absentees from the Session owing to various causes, the proceedings were marked by considerable enthusiasm The principal topics discussed were the status of Indians in South Africa and the desirability of a closer understanding between the Hindu and Mahomedan communities, for the common advancement of India The 1914-15 Session was fixed to be held at Madras under the presidency of the Hon. Mr Basu of Calcutta.

The Moslem League.

The Indian Moslem League was established in 1906. Prior to that time the Indian Moslems had stood aloof from politics Acting under the guidance of the greatest man they have produced, **Sir SyedAhmad**, they devoted their attention to education, founding the Aligarh College with the special purpose of making up the leeway of Mahomedans in education, and left politics to the other Indian peoples. A few Mahomedans joined the National Congress and took part in its annual sessions; but the community as a whole stood aside from political movements

In 1906 however changes occurred which impelled Indian Moslems to action Under the Act of 1892, constituting the Indian Legislative Councils, there was no specific Moslem representation and in the elections which had taken place under that Act the Moslems had for all practical purposes failed to find selection. Therefore, when the amendment of the Act and the extension of the representative principle were under discussion, they were stirred to action They feared lest, under an academic system, adapted only to a homogeneous people, their distinct communal interests would either secure no representation at all, or only inadequate representation They therefore took counsel together and approached the Viceroy in deputation, headed by His Highness the Aga Khan, and presented their views in an important State paper In this they laid stress on their position in the following passage —

"Representative institutions of the European type are new to the Indian people—many of the most thoughtful members of our community, in fact, consider that the greatest care, forethought, and caution will be necessary if they are to be successfully adapted to the social, religious and political conditions obtaining in India—and that in the absence of such care and caution then adoption is likely, amongst other evils, to place our national interests at the disposal of an unsympathetic majority"

Feeling that the Mahomedans were a distinct community, and that their interests had suffered because they had been under-represented, the deputation asked for representation on a communal basis, and for representation in excess of their actual numerical strength on account of the peculiar and historical position of the Moslem community This request was accepted, and the Imperial and Provincial Councils embodied the principle of Mahomedan representation on a communal basis

First Constitution.

It was felt that in view of the changed conditions the Moslems should organise their own political society for the expression of their communal policy This was the origin of the Moslem League The rules and regulations of the League provided for a constitution, with provincial branches, and defined the objects of the League in the following language —

The objects of the League shall be –

(*a*) to promote among Indian Musalmans feelings of loyalty towards the British Government, and to remove any misconception that may arise as to the intentions of Government with regard to any of its measures

(*b*) to protect the political and other rights and interests of Indian Musalmans and to place their needs and aspirations before the Government in temperate language

(*c*) without prejudice to the objects mentioned under (*a*) and (*b*) of this section, to promote so far as possible concord and harmony between the Musalmans and other communities of India

Revised Constitution

In 1912 and 1913 Moslem opinion as expressed by the League underwent a certain change First at a meeting of the Council, afterwards at the annual session which was held at Lucknow, the constitution was amended so as to include in the objects of the League the attainment of a system of **self-government** in India under the Crown The objects of the League, as defined in the most recent publication, are thus set forth —

The objects of the League shall be —

(*a*) to maintain and promote among the people of this country feelings of loyalty towards the British Crown

(*b*) to protect and advance the political and other rights and interests of the Indian Musalmans

(*c*) to promote friendship and union between the Musalmans and other communities of India.

(*d*) without detriment to the foregoing objects, attainment, under the ægis of the British Crown, of a system of self-government suitable to India, through constitutional means, by bringing about, amongst others, a steady reform of the existing system of administration, by promoting national unity, by fostering public spirit among the people of India and by co-operating with other communities for the said purposes

This change in the constitution of the League produced much discussion and was opposed by many of the older men who had led the community

London Branch.

There is a branch of the Moslem League in London, of which the Right Hon Syed Amir Ali is President In the autumn of 1913 the London office bearers resigned, as the result of differences of opinion with two Indian Moslems who were visiting England, Mr Mahomed Ali and Mr Vazier Khan, the honorary secretary of the League Syed Amir Ali thus described the nature of these differences "an endeavour to capture the organisation here and to impose on it their own will To both of these attempts I was, in the interests of the Mussulman community, bound to take strong objection" In response to strong pressure from the Provincial Leagues in India, the London office bearers resumed their posts and the London Branch of the League continues under the former personnel

The headquarters of the League are at Lucknow.

The annual session of the League was not held in 1914, as it was thought that the season was one for co-operation, not for criticism.

The Press.

The newspaper Press in India is an essentially English institution and was introduced soon after the task of organising the administration was seriously taken in hand by the English in Bengal In 1773 was passed the Regulating Act creating the Governor-Generalship and the Supreme Court in Bengal and within seven years at the end of the same decade, the first newspaper was started in Calcutta by an Englishman in January 1780 Exactly a century and a third has elapsed since, not a very long period certainly, a period almost measured by the life of a single newspaper, *The Times*, which came into existence only five years later in 1785, but then the period of British supremacy is not much longer, having commenced at Plassey, only twenty-three years earlier Bombay followed Calcutta closely, and Madras did not lag much behind In 1789 the first Bombay newspaper appeared, *The Bombay Herald*, followed next year by *The Bombay Courier*, a paper now represented by *the Times of India* with which it was amalgamated in 1861 In Bombay the advent of the press may be said to have followed the British occupation of the island much later than was the case in Calcutta In Calcutta the English were on sufferance before Plassey, but in Bombay they were absolute masters after 1665, and it is somewhat strange that no Englishman should have thought of starting a newspaper during all those hundred and twenty-five years before the actual advent of *The Herald*

The first newspaper was called *The Bengal Gazette* which is better known from the name of its founder as *Hicky's Gazette* or *Journal* Hicky like most pioneers had to suffer for his enterprising spirit, though the fault was entirely his own, as he made his paper a medium of publishing gross scandal, and he and his journal disappeared from public view in 1782 Several journals rapidly followed Hicky's, though they did not fortunately copy its bad example *The Indian Gazette* had a career of over half a century, when in 1833 it was merged into the *Bengal Harkarn*, which came into existence only a little later, and both are now represented by *The Indian Daily News* with which they were amalgamated in 1866 No fewer than five papers followed in as many years, the *Bengal Gazette* of 1780, and one of these, *The Calcutta Gazette*, started in February 1784, under the avowed patronage of Government, flourishes still as the official gazette of the Bengal Government

From its commencement the press was jealously watched by the authorities, who put serious restraints upon its independence and pursued a policy of discouragement and rigorous control Government objected to news of apparently the most trivial character affecting its servants. From 1791 to 1799 several editors were deported to Europe without trial and on short notice, whilst several more were censured and had to apologise At the commencement of the rule of Wellesley, Government promulgated stringent rules for the public press and instituted an official censor to whom everything was to be submitted before publication, the penalty for offending against these rules to be immediate deportation These regulations continued in force till the time of the Marquis of Hastings who in 1818 abolished the censorship and substituted milder rules

This change proved beneficial to the status of the press, for henceforward self-respecting and able men began slowly but steadily to join the ranks of journalism, which had till then been considered a low profession Silk Buckingham, one of the ablest and best known of Anglo-Indian journalists of those days, availed himself of this comparative freedom to criticise the authorities, and under the short administration of Adam, a civilian who temporarily occupied Hasting's place, he was deported under rules specially passed But Lord Amherst and still more Lord William Bentinck were persons of broad and liberal views, and under them the press was left practically free, though there existed certain regulations which were not enforced, though Lord Clare who was Governor of Bombay from 1831 to 1835, once strongly but in vain urged the latter to enforce them Metcalfe who succeeded for a brief period Bentinck, removed even these regulations, and brought about what is called the emancipation of the press in India in 1835, which was the beginning of a new era in the history of the Indian press Among papers that came into being, was the *Bombay Times* which was started towards the close of 1838 by the leading merchants of Bombay, and which in 1861 changed its name, to the *Times of India* *The Bombay Gazette* founded in 1791, ceased publication in 1914

The liberal spirit in which Lord Hastings had begun to deal with the press led not only to the improvement in the tone and status of the Anglo-Indian press, but also to the rise of the Native or Indian Press The first newspaper in any Indian language was the *Samachar Durpan* started by the famous Serampore Missionaries Ward, Carey and Marshman in 1818 in Bengali, and it received encouragement from Hastings who allowed it to circulate through the post office at one-fourth the usual rates This was followed in 1822 by a purely native paper in Bombay called the *Bombay Samachar* which still exists, and thus was laid the foundation of the Native Indian Press which at the present day is by far the largest part of the press in India, numbering over 650 papers

From 1835 to the Mutiny the press spread to other cities like Delhi, Agra, Gwalior, and even Lahore, whereas formerly it was chiefly confined to the Presidency towns. During the Mutiny its freedom had to be temporarily controlled by the Gagging Act which Canning passed in June 1857 on account of the license of a very few papers, and owing still more to the fears of its circulating intelligence which might be prejudicial to public interests. The Act was passed only for a year at the end of which the press was once more free.

On India passing to the Crown in 1858, an era of prosperity and progress opened for the whole country in which the press participated There were 19 Anglo-Indian papers at the beginning of this period in 1858 and 25 Native papers and the circulation of all was very small The number of the former did not show a great rise in the next generation, but the rise in in-

fluence and also circulation was satisfactory Famous journalists like Robert Knight, James Maclean and Hurris Mookerji flourished in this generation. The *Civil and Military Gazette* was originally published in Simla as a weekly paper, the first issue being dated June 22nd, 1872 Prior to and in the days of the Mutiny the most famous paper in Northern India was the *Mofussilite*, originally published at Meerut, but afterwards at Agra and then at Ambaba After a lively existence for a few years in Simla the *Civil and Military Gazette* acquired and incorporated the *Mofussilite*, and in 1876 the office of the paper was transferred from Simla to Lahore, and the *Gazette* began to be published daily During Lord Lytton's viceroyalty a reactionary policy was pursued towards the vernacular press which was restrained by a special Act passed in 1878 With the advent of Lord Ripon in 1880, the Press Act of Lytton was repealed in 1882 The influence of the native press especially grew to be very great, and its circulation too received a great fillip This may be said to have gone on till 1897, when India entered upon a disastrous cycle of years during which plague and famine gave rise to grave political discontent which found exaggerated expression in the native press, both in the vernacular and in English The deterioration in the tone of a section of the press became accentuated as years went on and prosecutions for sedition had little effect in checking the sinister influence.

In 1910 Lord Minto passed a Press Act applicable, not like Lytton's Act, to the peccant part alone, but like Canning's measure, to the entire press This measure is having the desired effect inasmuch as it has undoubtedly checked seditious writing in all the provinces where it had previously been most rife One marked effect of the Act has been to increase the influence and circulation of the moderate papers There is some tendency, as in Eastern Bengal, to evade the Act by the secret production and dissemination of seditious leaflets. (*See also p* 464)

Province		Printing Presses	Newspapers	Periodicals	Books	
					In English or other European Languages	In Indian Languages (Vernacular and Classical) or in more than one Language
Bengal		654	115	163	440	2,871
Bihar and Orissa		113	20	20	116	716
United Provinces		489	141	98	312	1,259
Punjab		206	76	103	78	1,487
North-West Frontier Province		22	2	1		.
Burma		127	50	57	31	304
Central Provinces and Berar		75	15	15	21	141
Assam		42	12	4	1	26
Ajmer-Merwara		9	2	5	3	21
Coorg		1		1		.
Madras		619	87	1,499	518	1,822
Bombay		424	139	303	76	1,341
Total, 1911-12		2,781	659	2,269	1,596	9,988
Totals	1910-11	2,751	658	1,902	1,578	10,063
	1909-10	2,736	726	829	2,112	9,934
	1908-9	2,594	738	895	1,687	8,345
	1907-8	2,571	753	1,602	1,524	7,095
	1906-7	2,490	744	973	1,589	8,126
	1905-6	2,380	747	793	1,411	7,644
	1904-5	2,252	713	747	1,321	7,023
	1903-4	2,139	709	719	1,294	6,824
	1902-3	2,156	657	691	1,252	6,783

Newspapers and News Agencies registered under the Press Rules and arranged alphabetically according to Station where they are published and situated.

NOTE —*News Agencies are distinguished by an asterisk*

Station	Title in full	Day of going to Press
Agra	Kayastha Hitkari	1st, 8th, 16th, and 24th of every month
Ahmedabad	Ahmedabad Samachar	Every day
	Coronation Advertiser	Wednesdays
	Gujarati Punch	Sundays
	Jaina Samachar	Sundays
	Kathiawar and Mahikantha Gazette	Saturdays
	Political Bhomiyo	Thursdays
	Praja Bandhu	Saturdays
	Rajasthan	Fridays
Ajmer	Rajastan Samachar	Thursdays
Akola, Berar	Berar Samachar	Sundays.
Akyab	Arakan Times	Mondays and Thursdays
	Arakan News	Tuesdays and Fridays
Aligarh	Aligarh Institute Gazette	Wednesdays
Allahabad	Abhyudaya	Fridays
	Hindustan Review	On first of every month
	Calcutta Intelligence Syndicate	
	Leader	Daily, except Tuesdays
	Pioneer	Daily
	Reuter's Telegram Company, Ld	
Amraoti	Kartawya	Tuesdays
	Pramod Sindhu	Mondays
	Veer Shaio Sanjeevinee	Mondays
Amreli	Islam Gazette	Thursdays
Amroha	Ittihad	Saturdays
Bagerhat	Jagaran	Sundays
Bangalore	Daily Post	Daily
	Army and Civil News	Daily
	Kasim-ul-Akhbar	Mondays and Thursdays
Bankipore	Behar Bhandu	Fridays
	Behar Herald	Saturdays
	Beharee	Daily.
	Express	Tuesdays, Thursdays and Saturdays
Barisal	Barisal Hitaishi	Sundays
Baroda	Shree Sayaji Vijaya	Thursdays
Bassein, Burma	Bassein News	Tuesdays and Fridays
Batticaloa (Ceylon)	Lamp	Every other Saturday.
Belgaum	Belgaum Samachar	Mondays
Benares City	Awazai Khalk	Every Wednesday
	Bharat Jiwan	Sundays
	Indian Student	27th of each month
Bhavnagar	Jainshasan	Tuesdays
Bihar (Patna)	Ittehad	Wednesdays
Bijapur	Karnatak Vaibhav	Saturdays

Stations,	Title in full.	Date of going to Press.
Bombay	Advocate of India	Daily.
	Akhbar-i-Islam .. .	Daily
	Akhbar-i-Soudagar	Daily, except on Sundays.
	Andhra Patrika	Wednesdays
	Argus	Sundays.
	Associated Press	
	Bombay Chronicle	Daily, except Saturday Evening and Sunday Morning
	Bombay Guardian	Fridays
	Bombay Samachar	Daily
	Briton	Daily, except Saturdays.
	Catholic Examiner	Thursdays
	Gujarati ..	Saturdays
	Illustrated Sporting Review	Saturdays
	Indian Industries and Power .	On the 15th of each month
	Indian Investors' Referee	Fridays
	Indian Social Reformer .	Saturdays
	Indian Spectator	Fridays
	Indian Spectator and the Voice of India.	Fridays.
	Indu Prakash .	Daily, except Sundays
	Jaina .	Saturdays
	Jam-e-Jamshed	Daily, except Saturdays
	Kaiser-i-Hind .	Saturdays
	Muslim Herald	Daily, except Sundays
	Muslim Times	Fridays
	Native Opinion	Tuesdays
	O Anglo-Lustiano	Saturdays
	The Parsi	Saturdays
	Railway Times	Fridays
	Rast Goftar	Sundays
	Reuter's Indian Journal	Daily.
	Reuter's Telegram Company, Limited	.
	Sanj Vartaman	Daily, except Sundays
	Shri Venkateshwar Samachar	Fridays
	Times of India	Daily
	Times of India Illustrated Weekly	Wednesdays
	United Press Syndicate	.
Bowringpet	Kolar Gold Fields News	Tuesdays
Budaon	Akhbor Zulqarnain	6th, 13th, 20th, and 27th of every month
Calangute (Goa)	A Voz do Povo .	Saturdays
Calcutta . ..	Al-Hilal	Daily.
	Amrita Bazar Patrika	Daily
	Asian .	Fridays.
	Associated Press	.
	Bangabasi .	Wednesdays
	Bengalee ..	Daily, except Sundays
	Bharata Mitra .	Thursdays.
	Calcutta Intelligence Syndicate	.
	Capital	Thursdays.
	Catholic Herald of India . .	Tuesdays.
	Dainik Hitabadi . .	Daily, except Wednesdays.
	Empire (Calcutta Evening News).	Daily, except Sundays.
	Englishman .. .	Daily.
	Hablul Matin	Daily, except Sundays.
	Handicap	Fridays.
	Hindoo Patriot	Daily, except Saturdays.
	Hitabadi	Wednesdays.
	Indian and Eastern Engineer ..	14th of each month.
	Indian Daily News . ..	Daily, except Sundays.
	Indian Echo	Fridays.
	Indian Empire	Wednesdays and Saturdays.
	Indian Engineering	Thursdays.
	Indian Express . . .	Once a month.

Stations	Title in full.	Day of going to Press
Calcutta	Indian Field	Wednesdays
	Indian Methodist Times	Last day of month
	Indian Mirror	Daily
	Indian Nation	Saturdays.
	Indian News Agency	
	Indian Planters' Gazette	Saturdays
	Indian Public Health	15th of each month
	Indo-British Press Agency	
	Moslem Chronicle and Muhammadan Observer	Thursdays
	Mussalman	Thursdays
	Railways and Shipping	15th and last day of every month
	Reis and Rayyet	Saturdays
	Reuter's Telegram Company, Limited	
	Sanjibani	Wednesdays
	Samay	Wednesdays
	Statesman	Daily, except Sundays
	Swadesh	Sundays
	Telegraph	
	Times of India Illustrated Weekly	Wednesdays
	United Press Syndicate*	
	Manorama	Fridays
	Kerala Sanchari	Wednesdays
Calicut	West Coast Reformer	Sundays and Thursdays
Cawnpore	West Coast Spectator	Wednesdays and Saturdays
	Azad	Wednesdays
	Reuter's Telegram Company, Limited	
	Zamana	25th day of every month
Chinsurah	Education Gazette	Tuesdays
Chittagong	Jyoti	Wednesdays
Cochin	Cochin Argus	Saturdays
	Malabar Herald	Saturdays
	Ceylon Catholic Messenger	Tuesdays and Fridays
Colombo	Ceylon Independent	Daily
	Ceylon Morning Leader	Daily
	Ceylon Observer	Daily
	Ceylon Sportsman	Saturdays.
	Ceylonese	Daily
	Dinakara Prakash	Mondays, Tuesdays, Thursdays and Saturdays
	Dinamina	Daily, except Sundays
	Dravida Mitran	Wednesdays and Saturdays
	Islam Mittiran	Saturdays
	Nanartha Pradipaya	Mondays and Thursdays
	Sarasavi Sandaresa	Tuesdays and Fridays
	Sihala Samaya	Mondays and Thursdays
	Sinhala Bauddhaya	Saturdays
	Times of Ceylon	Daily
Comilla	Hitavarta	Wednesdays
Cuttack	Utkal Deepica	Fridays
Contai	Nihar	Mondays.
Dacca	Associated Press*	....
	Dacca Gazette	Mondays
	Dacca Prokash	Sundays
	East	Thursdays and Sundays
	Herald	Daily.

Stations.	Title in full.	Date of going to Press.
Darjeeling	Darjeeling Visitor and Advertiser	Mondays
	Associated Press	
	Comrade	Fridays
Delhi	Durbar Bulletin .	Daily
	Hamdard	Daily
	Indian News Agency	
	Morning Post	Daily, except Sundays
	Pioneer Supplement	Daily
Dharwar	Dharwarvritt	Wednesdays
	Karnataka Patra	Fridays
	Karnatakavritta and Dhananjaya	Tuesdays
	Kshema Samachar	Thursdays
Dhulia	Khandesh Vaibhav	Fridays
Dibrugarh	Times of Assam	Fridays
Gaya	Kayastha Messenger	Sundays
Guntur	Deshabimani	Daily
Hubli	Kannad Kesari	Fridays
Hyderabad, Deccan	Musheer-i-Deccan	Daily
	Sahifa-i-Rozana	Daily
	Usman Gazette	Daily
Hyderabad, Sind	Sind Journal	Wednesdays
	Musafir	Saturdays
	Prabhat	Tuesdays and Fridays
Jaffna	Ceylon Patriot and Weekly Advertiser	Tuesdays
	Jaffna Catholic Guardian	Saturday Morning
	Vasavilan Jaffna Native Opinion	Fortnightly on Mondays
	Sithia Veda Pathukavalan	Every other Friday evening
Jaffna (Vannarponnai)	Hindu Organ	Wednesdays.
Jubbulpore	India Sunday School Journal	Third Thursday of every month
	Jubbulpore Post	Fridays
	Saddhram Pracharak	Tuesdays
Kankhal .	Karachi Argus	Wednesdays
Karachi	Karachi Chronicle	Saturdays
	Parsi Sansar	Saturdays
	Praja Mitra	Tuesdays and Fridays
	Phœnix	Tuesdays and Fridays
	Reuter's Telegram Company, Limited	
	Sind Gazette	Daily except Sundays.
	Sind Observer	Wednesdays and Saturdays.
	Sind Sudhar	Saturdays
	Star of India	Saturdays
Khulna . ..	Khulna Basi	Saturdays
Kolhapur City	Vidyavilas	Fridays.
Kottayam ..	Malayala Manorama	Wednesdays and Saturdays.
	Nazrani Deepka	Tuesdays
Kurunegala ..	Abhinawa Kawata Angana	Days prior to the 1st and 15th of every month.

Stations	Title in full.	Day of going to Press
Lahore	Akhbar-i-Am	Daily
	Arya Patrika	Saturdays
	Associated Press	
	Civil and Military Gazette	Daily, (Sundays excepted)
	Desh	Daily
	Hindu ..	Tuesdays
	Hindustan	Wednesdays
	Paisa Akhbar	Daily
	Punjabee	Tuesdays, Thursdays and Saturdays
	Punjab Observer	Wednesdays and Saturdays
	Punjab Samachar	Fridays.
	Rajput Gazette	1st, 8th, 16th and 24th of every month
	Reuters Telegram Company, Limited	
	Tribune	Daily, except Sundays
	Watan	Thursdays
Larkana	Khairkhah	Saturdays
	Larkana Gazette	Fridays
	Sind Patrika	Saturday
Lucknow	Advocate	Wednesdays and Saturdays
	Anand	Thursdays
	Indian Daily Telegraph	Daily
	Indian Witness	Wednesdays
	Kaukab-i-Hind	Wednesdays
	Kayastha Mutual Family Pension Fund News	15th day of every month
	Muslim Gazette	Tuesdays
	Oudh Akhbar	Daily, except Sundays.
Madras	Al-Mazmun	On the first of every month
	Andhra Patrika	Tuesdays
	Anglo-Indian	Thursdays
	Associated Press	
	Hindu—See against *Mount Road*	
	Indian Patriot	Daily
	Indian Railway Journal	15th of every month
	Jarida-i-Rozgar	Saturdays
	Law Times	Saturdays
	Madras Mail	Daily
	New India	Daily
	Madras Times	Daily, except Saturdays.
	Muhhammadan	Mondays and Thursdays.
	Mukhbir-i-Deccan	Wednesdays.
	Reuter's Telegram Company, Limited	
	Shamsul Akhbar	Mondays
	Swadesa Mitran	Daily, except Sundays
Madura ..	South Indian Mail	Mondays
Mapuca ..	Futuro	Daily.
Margao (Goa)	Noticias	Mondays.
	Ultramar	Mondays and Fridays

Stations.	Title in full.	Day of going to Press
Matheran	Matheran Jottings	Tuesdays and Fridays
Mattancheri	Chakravarthi	Saturdays.
Mirpurkhas..	Mirpurkhas Gazette	Wednesdays
	Zamindar Gazette	Thursdays
Mirzapur City	Khichri Samachar	Saturdays
Moradabad	Al-Mushei	4th, 11th, 18th, 25th of every month.
	Colonel	1st, 8th, 16th and 24th of every month
	Meston News	4th, 12th, 20th and 28th of every month
	Sitara-i-Hind	4th, 12th, 20th and 28th of every month
Moulmein .	Moulmein Advertiser	Tuesdays, Thursdays and Saturdays
	Rammenna Times	Mondays, Wednesdays and Fridays
Mount Road, Madras	Hindu	Daily, except Sundays
Mussoorie	Echo	Fridays
	Mussoorie Times	Thursdays
Muttra	Inniskillner	7th of each month
Muvattupuzha	Kerala Dheepika	Fridays
Mymensingh	Chasu Mihir	Tuesdays
Nagercoil	Travancore Times	Tuesdays
Nagpur	Nagpur and Berar Times	Fridays
	Desha-Sewak	Mondays
Navsari	Independent	Saturdays
Nova Goa	Boletim do Commercio	Wednesdays
	O'Commercio	Daily
	Odebate	Mondays
	Heraldo	Daily, except Mondays
	O'Heraldo	Daily, except Sundays and holidays
Ootacamund	South of India Observer and Nilgiri News	Daily issue Sundays
Pandharpur	Pandhari Mitra	Sundays
Panjim Goa	O'Crente	Saturdays
Pen	Sudhakar	Fridays
Peshawar	Afghan	Daily
	Reuter's Telegram Company, Limited	
Poona .	Deccan Herald	Daily
	Dnyan Chakshu	Wednesdays
	Dynana Prakas	Daily, except Mondays
	Evening Dispatch	Daily, except Sundays.
	Kesari	Tuesdays.
	Maharatta	Sundays
	Pandit .	Daily, and weekly on Wednesdays
	Poona Mail	Daily.
	Poona Observer	Daily.
	Sudharak or Reformer	Sundays

Stations	Title in full	Day of going to Press
Poona City	Vande Mataram	Saturdays
Quetta	Baluchistan Gazette	Wednesdays and Saturdays
Quilon	Malayali	Wednesdays and Saturdays.
Rajkot	Kathiawar Times	Wednesdays and Sundays
Rangoon	Burma Sunday Times	Sundays.
	Rangoon Gazette	Daily, except Saturday evening and Sunday morning.
	Rangoon Times	Daily, except Sundays.
Ratnagiri	Bakool	Saturdays
	Satya Shodhak	Sundays
Rawalpindi	Punjab Times	Saturdays and Wednesdays
Satara	Shubha Suchaka	Fridays
Satara City	Prakash	Wednesdays.
Secunderabad	Hyderabad Bulletin	Daily
	Notice Sheet	Daily
Shahjahanpur	Sarpunch	Daily
Shikarpur (Sind)	Trade Advertiser (Waper-Samachar)	Saturdays.
Shillong	Assan Advertiser	Fridays
Sholapur	Kalpataru	Sundays
	Sholapur Samachar	Tuesdays.
Simla	Associated Press	
	Indian News Agency	
	Indian War Cry	27th of each month.
	News of India	Wednesdays.
	Pioneer Daily Bulletin	Week days
	Reuter's Telegram Company, Limited.	
Sukkur	Sindhi	Saturdays
Surat	Apakshapata	Saturdays
	Deshi Mitra	Thursdays.
	Gujrat Mittra and Gujrat Darpan	Saturdays
	Praja Pokar	Wednesdays
	Surat Akhbar	Sundays.
Sylhet	Paridarsaka	Wednesdays.
Tamluk	Tamalika	Saturdays.
Tangail	Islam Rabi	Fridays
Thana	Arunodoya	Sundays
Trichur	Lokaprakasam	Mondays.
Truvalla	Kerala Taraka	Wednesdays
Trivandrum	Western Star	Tuesdays, Thursdays, and Saturdays.
Vizagapatam	Andhra Advocate	Fridays.
Vai	Modavritta	Mondays.
	Vrittasar	Mondays.
Yemal	Harikishore	Sundays

INDIAN PRESS LAW.

The Newspapers (Incitements to Offences) Act, 1908, was passed in view of the close connexion between the perpetration of outrages by means of explosives and the publication of criminal incitements in certain newspapers The Act deals only with incitements to murder, to offences under the Explosive Substances Act, 1908, and to acts of violence It gives power in such cases to confiscate the printing press used in the production of the newspaper, and to stop the lawful issue of the newspaper The procedure adopted in the Act follows the general lines of that provided in the Code of Criminal Procedure for dealing with public nuisances, with the addition that the final order of the magistrate directing the forfeiture of the press is appealable to the High Court within 15 days It is further provided that no action can be taken against a press save on the application of a Local Government When an order of forfeiture has been made by the magistrate, but only in that case, the Local Government is empowered to annul the declaration made by the printer and publisher of the newspaper under the Press and Registration of Books Act, 1867, and thereafter neither that newspaper nor any other which is the same in substance can be published without a breach of the law

The Indian Press Act, 1910, was a measure of wider scope, the main object of which was to ensure that the Indian press generally should be kept within the limits of legitimate discussion

The Act deals, not only with incitements to murder and acts of violence, but also with other specified classes of published matter, including any words or signs tending to seduce soldiers or sailors from their allegiance or duty, to bring into hatred or contempt the British Government, any Native Prince, or any section of His Majesty's subjects in India, or to intimidate public servants or private individuals.

The different sections of the Act have in view (i) Control over presses and means of publication; (ii) control over publishers of newspapers, (iii) control over the importation into British India and the transmission by the post of objectionable matter; (iv) the suppression of seditious or objectionable newspapers, books, or other documents wherever found.

As regards the first of these objects, it is laid down that proprietors of printing presses making a declaration for the first time under section 4 of the Press and Registration of Books Act, 1867, shall give security, which may, however, be dispensed with by the magistrate at his discretion, that the proprietors of presses established before the passing of the Act may similarly be required to give security if and when they are guilty of printing objectionable matter of the description to which the Act applies, and that, where security has been deposited, Local Governments may declare such security forfeit where it appears to them that the press has been used for printing or publishing such objectionable matter When the initial security so deposited has thus been forfeited, the deposit of further security in a larger sum is required before a fresh declaration can be made under section 4 of the Press and Registration of Books Act, and, if thereafter the press is again used for printing or publishing objectionable matter the further security deposited and the press itself may be declared forfeit

Control over publishers of newspapers, the second main object of the Act, is provided for in a similar manner. The keeping of a printing press and the publishing of a newspaper without depositing security when required are punishable with the penalties prescribed for failure to make the declarations required by sections 4 and 5 of the Press and Registration of Books Act, 1867

Other provisions deal with the cases of books or pamphlets printed out of India or secretly in India The more efficient control over the importation and transmission by post of objectionable matter of the kind described in the Act is given by empowering the customs and post office authorities to detain and examine packages suspected of containing such matter, and to submit them for the orders of the Local Government

The fourth object of the Act is attained by authorising the Local Government to declare forfeit any newspaper, book or other document which appears to it to contain matter of the prohibited description, and upon such a declaration the Act empowers the police to seize such articles and to search for the same.

In any case in which an order of forfeiture is passed by the Local Government, an application may be made to the High Court on the question of fact whether the matter objected to is, or is not, of the nature described in the Act For the most part the object of the Act has been secured, as regards the local press, without recourse to the power of confiscating security

Societies : Literary, Scientific and Social.

AGRICULTURAL AND HORTICULTURAL SOCIETY OF INDIA (Calcutta)—Founded 1820 Annual subscription Rs 32 Entrance fee Rs 8 *Secretary*, F H. Abbott 17, Alipore Road, Alipore.

AGRI-HORTICULTURAL SOCIETY OF BURMA.—*Secretary*, Capt W. H Allen, Victoria Park, Kandawglay

AGRI-HORTICULTURAL SOCIETY OF MADRAS—Established 1833 Quarterly subscription for members in Class A Rs 7, in Class B Rs 3 *Secretary*, P. F Fyson, Mount Road, Teynampett, S W, Madras

ANTHROPOLOGICAL SOCIETY OF BOMBAY—Founded 1886, to promote the prosecution of Anthropological research in India; to correspond with Anthropological Societies throughout the world, to hold monthly meetings for reading and discussing papers, and to publish a periodical journal containing the transactions of the Society Annual subscription Rs 10 *Secretary*, R P Masani, M A, Town Hall, Bombay

ASIATIC SOCIETY OF BENGAL (Calcutta)—*Secretary*, G H Tipper, M A, 57, Park Street, Calcutta

BOMBAY ART SOCIETY—Founded 1888, to promote and encourage Art by exhibitions of Pictures and Applied Arts, and to assist in the establishment and maintenance of a permanent gallery for Pictures and other works of Art Annual exhibition every February Annual subscription Rs 10, Life Member Rs 100 *Secretary*, Prof O V Muller, M A, Elphinstone College, Bombay

BOMBAY BRANCH OF THE CLASSICAL ASSOCIATION—The classical Association was started, in 1903 in London, to promote the development and maintain the well-being of classical studies The Bombay Branch was founded in 1910, it numbers 137 members, holds 5 or 6 meetings a year, and publishes a yearly journal Subscription Rs 6 for ordinary and Rs 2-8-0 for associate members *Secretary*, The Rev A Ailinger, S J, St Xavier's College, Bombay

BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY—Founded 1804 to investigate and encourage Oriental Arts, Sciences and Literature Annual subscription Rs 50 *Secretary*, Prof G Anderson Town Hall, Bombay.

BOMBAY NATURAL HISTORY SOCIETY—Founded 1883, to promote the study of Natural History in all its branches The Society has a small museum with a representative collection of the different vertebrates and invertebrates found in the Indian Empire and Ceylon A Journal is published quarterly which contains articles on different natural history subjects as well as descriptions of new species and local lists of different orders In the more recent numbers serial articles on game birds, common snakes, and common butterflies have been appearing Annual subscription Rs 15 Entrance fee, Rs 10 *Honorary Secretary*, W S Millard, 6, Apollo Street, Bombay

BRITISH AND FOREIGN BIBLE SOCIETY—Since 1811 the British and Foreign Bible Society has been at work in this country. It has 6 Auxiliaries in India and an Agency in Burma The first Auxiliary was established in Calcutta, in 1811, then followed the Bombay Auxiliary in 1813, the Madras Auxiliary in 1820, the North India Auxiliary in 1845, the Punjab Auxiliary in 1863 the Bangalore Auxiliary in 1875, while the Burma Agency was founded in 1899 The Bible or some portion of it, is now to be had in 80 different Indian languages and dialects and the circulation throughout India and Burma reached over 1,000,000 copies in 1913 The Bibles, Testaments, and Portions in the various Vernaculars are sold at rates which the very poorest can pay, and at considerable loss to the Society Grants of English Scriptures are made to Students who pass the various University examinations, whose applications are countersigned by their Principals, as under —

The 4 Gospels and the Book of Acts in 1 Vol to Matriculates

The New Testament and Psalms to Intermediates,

The Bible to Graduates

Last year no fewer than 9,000 volumes were so distributed Portions of Scriptures in the important vernaculars have been prepared in raised type for the use of the Blind and large grants of money are annually given to the different Missions, to enable them to carry on Bible-women's and Colportage work

Besides the British and Foreign Bible Society there is Bible work carried on, in India, Assam and Burma in a much smaller way, by the Bible Translation Society—which is connected with the Baptist Missionary Society—the American and Canadian Baptist Mission, the National Bible Society of Scotland, and the Tranquebar Tamil Bible Society

The following tables show the growth in the British & Foreign Bible Society's work during the past few years in India & Burma —

CIRCULATION OF THE B F B S IN INDIA.

Auxiliaries.	1912	1911.	1910	1909
Calcutta . ..	191,809	127,964	123,899	125,251
Bombay	161,128	140,852	138,907	128,778
Madras .	268,688	266,911	250,273	199,395
Bangalore . .	33,630	32,958	22,309	20,765
North India .	212,011	186,911	148,681	122,012
Punjab .. .	84,014	74,831	71,842	58,804
Total copies of Scriptures	951,280	830,427	755,911	655,005

These returns do not include the copies which any Auxiliary has supplied to London or to other Auxiliaries and agencies during the year.

TABLE OF CIRCULATION IN BURMA

Channels.	Bibles	Tests	Portions	Totals, 1912	Totals, 1911	Totals, 1910
Sales by colportage ..	765	1,164	91,921	93,850	76,516	70,209
Sales at Rangoon depot ..	860	1,372	8,441	10,673	11,494	10,359
Sales at branch-depots	61	192	1,641	1,894	2,327	3,676
Sales by Biblewomen .	1	13	2,087	2,101	982	1,766
Total sales .	1,687	2,741	104,090	108,518	91,319	86,010
Free grants .	15	13	100	128	97	108
Totals	1,702	2,754	104,190	108,646	91,416	86,118

BRITISH MEDICAL ASSOCIATION, (Bombay Branch) —Founded 1886, to promote Medical and the Allied Sciences and the maintenance of the honour and interests of the Medical Profession *Secretary*, Dr D R Bardi, Bombay

BOMBAY MEDICAL UNION —Founded 1883 to promote friendly intercourse and exchange of views and experiences between its members and to maintain the interest and status of the medical profession in Bombay The entrance fee for Resident members Rs 5, monthly subscription Rs 2 Absent members Rs 1, and non-resident members yearly subscription Rs 5 *President* Khan Bahadur Dr N H Choksy *Secretaries* Dr D. M Gagrat and Dr K K Dadachanji Dr M D D Gilder, Hon Librarian, Sir D M Petit Medical Union Library Hon Treasurer Dr V M Bhajekar Readymoney Buildings, Apollo Bunder, Bombay

BOMBAY SANITARY ASSOCIATION —Founded to create an educated public opinion with regard to sanitary matters in general, (*b*) to diffuse the knowledge of sanitation and hygiene generally, and of the prevention of the spread of disease amongst all classes of people by means of lectures, leaflets and practical demonstrations and, if possible, by holding classes and examinations, (*c*), to promote sanitary science by giving prizes, rewards or medals to those who may by diligent application add to our knowledge in sanitary science by original research or otherwise, (*d*) to arrange for homely talk or simple practical lectures for mothers and girls in the various localities and different chawls, provided the people in such localities or chawls give facilities Hon *Secretary*, Dr. J. A Turner, MD, Municipal Health Officer, Bombay

EUROPEAN ASSOCIATION —The European Association was established in 1883 under the title of the European and Anglo-Indian Defence Association and was re-established in 1912 under the title of the European Defence Association but the present title was adopted in 1913. The Association has for its objects the general protection of European interests and the promotion of European welfare The Association numbers 3370 The Head Offices are at Grosvenor House, Calcutta *President*, Mr L P E Pugh *Secretary*, Mr Alec Marsh

BRANCHES OF THE EUROPEAN ASSOCIATION

ASSAM VALLEY, DIBRUGARH —*Chairman*, Mr. R A Colhe *Secretary*, Mr W Dorward

BIHAR, MOZUFFERPORE —*Chairman*, Mr V N Hickley, CIE *Secretary*, The Hon'ble Mr T R Filgate, CIE.

BOMBAY —*Chairman*, Mr L H Savile *Secretary*, Mr A W S Wise

DARJEELING —*Chairman*, Mr H R Irwin *Secretary*, Mr G Wrangham-Hardy

DELHI —*Chairman*, Mr C E Bickley Roe *Secretary*, Mr R E Grant Govan

DOOARS, JALPAIGURI —*Chairman*, Mr H Child *Secretary*, Mr J M Walker

MADRAS —*Chairman*, The Hon'ble Mr J. O. Robinson *Secretary*, Mr P Holt

PUNJAB, LAHORE —*Chairman*, Mr W. Muir Masson *Secretary*, Mr L Saunders.

SIND, KARACHI —*Chairman*, Mr. J I. Murray. *Secretary*, Mr R D Marshal

SURMA VALLEY, SILCHAR —*Chairman*, Mr R St. J Hickman *Secretary*, Mr. R St. J. Hickman

UNITED PROVINCES, CAWNPORE.—*Chairman*, Mr A B Shakespear, CIE. *Secretary*, Mr J G Ryan

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE (Calcutta) —*Secretary*, Dr. Amrita Lal Sircar, 210, Bow Bazar Street, Calcutta

INDIAN MATHEMATICAL SOCIETY, founded in 1907 for the advancement of Mathematical studies in India It conducts a bi-monthly jornal in which papers on mathematical subjects are published and maintains a library with current mathematical periodicals in all languages and new books in the subject. The library is located in the Fergusson College, Poona, whence the journals and books are circulated to members by post The journal of the society is published in Madras. There are about 150 members from all parts of

India *President*, Prof R. N Apte of Kolhapur *Secretaries*, Prof. D. D Kapadia, Poona, and Prof M T Narasimgengar, Bangalore *Librarian*, Principal R P Paranjpye, Poona

INDIAN SOCIETY OF ORIENTAL ART (Calcutta) —*Joint Secs. and Treasrs*, N. Blount and B C Law, P O Box No 8, Calcutta

INDIA SUNDAY SCHOOL UNION —The India Sunday School Union is a large indigenous interdenominational Society having the sympathy and Co-operation of the greater number of Missionary Societies in India The great purposes of the Union are the promotion of systematic and careful Bible study, and the increased efficiency of Sunday School in India Its operations extend beyond the borders of India itself to Arabia, Siam, Borneo and Assam Upwards of 650,000 Sunday School scholars and teachers and 13,944 Sunday Schools are connected with the Union, speaking 60 Vernaculars One Central and 40 Provincial Committees control its Indian work which forms part of a world wide movement with a membership of 28,000,000

The India Union was founded in Allahabad in 1876 Yearly examinations are held for both teachers and scholars in 31 centres, for which medals, prizes, scripture awards, and certificates are granted to successful candidates, upwards of 20,000 entered these Exams for 1913 Notes on the daily portions of the Interdenominational Bible Reading Association are published by the I S S U in English and 14 Vernaculars, and 50 editions of the S S Lesson Expositions are published in 20 Vernaculars In addition, there is a large publication of literature dealing with all phases of child study and moral and religious training The monthly publication of the Union is the *Indian Sunday School Journal* Two whole-time and twenty-four part-time missioners are devoted to the work of Union The Teachers Training Department is under the care of Mr E A Annett

General Secretary of the Union, the Rev R Burges, India Sunday School Union Office, Jubbulpore

MADRAS FINE ARTS SOCIETY —*Secretary*, Edgar Thurston, Central Museum, Madras

MADRAS LITERARY SOCIETY AND AUXILIARY OF THE ROYAL ASIATIC SOCIETY —*Secretary*, W F Grahame, I C S, College Road, Nungambaukum

PHILATELIC SOCIETY OF INDIA —Annual subscription Rs 20 *Secretary*, J Godinho, Girgaum, Bombay

PHOTOGRAPHIC SOCIETY OF INDIA (Calcutta) —Annual subscription Rs 24 (Town Members) and Rs 10 (Mofussil members) Entrance fee Rs 20 and Rs 10 *Secretary*, A K Taylor, 40, Chowringhee Road, Calcutta.

RANGOON LITERARY SOCIETY —*Secretary*, M. Hunter, 13, York Road

RANGOON MUSICAL AND DRAMATIC SOCIETY. —Founded 1909 *Secretary*, Miss R. West, Dalhousie Street, Rangoon

SERVANTS OF INDIA SOCIETY —The Servants of India Society which was founded by the Hon'ble Mr Gopal Krishna Gokhale, B A., C I E. in 1905 has its Head-quarters in Poona and its objects are "to train national missionaries for the service of India and to promote, by all constitutional means the true interests of the Indian people" Its government is vested in the First member who is Mr Gokhale and a Council. It has at present four branches, *viz*, , (1) in Bombay, (2) in Madras, (3) in the United Provinces, (4) in Central Provinces Each Branch consists of ordinary members, members under-training and permanent assistants who work under the direction of a Senior Member. The branches engage both in propagandist and active work of political, educational, social, agricultural and philanthropic character A better idea of the work of a branch can be had from a brief description of the operations of the Bombay Branch whose members have so far undertaken activities in various fields (1) Social purity like the Hohka Sammelan of Bombay, (2) Social reform organization under the auspices of the National Social Conference, (3) rousing public opinion about elementary education, (4) promotion of the cause of elevation and education of Indian women by building up institutions like the Seva Sadan, Poona Branch, (5) Social Service as carried out by the Social Service League of Bombay, (6) spread of co-operative movement among the agriculturists, compositors, and mill-hands, (7) relief work connected with wide-spread calamities by organizing the Plague Relief Committee of Poona which succeeded in making inoculation popular in the Deccan, the Salumbra Fire Relief Committee which arranged for the relief to sufferers for five years and by undertaking a scheme of non-official relief during the famines of 1907-08 and 1914 in the United Provinces, the famine in Gujarat and Kathiawar of 1911-12 and the famine of 1913 in the district of Ahmednagar, (8) organising public opinion on the question of Indians in South Africa

The expenses incurred by the Central Home of the Society in Poona and its four branches exceed Rs 20,000 a year and this amount is made up by contributions from Indians, rich as well as poor The present number of workers enlisted by the Society is about 25 most of whom are University men of considerable standing

SEVA SADAN —The Seva Sadan Society was started on the 11th of July, 1908, by the late Mr B M Malabari It is the pioneer Indian ladies' society for training Indian sisters ministrant and serving (through them) the poor, the sick and the distressed. The society has a habitation in Gamdevi, Bombay. One-half of the Building and Endowment Fund of Rs 82,000 has been spent mainly in building at Gamdevi and partly in the purchase of two acres of land at Santa Cruz for a "Sisters' Home" and other purposes.

The Society maintains the following institutions for training its probationers and for doing its other work 1. A home for the Homeless 2 An Industrial Home with various departments. 3. A Shelter for the distressed. 4 A Dispensary for Women and Children, 5. Ashrama (or Sisterhoods) 6. Free educational classes and a Library and Reading-room. 7 A Work-class, and Home-Classes in the quarters of the poor. All these are for the benefit of women The Society has three branches, one at Poona and another at

Ahmedabad, and a third at Bangalore The expenditure annually incurred is about Rs 20,000 Secretary, Miss B A Engineer, MA, LL B, President, Mrs Ramabai Ranade, President, Ahmedabad Branch, Lady Chinubhai Madhavlal, President, Poona Branch, Mrs Ranade Treasurers, Sister Sushilabai and the Hob'ble Mr Lalubhai Samaldas Trustees, Sir Narayan Chandavarkar, Sir Bhalchandra Krishna, Sir V D Thackersey

CONSUMPTIVES' HOME SOCIETY —This Society was started by the late Mr B. M Malabari on the 1st of June 1909 It was registered under Act XXI of 1860 It is an off-shoot of the Seva Sadan Mr Malabari secured a large grant of land in a Himalayan pine forest in Dharmpur (Simla Hills) from H H the Maharaja of Patiala, for a Sanitorium for Consumptives The Sanitorium was started on June 1, 1909, and has been in existence ever since Mr Malabari collected an Endowment Fund of about Rs 67,000 lodged with the Treasurer, Charitable Endowments, under Act VI of 1890 Nearly Rs 70,000 more have been spent on buildings, etc, and the current annual expenditure is about Rs 14,000 Dr Nanavati, L M & S, and B Sc, is in charge of the Sanitorium

THE ROYAL SOCIETY OF ARTS, INDIAN SECTION —This Society was founded in London in the 18th Century Its recently published history by Sir Henry Trueman Wood Secretary of the Society, gives the following account of the Indian Section In 1857, a proposition was made by Mr Hyde Clarke who wrote to the Council suggesting that "a special section be formed for India, another for Australia, one for English America and so on" It was suggested that the Indian Section should meet once a fortnight for the reading of papers Nothing came of the suggestion until ten years later when Mr Hyde Clarke returned to England, and in 1868 he renewed his proposal, but only proposing the formation of a committee which should organise conferences on Indian subjects This time the suggestion was taken up more warmly Mr Hyde Clark himself was placed on the Council, and the Indian Conferences which soon developed into the Indian Section, were started "The Indian Section thus established became a most important department of the Society It has had great results in India by spreading information as to the directions which the development of Indian manufactures and Indian products could most usefully take, and in England by giving similar information as to the industrial resources and progress of India itself The Section has received great help from the Indian press and it has in return been of service to the Indian press in supplying useful information to it It has been of great value to the Society itself as the means by which many members have been added to its list, so that in fact, thanks to a very large extent to the work of the Indian Section and of the allied section for the Colonies, a large proportion of the present number of members come from the dependencies of the Empire abroad" *Secretary* Sir H T Wood, 18 John Street, Adelphi, London

THE YOUNG WOMEN'S CHRISTIAN ASSOCIATION IN INDIA, BURMA AND CEYLON —This was started in India in an organized and National way in 1896 The aim of the Association is to meet the needs of the girls and women who live in India from an Intellectual, Spiritual, Social and Physical standpoint This is done in many ways in the 160 Associations that now flourish under the auspices of the National Young Women's Christian Association The Associations in the big cities have a large membership and include all classes of the community Clubs, Classes, Lectures, Study Courses, Music, Languages, Bible and Mission Study, social intercourse and all kinds of physical recreation are carried on as need arises in these City Associations Boarding Homes are established in all the principal cities where teachers, nurses, business girls, students, apprentices, etc, can have a comfortable home with good, wholesome food and congenial companionship for Rs 20 or Rs 30 per month Travellers' Aid work is done and many travellers, especially in the port cities, find accommodation as they pass through. A useful feature of the Association is the Holiday Homes that are conducted in the hills, where girls from the plains can find inexpensive accommodation and regain health and strength Some of the homes accommodate as many as thirty-six at one time and hundreds benefit during the season The work of the Association in the large cities is managed by a staff of professional Y W C A Secretaries, who are fully trained and equipped to meet the many demands that are made on them These Secretaries are supplied from America, Britain, Australia and India

Many of the Associations are in small up country stations where a handful of members constitute the Branch, led by some lady in the station who is glad of this opportunity for service The members of these small stations may be transferred, in the ever-changing life of India, into the large cities and then they learn in a fuller way what the Association can do to help them in an all round development The National Headquarters are in Bombay where the greater part of the National Committee is stationed The interdenominational character of the Association is clearly kept in the forefront and ladies of many Christian denominations are on the Committee The National Committee consists of twenty-five members, resident and non-resident, representative of Student and City Department in various sections of the country

The Officers are Acting President Mrs Klosz, Vice-Presidents Mrs E J Palmer, Mrs R M Gray, Miss A M R Dobson, Hon Treasurer, F J Clark, Acting National General Secretary, Miss Florence B Lang The General Secretaries of the principal places are. Bombay, Miss Wealdon, Calcutta, Miss Rutherford, Colombo, Miss Taylor, Rangoon Miss Hughes; Madras, Miss Mather; Bangalore, "Secretary", Karachi, Miss O'Brian; Lahore, Miss Shields, Mussorie, Miss Gregory, Simla, "Secretary", Allahabad, "Secretary" Lucknow Miss Davies

The National Office is in the British Foreign and Bible Society Building, Hornby Road, Bombay.

The Official Organ of the Association is "The Young Women of India," which has a circulation of over 2,000 copies monthly

THE YOUNG MEN'S CHRISTIAN ASSOCIATION.—This Association, which was founded by the late Sir George Williams on June 6, 1844, seeks to unite those young men who, regarding Jesus Christ as their God and Saviour according to the Holy Scriptures, desire to be His disciples, in their doctrine and in their life, and to associate their efforts for the extension of His kingdom among young men The above is known as the "Paris Basis" of the Young Men's Christian Associations and it is world-wide. It was adopted at the first World's Convention in Paris in 1855 and re-affirmed at the Jubilee World's Convention in Paris in 1905 The aim of the Association is through its religious, educational, and physical work to cater for the threefold—spiritual, mental and physical—needs of young men, and its policy is one of intense loyalty to the Church

There are, as a rule, two classes of members Any young man who is a member in full communion of any Protestant Christian Church may be an active or voting member and any young man of good character may be an associate.

Flourishing Associations have been formed in Bombay and Rangoon under the auspices of the English National Council, of which Lord Kinnaird is President, and in Calcutta and in nearly every other important centre in India under the auspices of the International Committee of Y M C A of North America The International Committee appoints secretaries to the National Council, Y M C A, India and Ceylon, which is composed of members appointed triennially from the local associations

The headquarters of the National Council are in Calcutta at 86, College Street The following is a list of its present members and secretaries —

Patron, His Excellency the Viceroy, Lord Hardinge of Penshurst

Advisory Members, Sir Robert Laidlaw, Kt, London, G B. McNair, Esq, Calcutta, and E R Wood, Esq, Toronto.

Raja Sir Harnam Singh, K C I E, *Chairman*

W R Gourlay, Esq, I C S, *Treasurer*

Rev C F Andrews, M A

C G. Arthur, Esq

A H. S Aston, Esq, M.A.

Rev V. S Azariah, Bishop of Dornakal

J R. Banerjea, Esq, M A, B L

Sir Henry P Burt, K C I E.

Brig.-Genl. F. G. Bond, C B.

Rev J R. Chitamber, B A

Rev Alden H Clark, M A.

Rev W M Zumbro, M A.

F. J. Clark, Esq, J. P

W. A. Cole, Esq.

Dr. S K. Datta, B A.

J C Dutt, Esq, M A, B L

A. G Fraser, Esq, M A

The Hon'ble Mr F C Gates, C S.I

E S Hensman, Esq

J C Jansz, Esq.

H H. Mann, Esq, D S C.

The Hon'ble Mr R G. Monteath

Dr T. Narayan Swami.

Col G W Palin, C I E

Sir Henry E E Procter, Kt

J H. Simpson, Esq, C I E, I C S

The Hon'ble Mr F H Stewart, M A, C I E

SECRETARIES

E C Carter, B A
A C Harte, B A
K T Paul, B A
} *General Secretaries.*

J N Farquhar, M A, *Literary*

F C Freeman, *Railway*

F V Slack, *Student*

J H Gray, M D, *Physical*

J Callan, *Army*

D W Peterson, *Business*

B C Sircar M A, Bengal

H W White, B A, Tanjore—Palamcottah

M G Brooks, Ceylon

O H McCowen, L L B, Burma

John Devadas, Tinnevelly District

J R Isaac, B A, *H Schools*

H Glunkler, *Architect*

M R Shelton, *Railway*

M G Brooks, Ceylon

H Kuhner, Malabar

I Jacobi, Malabar

H Schaetti, *Architect*

L A Dixon, M A, Travancore

Of the local associations Bombay is said to possess the finest Association Building in the East and, owing to the generosity of the public, of Government, and of friends in the United States and Great Britain, it will shortly be the best equipped Association as well Its President is M D M. Inglis, Mr L G Granna, the General Secretary, resides at the Central Branch in Wodehouse Road Mr Frank Anderson, M A, J P (on furlough) and Mr. T R Ponsford are the secretaries of the Student Branch at Girgaum. Mr D. Munro who has been trained in America is the Physical Director, Mr. G S Canara, the Secretary of the Byculla or Indian Christian Branch Owing to the death of the late Mr W Blackford the post of Superintendent of the Mazagaon Branch with its Apprentices' Institute is at present vacant Apart from its religious activity, the Bombay Y M C. A. provides at moderate rates board and residence for about 50 young men. Two public tournaments, *viz*, the Elton Hockey Tournament, and the Condor Tennis Tournament are held annually under its auspices

TABLE OF WAGES, INCOME, &c.

Showing the amount for one or more days at the rates of 1 *to* 16 *Rupees per Month of* 31 *Days*

Rupees.	1			2			3			4			5			6			7			8			9			10			11			12			13			14			15			16		
Days	Rs	a.	p	Rs	a	p	Rs	a	p	Rs	a.	p	Rs	a	p	Rs	a	p	Rs	a	p	Rs	a	p	Rs	a	p	Rs	a	p	Rs	a	p	Rs	a	p	Rs	a	p	Rs	a.	p	Rs	a	p	Rs	a	p.
1	0	0	6	0	1	0	0	1	6	0	2	0	0	2	6	0	3	1	0	3	7	0	4	1	0	4	7	0	5	1	0	5	8	0	6	2	0	6	9	0	7	3	0	7	9	0	8	3
2	0	1	0	0	2	0	0	3	1	0	4	1	0	5	1	0	6	2	0	7	2	0	8	3	0	9	3	0	10	3	0	11	4	0	12	4	0	13	5	0	14	5	0	15	6	1	0	6
3	0	1	6	0	3	1	0	4	7	0	6	2	0	7	8	0	9	3	0	10	10	0	12	4	0	13	11	0	15	5	1	1	0	1	2	6	1	4	2	1	5	8	1	7	3	1	8	9
4	0	2	0	0	4	1	0	6	2	0	8	3	0	10	3	0	12	4	0	14	5	1	0	6	1	1	7	1	3	7	1	6	9	1	8	9	1	10	10	1	12	11	1	15	0	2	1	0
5	0	2	6	0	5	1	0	7	8	0	10	3	0	12	10	0	15	5	1	2	0	1	4	7	1	7	2	1	9	9	1	12	5	1	14	10	2	1	7	2	4	2	2	6	9	2	9	3
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9	0	4	7	0	9	3	0	13	11	1	2	6	1	7	2	1	11	10	2	0	6	2	5	1	2	9	9	2	14	5	3	3	1	3	7	8	3	12	5	4	1	0	4	5	8	4	10	3
10	0	5	1	0	10	3	0	15	5	1	4	7	1	9	9	1	14	11	2	4	1	2	9	3	2	14	5	3	3	7	3	8	9	3	13	10	4	3	1	4	8	3	4	13	5	5	2	6
11	0	5	8	0	11	4	1	1	0	1	6	8	1	12	4	2	2	0	2	7	8	2	13	4	3	3	1	3	9	9	3	14	5	4	4	0	4	9	10	4	15	6	5	5	2	5	10	9
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31	1	0	0	2	0	0	3	0	0	4	0	0	5	0	0	6	0	0	7	0	0	8	0	0	9	0	0	10	0	0	11	0	0	12	0	0	13	0	0	14	0	0	15	0	0	16	0	0

PRINCIPAL CLUBS IN INDIA.

Name of Club.	Established	Club-house.	Subscription			Secretary
			Ent	Annual	Monthly.	
			Rs	Rs	Rs	
ABBOTTABAD .		Abbottabad N W F Pro	16		10	Capt P M Rennie
ADYAR	1890	Madras	75	12	4	F Buckney
AGRA .	1863	Agra Cantonment	50		7	Capt Snowdon, R A.
AHMEDNAGAR .	1889	. .	32	.	10	Maj W. Cortlandt Anderson
AIJAL .. .	1893	Lushai Hills E B and Assam	32		10	Lt -Col G H Loch.
AJMERE	1883	Quaiser Bagh	50		15	W E Shipp.
AKOLA	1870	Berar	100		9	H C Greenfield.
ALLAHABAD	1868	Allahabad	100		9	Capt G. M. Routh, R. A
AMRAOTI ..	..		100		7	W J M Peeble.
AMRITSAR .	1894	Amritsar	20		7	A Mackay
BANGALORE UNITED SERVICE	1868	38, Residency Road	100	12	7	Major E Tennant.
BAREILLY .	1883	Municipal Gardens	32		9	Capt. W F. M. Loughman.
BARISAL .	1864	Backerganj, Barisal	25		12	G H W. Davies
BARRACKPUR	1850	Grant Trunk Road, 8, River Side	48		10	Major G. D L Chatterton
BASSEIN	1881	Fytche Street, 50, Bassein, Burma	50		10	Comdr. A Hamilton.
BELGAUM	1884	Close to Race Course	50	.	10	Major H M Thomas
BENARES			20		14	Wilmot C Dover
BENGAL	1827	33, Chowringhee Road, Calcutta	300	15	13	Col. W. Weallens.
BENGAL UNITED SERVICE	1845	29, Chowringhee Rd	150	18	10	C A Mackenzie
BOMBAY .	1862	Rampart Row	100		6	G Gilchrist
BURMA .	1885	Merchant Street, Rangoon	50		6	T G Miller
BYCULLA	1833	Bellasis Rd , Bombay	200	12	10	W P Pechey
CALCUTTA	1907	13, Russell Street	100			D Lindsay & Sir Rajendra Nath Mookerjee
CALCUTTA TURF	1861	49, Theatre Road	150	25		J Hutcheson.
CAWNPORE ..	1844	Cawnpore	50	8		J Esplin
CHAMBA .	1891	Dalhousie, Punjab	50		14	Capt H. R. Hoods
CHITTAGONG	1878	Pioneer Hill, Chittagong	50		10	Comdr. E Gray Mills, R. I. M
CLUB OF CENTRAL INDIA	1885	Mhow .. .	50		8	Major Charles T. Lamman
CLUB OF WESTERN INDIA	1865	Elphinstone Road, Poona.	200		6	Vacant.
COCHIN .. .	1876		50		5	Frederic A Cox.
COCONADA	1867	Coconada .	70		10	L H. Deane.
COIMBATORE .	1868	Coimbatore	50		7	E. M. Moss.
COONOOR	1894	Coonoor, Nilgiris	50	12	4	W. Souttar.
DACCA ..	1864	Dacca	50		14	Capt. P. L. Ingpen
DARJEELING	1868	Auckland Road	70		7	F M. Timme.
DELHI . .	1898	Ludlow Castle, Delhi	32		10	Lt -Col D. M. Davidson, I. M. S.
HIMALAYA	1841	Mussoorie .. .	100	12	10	R S Wahab
JHANSI .	1887	Next to Public Gardens Jhansi	50	.	9–8	Major W. Hallaran, R A. M. C.

Name of Club.	Established	Club-house	Subscription			Secretary
			Ent	Annual	Monthly.	
			Rs	Rs	Rs	
MADRAS	1831	Mount Road, Madras	250	92	10	Captain W B T Davidson
MALABAR	1864	Beach Road Calicut	50	12	6	W O Wright
MAYMYO	1901		100	12	10	Major F Morris
MOOLTAN	1892	Mooltan	30		12	Capt C B Penton
NAINI TAL	1864		100		5	Capt J O Nelson
OOTACAMUND	1840	Ootacamund, Nilgiri Hills	150	12	5	C A Mackenzie
ORIENT		Chaupatty, Bombay	150		6	Dossabhai Jehangir
PEGU	1871	Prome Rd , Rangoon	150	12		Capt B Stephenson
PESHAWAR	1883	Peshawar	32		10	Capt I M Conway Poole
PUNJAB	1879	Upper Mall, Lahore	150		12	A R Ross Redding
QUETTA	1879	Quetta	60		15	Capt B Leicester
RAJPUTANA	1880	Mount Abu .	50	48	8	Maj M P Corkery
ROYAL BOMBAY YACHT	1880	Apollo Bunder	200	12	7	Col R A Carruthers, C B
SATURDAY		7, Wood St , Calcutta				G Hervey
SECUNDERABAD	1883	Secunderabad, Deccan	100		8	W C Clark
SHILLONG	1878	Northbrook Road, Shillong	50		12	C H Holder
SIALKOT		Sialkot, Punjab	32		6	Capt G S Rivett-Carnac
SIND	1871	Karachi	200	12	6	J Humphrey
TRICHINOPOLY	1869	Cantonment	50		6	C McC Conway
TUTICORIN	1885	Tuticorin	50		8	H S Northey
UNITED SERVICE CLUB	1866	Simla	200			Capt L R Vaughan
UNITED SERVICE CLUB, LUCKNOW	1861	Chutter Manzil Palace	50		8	Major S D'A Crookshank, R E.
UPPER BURMA	1889	Port Dufferin, Mandalay	50		8	E D Haffenden.
WESTERN INDIA TURF		Bombay and Poona	50	20		Maj J E Hughes
WHEELER . .	1863	The Mall, Meerut	50	.	9	Maj R Burton.

The Church in India.

In the ordinary acceptance of the term, there is no established Church in India An Ecclesiastical Establishment is maintained for providing religious ministrations, primarily, to British troops, secondarily to the European civil officials of Government and their families. Seven out of the eleven **Anglican Bishops** in India are officers of the Establishment, though their episcopal jurisdiction far transcends the limits of the Ecclesiastical Establishment The stipends of the three Presidency Bishops are paid entirely by Government, and they hold an official status which is clearly defined The Bishops of Lahore, Lucknow, Nagpur and Rangoon draw from Government the stipends of Senior Chaplains only but their episcopal rank and territorial titles are officially recognised The Bishops of Chota Nagpur, Tinnevelly, Madura, Travancore, Cochin and Dornakal are not on the establishment A new Bishopric of Assam is soon to be created In its relations with Government it will be regarded as subordinate to the see of Calcutta But the maintenance of the Bishopric will be met entirely from voluntary funds

The **ecclesiastical establishment** includes four denominations—Anglican, Presbyterian, Roman and Wesleyan Of these, the first two enjoy a distinctive position, in that the Chaplains of those denominations (and in the case of the first-named the Bishops) are individually appointed by the Secretary of State and rank as gazetted officers of Government Throughout the Indian Empire there are 134 Anglican and 11 Presbyterian chaplains whose appointments have been confirmed The authorities in India of the Roman Catholic receive block-grants from Government for the provision of clergy to minister to troops and others belonging to their respective denominations The Wesleyan Methodist Church has a staff of military chaplains in India who receive a fixed salary from Government and 25 chaplains working on a capitation basis of payment by Government Churches of all four denominations, may be built, furnished and repaired, wholly or partly at Government expense

In the Anglican communion the Government has been hitherto of the nature of an episcopal autocracy, tempered by a large deference to the wishes of Government in one direction and the counsels of missionary societies in another A movement towards Synodical Government on an elective basis is now well advanced It is felt that the interests of the large and growing body of native converts demand a substantial measure of autonomy Certain legal difficulties arising out of the relations of the Indian Bishoprics with Canterbury and the Crown will have to be overcome before a full Synodical system can be established In the meantime it is proposed, as a preliminary measure, to set up Diocesan Councils to assist the Bishops, as far as possible, in the administrative side of their work

So far as the European and Anglo-Indian communities are concerned the activities of the Church are not confined to public worship and pastoral functions The **education** of the children of those communities is very largely in the hands of the Christian denominations There are a few institutions such as the La Martiniere Schools, on a non-denominational basis, but they are exceptional In all the large centres there exist schools of various grades as well as orphanages, for the education of Europeans and Anglo-Indians under the control of various Christian bodies The Roman Catholic Church is honourably distinguished by much activity and financial generosity in this respect Her schools are to be found throughout the length and breadth of the Indian Empire, and they maintain a high standard of efficiency The Anglican Church comes next, and the American Methodists have established some excellent schools in the larger hill-stations The Presbyterians are also well-represented in this field, particularly by the admirable institution for destitute children at Kalimpong, near Darjeeling Schools of all denominations receive liberal grants-in-aid from Government, and are regularly inspected by the Education Departments of the various provinces Thanks to the free operation of the denominational principle and its frank recognition by Government, there is no "religious difficulty" in the schools of the European and Anglo-Indian communities.

Christian Missions.

The tradition that St Thomas, the Apostle, was the first Christian missionary in India is by no means improbable History, however, carries us no further back than the sixth century, when a community of Christians is known to have existed in Malabar Since then the so-called **Syrian Church** in south-west India has had a continuous life Except in its infancy this Church (or rather these Churches, for the Syrian Christians are now divided into four communions) has displayed little of the missionary spirit until quite recent times Western Christianity was first introduced into India by the Portuguese, who established their hierarchy throughout their sphere of influence, Goa being the metropolitical see of the Indies St Francis Xavier, a Spaniard by race, took full advantage of the Portuguese power in Western India to carry on his Christian propaganda His almost super-human zeal was rewarded with much success, but many of the fruits of his labour were lost with the shrinkage of the Portuguese Empire. It is really to the work of the missionaries of the **Propaganda** in the 17th century that the Papacy owes its large and powerful following in India to-day The Roman Catholics in India number 1,904,006, of whom 379,251 were added during the decade 1901-1911 The total of "Syrian" Christians (exclusive of those who while using the Syrian liturgy, are of the Roman obedience) is 315,612, as against 248,741 in 1901 Protestant Christians (the term throughout this article includes Anglicans) number 1,636,731, an increase of 486,986 since 1901. Thus, the total number of Christians of all denominations in India is now close on four millions. In fact it probably exceeds that figure at the present moment, as these statistics are taken from the Census Report of 1911, and the rate of increase during the previous decade was nearly 100,000 per annum

The Protestant Churches made no serious attempt to evangelise India till the beginning of the nineteenth century They have thus been at work in the Indian mission field for something over 100 years, and the statistical results of their efforts are given above It is now, however, generally recognised that Christian missions are producing indirect effects in India which lend themselves only incompletely to any sort of tabulation The main agency of this more diffusive influence of Christianity is the missionary school and college The **Protestant missions** fill a considerable part in the elementary education of the country According to the *Year Book of Missions in India*, 1912, they are teaching 446,000 children in 13,204 elementary schools, mostly situated in villages This represents one-ninth of the total of elementary schools and scholars throughout the Empire The majority of children in these schools are non-Christians The same is true also of the high schools and in a still greater degree of the colleges The former number 283 with 62,600 male and 8,400 female pupils There are 38 colleges affiliated to Universities, containing 5,488 male and 61 female students Of these as many as 5,241 are non-Christians From the standpoint of missionary policy much importance is attached to these agencies for the indirect propagation of the Christian faith The statesman and the publicist are chiefly interested in the excellent moral effect produced by these institutions amongst the educated classes, and the higher educational ideals maintained by their staffs The principal University colleges under Protestant auspices are the Madras Christian College, the Duff College, Calcutta, the Wilson College, Bombay, and the Foreman College, Lahore All these are maintained by Presbyterian societies, either British or American The Roman Catholics have a large number of educational institutions, ranging from small village schools to great colleges preparing students for University degrees. But the proportion of Christian students in their institutions is very much larger than in those of the Protestant bodies The proportion of literates amongst native Roman Catholics is probably lower than amongst the Protestant converts, but compared with Hindus and Mahomedans it is conspicuously higher The Roman Catholics have some 3,000 elementary schools in which 98,000 boys and 41,000 girls are receiving instruction In middle and high schools they have 143,000 boys and 73,000 girls and in University colleges about 5,000 students of both sexes These figures, however, include a large proportion of Europeans and Eurasians, who are an almost negligible quantity in Protestant mission schools and colleges

More recent, but producing even more widespread results, is the **Philanthropic work** of Christian missions Before the great famine of 1878, missionaries confined themselves almost exclusively to evangelistic and educational activity. The famine threw crowds of destitute people and orphan children upon their hands. Orphanages and industrial schools became an urgent necessity But the philanthropic spirit is never satisfied with one kind of organisation or method. A great stimulus was also given to medical missions Hospitals and dispensaries have sprung up in all parts of the mission field; and leper asylums are almost a monopoly of Christian missionary effort In 1911 the total number of medical missionaries working under Protestant societies in India was 118 men and 217 women, the majority of the former being also ordained ministers of religion There are 184 industrial institutions in which 59 different arts and crafts are taught, ranging from agriculture to type-writing In this department the Salvation Army hold a prominent place, and the confidence of Government in their methods has been shown by their being officially entrusted with the difficult work of winning over certain criminal tribes to a life of industry The indirect effect of all this philanthropic activity under missionary auspices has been most marked It has awakened the social conscience of the non-Christian public, and such movements as "The Servants of India" and the mission to the Depressed Classes are merely the outward and visible sign of a great stirring of the philanthropy spirit far beyond the sphere of Christian missionary operations

Anglican Missionary Societies.

The Church Missionary Society carries on work in India in seven different missions—the United Provinces, South India, Travancore and Cochin, Bengal, Western India, Punjab and Sind and the Central Provinces and Rajputana The names are in order of seniority Work was begun in what are now called the United Provinces in 1813, in the Punjab in 1851, and in the Central Provinces in 1854 The Society has always kept Evangelistic work well to the fore, but it also has important medical missions, especially on the N.-W. Frontier, and many schools of the Primary, Middle and High standards The Church of England Zenana Missionary Society is an offshoot of the C M S controlling the work of 162 missionary ladies The number of ordained European missionaries of the C M S in India is 166, European laymen 64 and European lay-women 271 The Society claims a Christian community of 1,85,000 of whom 52,000 are adult communicants

Society for the propagation of the Gospel. Statistics of the work of this Society are not easily ascertained, as much of it is done through Diocesan institutions, which, while financed and in many cases manned by the S P G, are entirely controlled by the Diocesan authorities. The best known of the S P G missions is that at Delhi, commonly called the Cambridge Mission to Delhi, carrying on educational work at St Stephen's College and School Missions to the depressed classes exist in Burma, in the Ahmednagar District and in several parts of South India, especially in the Diocese of Tinnevelly-Madura There are 1,16,000 Indian Christians under the ægis of the S P G, 90 ordained European missionaries and 98 European lady workers

Other Anglican Societies —The Oxford Mission to Calcutta was started in 1880 It works in the poorest parts of Calcutta and also at Barisal There are 10 mission-priests of this Society, 4 laymen, and 11 laywomen. In addition to its work amongst the poor, the

Oxford Mission addresses itself to the educated classes in Bengal and issues a periodical called *Epiphany*, which is known all over India

The Society of St John the Evangelist (commonly known as the Cowley Fathers) has houses at Bombay and Poona, and small stations in the Bombay Konkan In Bombay its missionary work centres round the Church of Holy Cross, Umarkhadi, where there is a school and a dispensary The Christians are chiefly drawn from the very poorest classes of the Bombay population At Poona the Society co-operates with the Wantage Sisters and in Bombay with the All-Saints Sisters Other Anglican sisterhoods represented in India are the Clewer Sisters at Calcutta and the Sisters of the Church (Kilburn) at Bangalore The St. Hilda's Deaconesses' Association of Lahore carries on important educational work (chiefly amongst the domiciled community) in the Punjab.

Bengal Ecclesiastical Department.

Lefroy, Most Reverend George Alfred, D D	Lord Bishop of Calcutta and Metropolitan of India

SENIOR CHAPLAINS

Macdonald, Rev James Middleton, M A .. .	Services transferred to Punjab.
Wickins, Ven'ble Canon William John, M A	Archdeacon of Calcutta
Scott, Rev Sydney, S , M A	Services transferred to Punjab
Cogan, Canon Horace Barbut M A , D D	Fort William and Military Hospital, Calcutta.
Stuart, Rev Robert William Hall, B A	St Paul's Cathedral, Calcutta
Smith, Rev Joseph Frank, B A A K C	St James,' Calcutta
Firminger, Rev Walter Kelly, M A , B D	Officiating Archdeacon and Chaplain, St. John's Church, Calcutta
Stokoe, Rev Cecil George, M A	St Thomas', Calcutta

And 13 Junior Chaplains

CHAPLAINS OF THE CHURCH OF SCOTLAND

Chree, Rev George Johnstone, B D	Presidency Senior Chaplain, St Andrew's, Calcutta On combined leave
Gillan, Rev D H	Officiating
Dodd Rev G E	Officiating Second Chaplain, St Andrew's, Calcutta

CHAPLAINS OF THE CHURCH OF ROME

Meuleman, The Most Reverend Dr Brice, S J	Archbishop
Marchal, Rev Fr V , S J	Officiating Administrator of the Archdiocese
Carbery, Rev. Fr Stanislaus, S J .	Chaplain, Presidency Jail

Bombay Ecclesiastical Department.

Palmer, Right Reverend Edwin James, M A	Lord Bishop of Bombay
Barham, Rev C M , M A	Archdeacon of Bombay and Bishop's Commissary
Bowen, John Cuthbert Grenside	Registrar of the Diocese
Coles, Rev A H	Honorary Canons of Bombay Cathedral.
Heywood, Rev R S	
Joshi, Rev D L	
King, Rev C	
Rivington, Rev C S .	

SENIOR CHAPLAINS.

Courtice, Rev George Robert Aulton, M A , B SC	On furlough
Foote, Rev Harold .	Camp, Aden
Nelson, Rev Horatio William, M A	Ahmedabad
deCoetlogon, Rev Charles Evelyn Cambridge, M A	Colaba
Kennelly, Ven'ble W J M , B A	Byculla
Mould, Rev Horace	Mount Abu

And 17 Junior Chaplains.

CHAPLAINS OF THE CHURCH OF SCOTLAND

Matthew, Rev John Crombie, M A , B D ..	Acting Senior Presidency Chaplain

And 3 Junior Chaplains.

CHAPLAINS OF THE CHURCH OF ROME.

Jurgens, The Very Rev H	Presidency

Madras Ecclesiastical Department.

Whitehead, Right Reverend Henry, D D. ..	Lord Bishop of Madras.
Cox, Ven'ble Lionel Edgar, M A . .	Archdeacon and Commissary and Domestic Chaplain to the Lord Bishop.
Rowlandson, Frederic, B.A , LL.B. .. .	.. Registrar of the Diocese and Secretary to the Lord Bishop.

SENIOR CHAPLAINS

Breay, Rev Christopher Francis, M A	Vellore
Bull, Rev Edmund	St Thomas' Mount.
Giles, Rev Clement Douglas, M A	On combined leave
Welchman, Rev Richard Herbert, M A	Wellington
Lys, Rev Alleyne FitzHerbert	Coconada
Hatchell, Rev Christopher Frederic Wellesley, M A	On combined leave.
Heycock, Rev Francis Wheaton, M A	Secunderabad

And 24 Junior Chaplains

CHURCH OF SCOTLAND

Heron, Rev John, M A, B D	Presidency Senior Chaplain, St Andrew's Church, Madras On combined leave.
Meldrum, Rev Neil, M A, B D	St Andrew's Church, Madras
Phillip, Rev James Gibson	St Andrew's Church, Bangalore
Mitchell, Rev James Donald, M A, B D	St Andrew's Church, Secunderabad.

Assam Ecclesiastical Department.

Dyer, Rev Basil Saunders, B A	Shillong
Orpwood, Rev H, M A	Sibsagar
Jourdain, Rev R T, M A	Silchar

Bihar and Orissa Ecclesiastical Department.

JUNIOR CHAPLAINS

Birch, Rev Ormonde Winstanley	Dinapore
Taylor, Rev John Frederic Oddin, B A	Cuttack
Cullen, Rev John Armstrong	Bhagalpur
Green, Canon Arthur Daniel	Monghyr and Jamalpur
Payne, Rev Russell, M A	Muzaffarpur
Cosgrave, Canon W F	Ranchi
Moore, Rev H M	Bankipore

Burma Ecclesiastical Department.

Fyffe, The Right Reverend Rollestone Sterritt, M A	Lord Bishop of Rangoon
Cory, Ven'ble Charles Page, M A	Archdeacon and Bishop's Commissary.

SENIOR CHAPLAINS

Blandford, Rev Henry Weare, B A	Shwebo
Collins, Rev James Henry	Dagshai
Seeley, Rev George Henry	Mandalay

And 7 Junior Chaplains

Central Provinces Ecclesiastical Department.

Chatterton, Right Reverend E, D D	Lord Bishop of Nagpur
Price, Ven'ble C, M A	Archdeacon, Nagpur

SENIOR CHAPLAINS

Darling, Rev C W, M A	Jubbulpore
Anstey, Rev H C S, M A	Neemuch

And 14 Junior Chaplains

North-West Frontier Ecclesiastical Department.

SENIOR CHAPLAIN

Stewart, Rev C, B A	Nowshera

And 4 Junior Chaplains.

Punjab Ecclesiastical Department.

Durrant, Right Reverend H B, M A, D D.	Lord Bishop of Punjab, Lahore.
Warlow, The Ven'ble Edmund John, M A	Archdeacon

SENIOR CHAPLAINS

MacDonald, Rev. J M, M A	Subathu
Parry, Rev John Horndon, M A	West Ridge, Rawalpindi.
Naish, Rev Henry	On combined leave
Becker, Rev. Charles Maxwell, M A	Amballa.
Syme, Rev. James Greenaill Skottowe, M A	Simla
Brookes, Rev. Joshua Alfred Rowland, M A	Kashmir
Stanley, Rev. Albert Edward, M A	Jullunder
Musprott, Rev Walter, M.A	Murree Galis.
Stewart, Rev Charles, B.A.	Nowshera.

And 19 Junior Chaplains.

United Provinces Ecclesiastical Department.

Wescott, The Right Reverend George Herbert	Lord Bishop of Lucknow
Chapman, The Ven'ble Percy Hugh, M A , LL D	Archdeacon of Lucknow
Pearson, H G , Bar -at-Law	Registrar of the Diocese of Lucknow
SENIOR CHAPLAINS	
Klugh, Rev Leonard	On combined leave.
Kirwan, Rev Robert Mansel, M A	Bareilly
Shaw, Rev Walter Lilley Pritchatt, M A	Landour
Johnson, Rev Percy James Debenham, B A	Fyzabad
Oldham, Rev George Ernest, M A	Lucknow (Civil)
Canney, Rev Duncan Arnold .	Chan Cattia
Menzies, Rev Henry, M A . .	Mussoorie.

And 16 Junior Chaplains, with 7 Additional Clergy

CHURCH OF SCOTLAND

Two Junior Chaplains

THE ROMAN CATHOLIC CHURCH.

With regard to numbers, the *Catholic Directory of India*, 1913, gives the following discrepant tables —

	Civil Census 1911	Ecclesiastical Estimate
British India — Latin rite	1,430,582	1,535,820
British India — Syriac rite	413,142	364,660
Total, British India and Prot States	1,843,724	1,900,480
Burma	60,282	88,447
Ceylon	339,300	322,163
Total, India Burma, and Ceylon	2,243,306	2,311,090
French India		25,918
Portuguese India		296,148
Ecclesiastical Grand Total		2,663,156*

* After trying to rectify discrepancies the *Directory* fixes as probable the following numbers —

European and Eurasian Catholics	114,512
Baptised Native Catholics	2,423,286
Total	2,537,798

The Catholic community as thus existing is composed of the following elements —

(1) The "Syrian" Christians of the Malabar Coast, traditionally said to have been converted by the Apostle St Thomas They were brought under allegiance to the Pope by the Portuguese in 1599, and placed first under Jesuit bishops and then under Carmelite Vicars Apostolic They are at present ruled by four Vicars Apostolic of their own Syriac rite

(2) Converts of the Portuguese missionaries from 1500 and onwards, starting from Goa and working in the south of the peninsula and up the west coast and in Ceylon

(3) European immigrants at all times, including British troops

(4) Modern converts from Hinduism and Animism in recent mission centres

The Portuguese mission enterprise starting after 1500, continued for about 200 years, after which it began to decline To meet this decline fresh missionaries were sent out by the Congregation *de propaganda fide*, till by the middle of the 19th century the whole country was divided out among them except such portions as were occupied by the Goa clergy Hence arose a conflict of jurisdiction in many parts between the Portuguese clergy of the "padroado" or royal patronage, and the propaganda clergy This conflict was set at rest by the Concordat of 1886 At the same time the whole country was placed under a regular hierarchy, which after subsequent adjustments now stands as follows.—

Of the **Portuguese Jurisdiction** —

The archbishopric of Goa (having some extension into British territory) with suffra-

Note —Recent changes modifying the above system are (1) The creation of a new archbishopric at Simla in 1910 to which Lahore and Kashmere are now attached as suffragan, (2) The addition of a fourth Vicariate Apostolic of the Syriac rite, (3) The elevation of Rajputana to a bishopric (of Ajmer), suffragan to Agra

gan bishoprics at Cochin, Mylapore and Damaun (all three covering British territory)

(b) the **Propaganda Jurisdiction** —

The archbishopric of Agra with suffragan bishoprics of Allahabad and Rajputana and the Prefecture Apostolic of Bettiah

The archbishopric of Bombay, with suffragan bishoprics of Poona, Mangalore and Trichinopoly

The archbishopric of Calcutta, with suffragan bishoprics of Dacca and Krishnagar, and the Prefecture Apostolic of Assam

The archbishopric of Madras, with suffragan bishoprics of Hyderabad, Vizagapatam and Nagpur.

The archbishopric of Pondicherry (French) with suffragan bishoprics of Mysore, Coimbatore and Kumbakonam

The archbishopric of Simla with suffragan bishopric of Lahore and the Prefecture Apostolic of Kashmere

The archbishopric of Colombo (Ceylon) with suffragan bishoprics at Kandy, Galle, Jaffna and Trincomalee

The archbishopric of Verapoly, with suffragan bishopric of Quilon

Four Vicariates Apostolic of the Syriac rite, for the Thomas Christians of Malabar

Three Vicariates Apostolic of Burma

The European clergy engaged in India almost all belong to religious orders, congregations or mission seminaries, and with a few exceptions are either French, Belgian, Dutch, German, Spanish or Italian by nationality They number about 1,000 besides which there is a body of secular clergy mostly native to the country, numbering about 2,000 and probably about 2,000 nuns The first work of the clergy is parochial ministration to existing Christians, including railway people and British troops Second comes education, which is not confined to their own people; their schools being frequented by large numbers of Hindus, Mahomedans, Parsis, etc Among the most important institutions are St. Xavier's College Calcutta, St Peter's College, Agra, St Xavier's College, Bombay, St Joseph's College, Trichinopoly, St Aloysius College, Mangalore, teaching university courses, besides a large number of high schools and elementary schools The education of girls is supplied for by numerous convent schools worked by religious congregations of nuns to say nothing of orphanages and other charitable institutions The total number under education amounted in 1901 to 143,051 boys and 73,164 girls, later figures being unavailable

As to missionary work proper, the country is covered with numerous mission centres, among which those in Chota Nagpur, Gujerat, Orissa, the Nizam's Dominions, the Ahmednagar district and the Telugu coasts may be mentioned (Full particulars on all points will be found in the Catholic Directory already quoted) The mission work is limited solely by shortage of men and money, which if forthcoming would give the means to an indefinite extension The resources of the clergy after the ordinary church collections and pay of a few military and railway chaplaincies are derived mainly from Europe, that is, from the collections of *the Society for the Propagation of the Faith* and of *the Holy Childhood*, helped out by private or other donations secured from home by the different local missionaries In mission work the fathers count as enrolled only those who are baptised and persevering as Christians, and no baptism, except for infants or at point of death, is administered except after careful instruction and probation This, while keeping down the record, has the advantage of guaranteeing solid results

THE SCOTTISH CHURCHES.

THE ESTABLISHED CHURCH OF SCOTLAND— The Chaplaincy work of the Church of Scotland dates from 1814, when the Rev Dr Bryce landed in Calcutta, and organised a congregation of his Scottish fellow countrymen Since 1903 there have been eighteen chaplains on the staff, of whom nine belong to the Bengal Presidency, five to Bombay, and four to Madras These minister both to the Scottish troops and to the civil population of the towns where they are stationed, but when there is a Scottish regiment the chaplain is attached to the regiment, instead of being posted to the station where the regiment happens to be placed There are churches in the chief towns of the Presidencies, and Churches have also been built, or are being built, in all considerable military stations, *e.g.*, Chakrata, Lucknow, Peshawar, Ranikhet, Rawalpindi, Sialkot and Umballa. In addition to the regular establishment there are a number of acting Chaplains sent out by the Colonial Committee of the Church of Scotland and these are serving in such stations as Rawalpindi, Cawnpore, Meerut, Mhow, and Quetta In other places such as Sialkot, Murree, Dalhousie, Darjeeling and Lahore regular services are provided by Scottish Missionaries Simla has a minister of its own sent out from Scotland

The Mission work of the Church of Scotland dates from 1829, when Alexander Duff, one of the greatest of modern missionaries, was sent to Calcutta He was the first to open schools where English was made the medium for instruction, and where religious teaching was given daily Similar educational missions were soon afterwards started in Bombay and Madras Educational work is still an important branch of the mission work of the Church, but the Bombay College was closed in 1891, and in 1907 the College in Calcutta was united with the College of the United Free Church of Scotland, to form the "Calcutta Christian College" In the Punjab Evangelistic work is being carried on from eight centres under seventeen missionaries The baptised Christian community now numbers over 10,000 Work commenced in Darjeeling in 1870 is now carried on throughout the whole Eastern Himalayan district, and there is a Christian community there of between five and six thousand In the five mission districts of

Calcutta, the Eastern Himalayas, Madras, Poona, and the Punjab there were at the end of 1911 over 17,500 baptised Indian Christians In connection with these missions the Women's Association of Foreign Missions does invaluable service in school, medical and zenana work, having in India 47 European missionaries, 143 teachers, over 50 schools, three hospitals and six dispensaries.

The Established Church of Scotland has also done much to provide education for European children in India. Together with the United Free Church St Andrew's Church provides the governing body of the Bombay Scottish High Schools, which have always held a high place among such institutions, and exercises pastoral supervision over the Bombay Scottish Orphanage In Bangalore there is the St Andrew's High School, and both in Bangalore and in Madras the local congregation supports a school for poor children The now well-known St Andrew's Colonial Homes at Kalimpong, Bengal, though not directly part of the work of the Church of Scotland, were initiated by and are being locally managed by Missionaries of that Church The homes exist for the benefit of the de nicled European Community, and are doing magnificent work There are now fifteen cottages, and 437 children in residence

THE UNITED FREE CHURCH OF SCOTLAND — This branch of the Scottish Church has only two purely European congregations in India, one in Calcutta, Wellesley Square, and one in Bombay, Waudby Road As noted above members of these congregations co-operate with the Established Church of Scotland in providing education for European children In Calcutta a second congregation is maintained at Howrah in the district of the mills, and every effort is made to minister to the Scottish engineers and other workers in the mills.

The Mission work of the Church is extended and varied It is carried on in six centres— in Bengal, in Santalia, with five stations, in Western India, including Bombay, Bombay district, Poona, and Jalna and Bethel in the Nizam's Dominions, in Madras, with four stations, in the Central Provinces, including Nagpur, Nagpur District, Bhandara, Wardha and Amraoti, and in Rajputana where since 1860 missions have been established in eleven districts

There are at work in these centres 212 Scotch missionaries, together with a native staff of 340 Of organised Indian congregations there are 39 comprising 4,521 communicant members, and representing a Christian community of 12,545 Of schools there are 324 with 756 teachers A large part of this work is organised and supported by the women of the Church who have sent out as many as 84 of these missionaries In connection with the medical work of the mission there are 19 hospitals where in the year 448,931 out-patients and 4,540 in-patients are treated, all of whom are brought under Christian instruction There are four great missionary Colleges There is the Madras Christian College, with 800 students, which reached its great success under the wise leadership of the Rev Dr William Miller and which is now contributed to by five other Missionary Societies as well as that of the United Free Church Representatives of these Missions, which include the C M S and the Wesleyan Missionary Society, sit upon the College Board There is the Scottish Christian College in Calcutta, with over 900 students, the Hislop College at Nagpur with 327 students, and the Wilson College in Bombay with 791 students

BAPTIST SOCIETIES.

THE ENGLISH BAPTIST MISSIONARY SOCIETY —formed in 1792, largely through the efforts of Dr. Wm Carey, operates mainly in Bengal, Bihar, the United Provinces and the Panjab, with a staff of 79 missionaries and about 800 Indian workers Connected with the Society are 167 Indian Churches, 222 Day Schools, 13 Boarding Schools, and 3 Theological Training Colleges. The Church membership at the close of 1912 stood at 11,009, and the Christian Community at 31,473 In the methods of the Society, the chief place is given to Bazaar and Village preaching Increase in membership during the past ten years, about 30 per cent and in the Community 50 per cent for the same period Amongst the non-caste people great progress has been made in recent years, and Churches formed from amongst these peoples are self-supporting

Special work amongst students is carried on in Calcutta, Dacca, Bankipore, Cuttack and Delhi, where Hostels have been erected for the prosecution of this form of work

EDUCATIONAL WORK —Ranges from Primary School to Colleges Serampore College, the only College in India able to bestow a theological degree granted under Royal Charter by His Danish Majesty in 1827, and confirmed by the British Government in the Treaty of purchase of the Settlement of Serampore in 1845, and placed in 1856 by the College Council at the disposal of the Baptist Missionary Society to become a part of its Missionary Educational operations, Arts and Theological It was affiliated in 1857 to the newly-formed Calcutta University, reorganised in 1910 on the lines of its original Foundation with the appointment of a qualified Theological Staff on an Interdenominational basis for the granting of Theological Degrees to qualified students of all Churches

As the only College in India granting a Theological Degree a large number of students are now resident in the splendid College Buildings In Arts, the College prepares for the Calcutta Arts Examinations *Principal* : Rev G Howells, M A, B D, B LITT, PH D

A Vernacular Theological Institute, and High School likewise attaches to Serampore, as also at Delhi and Cuttack, for the training of native preachers.

There are 9 or 10 purely English Baptist Churches connected with the Society, but English Services are carried on in many of the

stations where an European population obtains Medical Work connected with the Society reported 2 Hospitals, 7 Dispensaries, 401 in-patients, and 73,645 out-patients for the year 1912. Two large Printing Presses for both English and Vernacular work are conducted at Calcutta and Dacca

WOMEN'S MISSIONARY AUXILIARY, B M S,—Extends over the same area practically as the above, there are 75 missionaries, 336 Indian Workers, 102 Girls' Day Schools and 5 Girls' Boarding Schools in connection with this work, 751 villages are visited annually by Teachers and Missionaries engaged in Gospel work A large place is given to medical work, 5 Hospitals with qualified staffs and 12 Dispensaries providing for 1,004 in patients, and 93,874 out-patients for the past year The Indian General Secretary of the Women's Missionary Auxiliary of the Baptist Missionary Society is Miss Angus, 44 Lower Circular road, Calcutta

THE CANADIAN BAPTIST MISSION —Was commenced in 1876, and is located in the Eastern Telugu District to the north of Madras, in the Kistna, Godaveri, Vizagapatan, and Ganjam Districts There are 20 stations and 162 outstations with a staff of 88 missionaries, including 5 qualified physicians, and 567 Indian workers, with Gospel preaching in villages Organised Churches number 64, communicants 9,482, and adherents 13,809 for the past year Ten Churches are entirely self-supporting In the Educational department are 226 village Day schools, with 6,502 children, 8 Boarding schools, 2 High schools, a Normal Training school, a Theological Seminary providing in all for 619 pupils, and an Industrial school There are 5 Hospitals The Mission publishes a Telegu Newspaper Village Evangelisation is the great feature of the Mission, and stress is laid upon the work amongst women and children in particular During the last decade membership has increased by 71 per cent the Christian Community by 90 per cent and scholars by 376 per cent The Indian Secretary is the Rev A A Scott, Tuni, Godavari Dist

THE AMERICAN BAPTIST TELUGU MISSION —Was commenced in the year 1840, and covers large parts of Nellore, Guntur, Kistna, and Kurnool Districts, and parts of the Deccan Its main work is evangelism, but there is large Educational and Medical work in addition There is an English Church in Madras A large industrial Yerakala settlement is carried on at Kavali under the charge of one of the missionaries Organized Telugu Churches number 133, with 66,826 baptised communicants. There has been a net increase of 1 000 per annum for the past twenty years There are 126 Missionaries and 1 671 Indian Workers There is a large Theological Seminary at Ramapatnam for the training of Indian preachers and a Bible School at Nellore for the training of Bible Women In ordinary educational work 601 day schools, 26 Boarding Schools and 4 High Schools give training to 18,577 scholars In Medical work 5 Hospitals report 1,501 in-patients and 19,583 out-patients for the year.

Corresponding Secretary Rev William J. Longley, Bapatla, Guntur Taluk

AMERICAN BAPTIST FOREIGN MISSION SOCIETY, commenced in 1814, the largest Society at work in Assam and Burma, owes its rise to the celebrated Adoniram Judson. Until 1910 the Mission was known as the American Baptist Missionary Union There are 12 main stations in Assam, 26 in Burma and hundreds of out-stations All forms of missionary enterprise come within the scope of the Mission The missionary staff numbers 195 in all, with an Indian workers' staff of 4,954. Communicants number 147,676. Organised Churches number 1,316, of which 860 are self-supporting Educational work is conducted on a large scale, the total number of schools of all grades being 1,848 with over 58,000 pupils. The Christian College has 68 students There are 8 High Schools with 3,162 pupils

Medical works embraces 12 Hospitals and 29 Dispensaries During 1913 the number of out-patients treated was 60,075, and in-patients 1,784

The great work of the Mission continues to be evangelistic and the training of the native preachers and Bible-women, and extends to many races and languages, the most important of which, in Burma, has been the practical transformation of the Karens, whose language has been reduced to writing by the Mission. The work in Assam embraces 9 different languages, and large efforts are made amongst the employers on the tea plantations The Mission Press at Rangoon is said to be the largest and finest in Burma The American Baptist, Telugu Mission and the American Baptist, Bengal-Orissa mission are branches of the above

Assam Secretary, Rev Judson Luttle, M A, Gauhati, Assam

Burma Secretary, Rev A C Darrow, Moulmein, Burma

THE TASMANIAN BAPTIST MISSION —With 3 missionaries, is established at Sragunge, E Bengal

Secretary Rev E T Thompson, Mission House, Siragunge

THE AUSTRALASIAN BAPTIST MISSONARY SOCIETIES —Representing Australia, N Zealand, and Tasmania, are working in Bengal with a staff of 36 missionaries, and 103 Indian Workers There are 17 organised Churches, 1,074 Communicants, and a Christian community of 3,611 Educational work comprises 2 High schools, 5 Boarding schools, 2 Industrial and 62 Elementary schools, with 1,912 pupils in all. In Medical work, 1 Hospital, and 3 Dispensaries provide for 31,649 in and out-patients Secretaries Rev C H Harvey, Calcutta, Dr C S. Mead, B A, (Faridpur Mission) Orakandi, Faridpur District, Miss E L King, Rajbari, and the Rev. E T Thompson, (Tasmanian Mission) Siragunge

THE STRICT BAPTIST MISSION—Has 9 Missionaries, and 86 Indian Workers in Madras W and the Trichy District. Communicants number 100, organised Churches 4, Elementary schools 24, with 1,200 pupils.

Secretary Rev. E. A. Booth, Kilpauk, Madras, W

AMERICAN BAPTIST, BENGAL-ORISSA MISSION commenced in 1836. Area of operation, Midnapore and Balasore districts of Lower Bengal Mission staff 29, Indian workers 264. One English Church and 24 Vernacular Churches, Christian Community 5,000 Educational, One Theological High School, and 150 Elementary schools, pupils 4,880. Two Industrial schools for weaving and carpentering, &c The Vernacular Press of this mission printed the first literature in the Santali Language

Secretary Rev. Howard R Murphy, N D, Midnapore

PRESBYTERIAN SOCIETIES.

THE IRISH PRESBYTERIAN CHURCH MISSION —Operates in Gujerat and Kathiawar with a staff of 36 Missionaries of whom 4 are qualified doctors and an Indian staff of 560 including school teachers There are 25 Organised Churches, a communicant roll of 1,498, and a Christian community of 5,847 In Medical work there are 2 Hospitals, 5 Dispensaries, with 889 in-patients and 2,3,232 out-patients The Mission conducts 3 High schools, 3 Anglo-vernacular schools, and 123 vernacular schools affording tuition to 6,351 pupils, 5 Orphanages, a Divinity College at Ahmedabad, and a Mission Press at Surat The Mission has made a specialty of farm colonies, of which there are about a score in connection with it, most of them thriving

The Jungle Tribes Mission with 3 missionaries is a branch of the activities of the above, working in the Panch Mahals and Rewa Kantha districts, with farm colonies attached

Secretary Rev R R Johnson, B A, Mission House, Broach

THE UNITED PRESBYTERIAN CHURCH OF N. AMERICA —Sialkot Mission was established in 1856 operating in the extreme North of the Punjab, and is practically the only Mission working amongst the 9,374 cities and villages of that district Its missionaries number 105 Indian workers 674 There are 54 Organised Churches with 199 outstations, a membership of 31,631, and a Christian community of 58,034, Women's Societies number 32, a Theological Seminary and a College, 4 High schools, 8 Middle schools, 2 Industrial schools and 191 Primary schools, containing in all 11,617 pupils In Medical work, there are 4 Hospitals and 7 Dispensaries with 1,980 in-patients, and 53,293 out-patients for 1913

Secretary Rev E L Porter, Rawal Pindi

THE AMERICAN PRESBYTERIAN MISSION operates in 3 main sections, known as the Punjab, North India, and Western India Missions The American staff numbers 216 and Indian staff 924 There are 29 main stations and 178 out-stations Communicants number 7,319, Christian community 36,978 Educational work as follows 2 Christian Colleges, students 608, 1 Theological Institution, pupils 61, 7 Training Institutions, pupils, 120, 12 High schools, scholars, 2,040, 17 Boarding schools, scholars, 1,220, 3 Industrial schools, pupils, 29,220, Elementary schools, scholars, 4,356 Medical work 8 Hospitals, 14 Dispensaries, with staff of 30, in-patients 3,631, and out-patients 2,33,343 for last year The Hospital at Miraj, under the care of Dr W. J. Wanless and Dr C E Vail is well known throughout the whole of S W. India, and the Forman Christian College at Lahore is equally well known and valued in the Punjab. The Allahabad Christian College is growing rapidly and its mechanical and agricultural departments have become increasingly prominent Woodstock College for women at Landour, Mussoorie, Principal Miss A Mitchell, M D, is one of the largest and most valuable institutions of this description in Northern India Secretary of Council of A P Missions in India Rev H D Griswold, Ph D, Mussoorie

Punjab Mission, Rev E D, Lucas, Lahore.

North India Mission, Rev R C Smith Fatehpur Haswa

West India Mission, Rev Henry G Howard, Kodoli, S M C

The above particulars are those published for 1913

THE NEW ZEALAND PRESBYTERIAN MISSION —Commenced as recently as 1910 at Jagadhri, Punjab

Secretary Miss A E Henderson, Jagadhri

THE CANADIAN PRESBYTERIAN MISSION —Commenced in 1877, has 13 main Stations in the Indore, Gwalior, Rutlam, Dhar, Ahrajpur, Jaora, Sitamau, Banswara, &c Native States— The Mission staff numbers 66, Indian workers over 200, Organized Churches 13, Communicants (September 30, 1912-1913) 1,107, Baptised non-communicants 1,617, Unbaptised infants and catechumen 302 Educational work comprises Elementary and Middle Schools, High Schools for boys and girls, College, Theological Seminary and Classes Industrial teaching and work is done in three Girls' Orphanages, in the Women's Industrial Home, and at Rasalpura which last includes the Mission Press and the School for the blind The Medical work is large, chiefly among women

Secretary Rev J Fraser Campbell, D D, Rutlam, C I

THE GERMAN EVANGELICAL SYNOD of NORTH AMERICA — Commenced work in the C P in 1865 The mission staff numbers 23, Indian Christian workers 247, Communicants 1,847 Total Christian community 3,967, Organised Churches 9, one Theological school with 10 students, one High School with 72 students and 64 other schools with 3,792 students. The mission has 2 Hospitals and 6 Dispensaries which in 1914 treated 11,460 patients,

Secretary Rev F A Goetsch, Bisrampur.

THE WELSH CALVINISTIC METHODIST MISSION (OR WELSH PRESBYTERIAN MISSION) established in 1840 with a staff of 37 Missionaries, 511 Native workers, occupies stations in Assam in the Khassia and Jaintia Hills, the Lushai Hills and at Sylhet and Cachar The Khassia language has been reduced to writing, the Bible translated, and many books pub-

lished in that language by the Mission Communicants number 9,316, the total Christian community 30,000, organised Churches 391, self-supporting Churches 30 Elementary schools number 407, scholars 10,163, Boarding schools 3, scholars 820, in addition to 1 Industrial school, 4 Training institutions and 1 Theological Seminary One Hospital and 3 Dispensaries provided for 6,611 patients for the past year.

Secretary: Rev J. Ceredig Evans, Shillong

THE ARCOT MISSION of the Reformed Church in America (Dutch), organised in 1853 occupies the Arcot and Chittoor districts in S India with a staff of 29 Missionaries, and 104 Indian ministers and workers. Churches number 19, Communicants 3,936, total Christian community 11,298, Boarding schools 11, scholars 528, Theological school 1, students 37, High schools 4, scholars 1,219; Training schools 2, students 44, Industrial schools 2, pupils 95, Elementary schools 181, scholars 6,945 Three Hospitals, 7 Dispensaries with staff of 38, provided for 2,217 in-patients and 82,052 out-patients for the past year.

Secretary Rev H J. Scudder, M A, & B D, Punganur, S India

CONGREGATIONAL SOCIETIES.

THE AMERICAN BOARD OF COMMISSIONERS FOR FOREIGN MISSIONS —Has two large Missions, the American Marathi Mission, and the Madura Mission. The Marathi Mission includes a large part of the Bombay Presidency, with centres at Bombay, Ahmednagar, Satara and Sholapur, was commenced in 1813, the first American Mission in India Its activities are large and varied The staff at the beginning of 1913 consisted of 47 missionaries and 529 Indian workers operating in 144 out-stations exclusive of Bombay City. Organised Churches number 60 with 7,699 communicants, and 6,273 adherents There is a Leper Church at Sholapur The Educational work embraces 20 Boarding schools with 2,151 pupils, 152 Ordinary schools with 4,839 boys and girls under instruction, three-fifths of which are non-Christians A large Theological Seminary at Ahmednagar trains for the Indian Ministry Zenana work and Industrial work are vigorously carried on, the latter embracing carpentry, weaving and lace work Much work is done in so-called famine districts A School for the Blind is conducted on both Educational and Industrial lines Upwards of 43,786 patients were treated in the Hospitals and Dispensaries of the Mission last year The Mission has for 70 years published the "Dnyanodaya," the only combined English and Marathi Christian weekly newspaper Special evangelistic work is carried on amongst the tribes known as the Bhils and Mangs This Mission was the first to translate the Christian Scriptures into the Marathi tongue The Arcot Mission commenced under the American Board in 1851 was transferred to the Reformed Church of America

THE MADURA MISSION—In the S Madras District, commenced in 1834, has a Staff of 49 missionaries and 810 Indian workers, operates in the Madura and Ramnad district and has a communicant roll of 7,954 and 23,937 adherents and 35 Organised Churches, many of which are entirely self-supporting and self-governing Schools number 262 with 12,819 pupils There is a Christian College at Madura, as also Hospitals for men and women, at Pasumalai are a Theological Institution, Industrial school and Teachers' Training school The Secretary of the Marathi Mission is the Rev W Hazen, Bombay; and of the Madura Mission, the Rev J. S. Chandler, Madura.

THE SCANDINAVIAN ALLIANCE MISSION OF NORTH AMERICA —Embraces two Branches, one in Bengal and the other in Khandesh. The total mission staff is represented by 11 missionaries and 27 Indian workers There are 30 Communicants and a Christian community of 50 A Boarding School, 1 Industrial School and 11 Elementary Schools provide for 150 pupils

Secretaries Rev O A Dahlgren, Navapur, Khandesh, and Miss H Abrahamson, Domar, Bengal The Branch in Khandesh co-operates with the Swedish Alliance Mission, and both missions having a united yearly conference

THE SWEDISH ALLIANCE MISSION —Working among the Bhils in West Khandesh has 11 missionaries and 26 Indian workers There are 7 churches with a total membership of 556 of whom 245 are communicants There are 5 Elementary schools, one Boarding School, and one Industrial School The pupils are 130

Secretary Rev G A Bjork, Nandurbar, West Khandesh

THE SCANDINAVIAN ALLIANCE MISSION, HIMALAYAS —(Finnish Branch) The total mission staff is represented by nine missionaries and six native workers There are about 80 Communicants five churches and a Christian community of about 100 One Orphanage with 23 orphans, one Kindergarten school, one Upper Primary school and three Day Schools with about 70 pupils *Acting Secretary* Miss Klara Hertz, Lachen, *via* Gangtok, Sikkim

THE LONDON MISSIONARY SOCIETY —Commenced work in India in 1798 and occupies 10 centres in N India, 12 in S India and 7 in Travancore The Mission engages in every form of Missionary activity. The European staff numbers 223, Indian workers 2,004, Organised Churches, 490, Communicants 13,748 and Christian community 116,575 There are 4 Christian Colleges, students 159, 3 Theological Institutions, students 41; 4 Training Institutions, pupils 114, 22 High schools, pupils 4,849, 25 Boarding schools, scholars, 1167, 9 Industrial schools, pupils, 116 and 862 Elementary schools with 36 775 scholars In Medical work Hospitals number 15, Dispensaries 15, qualified doctors 10, and 3,997 in-patients and 130,220 out-patients for the year

The main centres of the Mission in N India are at Calcutta, Benares and Almora The Bhowanipur Institution at Calcutta is now a first grade College, Evangelistic work is carried on amongst the thousands of pilgrims visiting Benares, and Almora is noted for its Hospital

and Leper Asylum Special efforts are made amongst the Nama Sudras and the aboriginal tribes known as the Majhwars, Cheros and Pankas. The S. India district is divided into the Kanarese, Telugu and Tamil areas, with 12 stations and 472 outstations At Nagercoil, (Travancore) is the Scott Memorial College with 985 students, a Church and congregation said to be the largest in India, and a large Printing Press, the centre of the S Travancore Tract Society

V *India Secretary*, Rev. W R LeQuesne, Calcutta .

S India Secretary Rev E P Rice, B A , Bangalore

ALL-INDIA MISSIONS.

THE CHRISTIAN AND MISSIONARY ALLIANCE —Dates from the year 1893 under the name of the India Missionary Alliance, but a number of its missionaries were at work in Berar Province much earlier The work is confined to the provinces of Berar, Khandesh and Gujerat There is a staff of 76 missionaries and 85 Indian workers The number of Mission stations is 21, with additional outstations There are 4 orphanages, 2 for boys and 2 for girls 3 training schools for Indian workers and 1 English congregation at Bhusawal *Secretary* Rev E R Carnei, Khamgaon, Berar

THE CHURCH OF THE BRETHREN (AMERICAN) —Opened work in 1895, and operates in the Southern part of Gujerat, Khandesh, and Thana Districts Its staff numbers 29 including missionaries' wives, and 105 Indian workers The baptised (immersed) membership stands at 1,125 , education is carried on in 2 Girls' Boarding schools, 4 Boarding schools for boys, and 81 Village Day schools Industrial work is connected with four of the schools, and a Farm Colony is established at Umballa

THE POONA AND INDIAN VILLAGE MISSION — Founded in 1893 operates in the Poona, Satara and Sholapur Districts, with 23 European and 32 Indian workers The number of Indian Christians is 40 The main work is evangelism of the villages, with Women's Zenana work, and Village schools There are 4 Village Dispensaries, including a large medical work in the great pilgrimage city of Pandharpur And a hospital at the head-quarters of the Mission, Nasrapur, in the Bhor State *Secretary* Mr J W Stothard, Nasrapur, Poona District

THE AMERICAN CHURCHES OF GOD MISSION —Has two missionaries at Bogra, Bengal

THE INDIAN CHRISTIAN MISSION—Founded in 1895, has 31 Organised Churches, 11 Missionaries, 37 Indian workers, 511 Communicants and 30 Primary schools in the Ellore district, 8 India Stations also in Berenag, Kumaon, N India, and Nuwara Eliya, Ceylon *Secretary* A S Paynter, Nuwara Eliya, Ceylon

There are 3 PENTECOSTAL MISSIONS at work. The Pentecostal Mission in W. Khandesh and Thana Districts , the Pentecostal Church of the Nazarine Mission at Buldana, Berar, and the Pentecost Bands of the World Mission with a Boys' Orphanage at Dondi Lohara, C P and a Girls' Orphanage at Raj Nandgaon, headquarters

THE INDUSTRIAL EVANGELISTIC MISSION— Is engaged mainly with orphan children and owes its rise to the famines of 1897 and 1900. It numbers about 120 Christians in all stations, the principal of which is Dehra Dun *Director* Pastor J C Lawson, Dehra Dun

THE SANAPPUR AND LOHAGHAT DISTRICT BIBLE AND MEDICAL MISSION—Was established at Lohaghat, 48 miles from Almora, in 1910 Amongst the faith missions are the Vanguard Mission at Sanjan, Thana District, with 6 Missionaries , the Hephzibah Faith Mission, with 6 Missionaries, headquarters at Raghunathpur, Bengal , and the Church of God Mission with 7 Missionaries at Lahore The Burning Bush Mission has a staff of 8 Missionaries at Allahabad The Tehri Border Village Mission is the only Christian enterprise in the Himalayan Native State of that name, its agents are stationed at Landour, and have translated portions of the New Testament into the Tehri-Garhwali language

THE TIBETAN MISSION—Has 5 Missionaries with headquarters at Darjeeling, and Tibet as its objective *Secretary* Miss J Ferguson, Darjeeling

The Indian Missionary Society of Tinnevelly (DORNAKAL MISSION)—Opened in 1904, operates in the Warangal District of the Nizam's Dominions It is the missionary effort of the Tamil Christians of Tinnevelly. There are now 1,550 Christians in 46 villages *Secretary* Mr J Anbudaiyan, B A , L T , Palamcottah

THE MISSION TO LEPERS—Founded in 1874, is an interdenominational and international Society for the establishment and maintenance of Asylums for Lepers and Homes for their untainted children, working largely in India, China, and Japan Its work in India is carried on through co-operation with 29 Missionary Societies. The Mission now has 40 Asylums of its own with over 3,500 inmates, and is aiding or has some connection with work for lepers at 20 other places in India In the Mission's own and aided Asylums there are about 3,100 Christians The total number of lepers reached by the Mission in India is about 5,000

An important feature of the work of the Mission is the segregation of the untainted or healthy children of lepers from their diseased parents 500 children are thus being segregated and saved from becoming lepers.

The Mission very largely relies on voluntary contributions for its support *Secretary for India* Mr W H P Anderson, 6, Napier Road, Poona Head Office, 28 North Bridge, Edinburgh , Mr Wellesley C Bailey, General Superintendent. Organising Secretary, Mr John Jackson, F R G.S , 33, Henrietta Street, Covent Garden, London.

THE REGIONS BEYOND MISSIONARY UNION —An interdenominational Society, commenced work at Motihari, Behar, in 1900, and now occupies 4 stations and 7 outstations in the Champaran and Saran Districts, with a staff

of 13 Europeans, and 34 Indian workers There are 21 Elementary schools, with 517 pupils, a Girls' and a Boys' Orphanage and Boarding school, communicants number 50

THE NATIONAL MISSIONARY SOCIETY OF INDIA—Established 1905, it has a staff of 21 Indian Missionaries, operates in Kalwai, Okara (Punjab) and Omalur (Madras) Communicants number 125, Christian community 1,500, Elementary schools 10, Dispensary patients, 1,700 *Secretary* K T Paul, Esq, BA, LT, Madras, S W

THE SEVENTH DAY ADVENTISTS—Established 1895 have 44 Missionaries in various parts of India Communicants, 221, Christian community, 1,034, Churches, 2, Elementary schools, 1, Hospitals, 2, Dispensaries 2, patients 1,150 *Secretary* Rev J L Shaw Kirkville House, Mussoorie

THE AMERICAN MENNONITE MISSION—Established 1899, works in the C Provinces Mission staff numbers 20, Indian workers 80, Church members 530, 1 Industrial Training Institution, 1 High School 1 Bible School, 2 Orphanages 1 Widows Home, 1 Leper Asylum, Elementary Schools 8, Dispensaries 3 Hospital 1. *Superintendent* Rev M C Lapp, P O Dhamtari, C P

THE MENNONITE MISSION GENERAL CONFERENCE—Started in 1901 in the C Provinces Workers number 11, Leper, Medical, Orphan and village work carried on From the Leper Asylum 118 have been baptised. *Secretary* Rev P W Penner, Jangir C P

THE KURKU AND CENTRAL INDIA HILL MISSION—Established 1890 in the C P and Berar, has a mission staff of 22, Indian workers 17, Churches 7, Communicants 105, Christian community 550, 2 Boarding 1 Industrial and 4 Elementary schools, with 114 pupils *Secretary* Mr Carl Wydner, Ellichpur, Berar

THE CEYLON AND INDIA GENERAL MISSION—Established 1893 occupies stations in India in the Combatore and Anantapur Districts Mission staff, 23, Indian workers, 50, Churches 10, with Communicants 256, and Christian community 678, Orphanages 3 Elementary schools 14, pupils 325

Secretary Rev D Logan Coonoor Nilgiris

THE BOYS' CHRISTIAN HOME MISSION—Owes its existence to a period of famine, was commenced in 1899 Mission staff 10, Indian workers 20 There are two Elementary schools with 80 children, Orphans' and Widows' Homes, and 210 in the Homes at Dhond Balmrach, and Oral, where Industrial Training is given *Secretary*, Mr Albert Norton, Dhond Poona District

Ladies' Societies.

ZENANA BIBLE AND MEDICAL MISSION—This is an interdenominational society with headquarters in London working among women and girls in seven stations in the Bombay Presidency, one in Madras, fourteen in United Provinces, and five in the Punjab There are 89 European Missionary Ladies on the staff and 22 assistant missionaries 215 Indian workers, teachers and nurses, and 77 Bible women During 1913 there were 2,216 inpatients in the five hospitals supported by the Society (Nasik Benares, Jaunpur, Lucknow and Patna) and 25,932 out-patients. In their 56 schools were 3,369 pupils while 174 women were under training as teachers The evangelistic side of the work is largely done by house to house visitation and teaching the women in Zenanas 3,242 women in 2,632 houses were so taught

The Ludhiana Zenana and Medical Mission has its Hospital, 2 Lady Doctors, and Dispensary at Ludhiana and branch Dispensaries with 11 nurses, teachers and Biblewomen at Sill and Phillour, *Secretary*, Miss Grenfield, Ludhiana

The Missionary Settlement for University Women was founded in Bombay in 1895 to reach the highest class of Indian ladies, its activities now include a hostel for women students, in addition to educational social, and evangelistic work *Secretary*, Miss Dobson, Gingaum Bombay

The Mukti Mission, the well-known work of Pandita Ramabai enables upwards of 350 widows, deserted wives and orphans to earn a comfortable living by means of industrial work organised by the Pandita, supported by a good staff of Indian helpers A large staff of European Missionary Ladies do evangelistic work in the surrounding Kedgaon, Poona District

Disciple Societies

The India Mission of the Disciples of Christ (Foreign Christian Missionary Society of Cincinnati, Ohio, and Christian Women's Board of Missions of Indiana combined) commenced work in 1882, its area Central and United Provinces, number of Indian Churches 13 and immersed communicants 1,388 Its staff, including Missionaries' wives, 67, Asst missionaries 3, and Indian Worker's staff 287 There are 7 Hospitals, 5 Dispensaries, with 47,590 inpatients and outpatients for the past year Three Orphanages and an Industrial Home show 474 inmates In connection with the Industrial work a farm of 400 acres has been taken at Damoh There are 6 Middle schools 37 Primary schools with 3,187 scholars An active Zenana work is carried on A small work known as the Australian Mission is under the auspices of the 'Disciples" at Baramati, Poona, and also at Daltonganj, W Bengal *Secretary*, Rev W B Alexander, BA, Damoh, C P

Undenominational Missions

The Central Asian Mission, with a Church Dispensary and School is found on the N-W Frontier, conducted on the lines of the China Inland mission, and has Kafiristan as its objective

The Friends' Foreign Missionary Association with Headquarters at Hoshangabad, Central Provinces, commenced in 1874 Work has recently been opened up in the Gwalior and Bhopal States There are 5 Churches, 27 Missionaries, 195 members, Orphanages for Boys and Girls, 1 Anglo-Vernacular school, 15 Day schools, one High School and one Zenana

Hospital with a general dispensary connected with the Mission, in addition to a self-supporting weaving community at Itarsi, and Industrial Works and a Farm Colony at Hosangabad *Secretary*, Mr Henry F Robson, Sohagpur, C P

The American Friends' Mission with 5 Missionaries is working at Nowgong *Secretary*, Miss D Fistler, Nowgong C I

The Old Church Hebrew Mission was established in 1858, in Calcutta, and is said to be the only Hebrew Christian Agency in India *Secretary*, J W Pringle Esq, Calcutta

THE OPEN BRETHREN—Occupy 46 stations in the U Provinces, Bengal, S Maratta, Godavari Delta Kanarese, Tinnevelly, Malabar Coast, Coimbatore and Nilgiri Districts They hold an annual Conference at Bangalore

Lutheran Societies

The American Evangelican Lutheran Mission General Council, founded in 1844 for the Godavari and Kistna Districts, has its Headquarters at Rajamundry Its staff consists of 28, including Missionaries wives and Lady Doctors with 465 Indian Workers The membership is 22,596 There are Boys' and Girls' Central Schools, Mission Press, and Book Depot at Rajamundry, and a High School at Peddapuri *Chairman*, The Rev Rudolf Arps B D, Dowlaiswaram

The 'General Synod' Section of the above, has its headquarters in Guntur founded in 1842 Its Christian community numbers 46,594, with 16 242 communicants 27 missionaries inclusive of wives, and 815 Indian workers, shewing an increase of 61 per cent during the past ten years The following institutions are connected with the Mission a second grade College High school for Girls Hospital for women and children, Normal tramng School, and Industrial School *Secretary*, the Rev Victor McCauley, Guntur

The Evangelical National Missionary Society of Stockholm founded in 1856, occupies the districts of Betul, Chindwara, and Saugor in the C Provinces There are 1,510 Church members and 11 Indian Churches The staff numbers 42, including women workers, with an Indian staff of 147 Schools number 19 with 1,433 children, together with 'Anglo-Vernacular, and 1 training school, and a Hospital *Secretary*, Rev A G Danielsson, D D Chhindwara, C P

The Hermannsburg Evangelical Lutheran Mission began its work in India in 1866 and operates in the South Nellore, the East Chittoor and South East Cuddapa Districts There are 22 Indian Churches, 13 European Missionaries and 178 Indian workers, Church members number 317 Women's work is done in 3 stations, with a large Industrial school for 70 girls, in a fourth, in addition to Zenana and Educational work There are 91 Lower grade Elementary schools, 1 High school, 1 Lower Secondary, and 2 Higher grade schools, and a Theological Seminary and Training school A Leper Asylum is stationed at Kodur with a Dispensary, and a large Industrial school at Nayudupeta *Secretary*, Rev J Rohnew, Gudur, Nellore Dist, Madras

The Schleswig Holstein Evangelical Lutheran Mission, commenced in 1881, operates in the Vizagapatam District Fruitful work is carried on amongst the Odiya Hill Tribes, the Konds, and the Dombo Caste There are 12 stations, a total Missionary Staff of 44, with 441 Indian workers The growth in the Christian population has been from 1,530 in 1901 to 16,350 in 1914 Communicants number 4,140, and Catechumen 7 8,62 Education work comprises 1 Theological Seminary, 1 Secondary, 1 Industrial and 100 Elementary schools, providing for 2,716 pupils There are 9 Dispensaries with 50,000 patients for the year English Services are held in the Mission Church at Jeypore *Secretary* Rev J Th Timmcke, Koraput, Vizagapatam

LEIPZIG EVANGELICAL LUTHERAN MISSION GERMAN DIOCESE The mission commenced in 1834, and is confined to the Tamil speaking areas, chiefly in the Madras Presidency, with an Indian Minister and Church, in addition, in Rangoon The total European staff numbers 33, ordained Indian Ministers 24 and 109 Indian workers, Organised Churches, 33 places of worship, 221, Baptised membership 19 558 There are 133 boys' schools (including 1 Tramng an industrial and 4 Secondary schools) and 23 Girls' schools, including an industrial school The teaching staff numbers 558 and pupils 10,394 Zenana work is actively prosecuted A Printing Press and Publishing House are established at Tranquebar *Secretary* Rev H Goebler, Kilpauk Madras

THE BASLE MISSION was commenced in 1834 and occupies 26 main stations and 128 outstations in the Coorg S Mahratta, Nilgiris, and N and S Canara districts of S W India The total European Staff numbers 159 with 1,110 Indian workers There are 66 organised Churches, with a membership of 19,762 Educational work embraces 204 schools (including 2 Theological, 9 Boarding and 4 High schools) with 16 970 Elementary and 3,150 Secondary school pupils and 831 scholars in Boarding Institutions and Orphanages There are good Hospitals at Bulgiri and Calicut under European doctors with 3 branch hospitals and 4 Dispensaries connected, 66,804 patients were treated last year There is a Leper Asylum at Chevayur

The Industrial work of the Mission is second to none in India and comprises 17 establishments, embracing one mechanical establishment of a first rate order at Mangalore, 2 Mercantile branches, 7 Weaving and 7 Tile work establishments in the Canara and Malabar districts, employes number 3,633 A large Printing Press at Mangalore issues publications in the Kanarese, Malayalam, Tulu and English languages

Secretary, Rev A Schossei, Manglore

THE CHURCH OF SWEDEN MISSION—Was founded in 1874, and operates in the Madura Tanjore, Trichinopoly and Ramnad Districts Since 1901 the Mission works independently, though in close relationship with the Leipzig Missionary Society The staff numbers 15 baptised membership 2,625, Schools 57 with 3,177 pupils *Secretary*, Rev. D Bexell Madura.

THE MISSOURI EVANGELICAL LUTHERAN MISSION —Is located in Arcot and Travancore with a staff of 15 Missionaries One Training school, 58 pupils, and 41 Elementary schools with 1,717 pupils are connected with the Mission.

Secretary, Rev G Hucheuer, Nagercoil, Travancore

THE DANISH EVANGELICAL LUTHERAN MISSION—Established 1863 in Madras and S Arcot Districts has a total staff of 28 Missionaries and 80 Indian workers, Communicants 648, Christian community, 1,550, 2 High schools, pupils 410, 3 Boarding schools, scholars, 146, 4 Industrial schools, pupils, 79, 35 Elementary schools, 1,500 scholars, Dispensary patients, 15,138

Secretary, Rev Joh Bittmann, 38 Broadway, Madras

THE GERMAN EVANGELICAL LUTHERAN (GOSSNER'S MISSIONS)—Founded 1836, occupies stations in Bengal, Bihar and Assam, the Mission staff numbers 92, Indian workers 1,017, Communicants 34,208 and Christian community over 100,000, organised Churches, 437 Theological and Teacher's Seminaries 66 pupils Boarding Schools 39 Elementary Schools 277 Pupils in schools 9,355 Leper asylum 728 inmates Lace schools in Ranchi and Purulia

Secretary, Rev Paul Wagner, Purulia, B N Rly Manbhum, Bihar Head-quarters Friedemon, Berlin, Germany

THE SANTAL MISSION OF THE NORTHERN CHURCHES —(formerly known as the India Home Missions to the Santals)—Founded in 1867, works in the Santal Parganas, Goalpara (Assam), Malda, and Dinapur Work is principally among the 3 000 Santals The mission staff numbers 20, Indian workers 264, communicants 3 000, Christian community 18,000, organised churches 30, boarding schools 2, pupils 340, elementary schools 31, pupils 535

Secretary, Rev P O. Bodding, Dumka, Santal Parganas

Methodist Societies.

The Methodist Episcopal Church began its Indian Mission in 1857, and with the exception of Assam, and the N W Frontier Provinces is now established in all the political Divisions of India Its number of baptised Christians stands at 251,275, under the supervision of 240 ordained and 900 unordained Ministers Schools of all grades number 1,569 with 39,087 students, Sunday School scholars stand at 126,000, and young peoples' societies at 604, generally known as Epworth Leagues Thirty Anglo-Indian Congregations are found in the larger Cities, with one College, 6 High schools, and numerous Middle schools for this class For Anglo-Vernacular Education the mission has 3 Colleges, 12 High schools and 62 schools of Lower grade The net increase from the non-Christian races has been at the rate of 15,000 per annum, for the last decade The Isabella Thoburn Training College at Lucknow is a large Institution There are large printing presses at Calcutta, Madras and Lucknow.

In Burma there are 9 schools, with 1,484 pupils, a large Boarding and Day school for European Girls at Rangoon, a hill station Boarding school for Girls at Thandaung, and an Anglo-Indian Church at Rangoon

While financially supported by the Board of Foreign Missions of the American Methodist Episcopal Church, ecclesiastically the Church in India is independent of foreign control, being under the supervision of its own bishops, *viz*, *Bishop* F W Warne, Lucknow *Bishop* J E Robinson, Bangalore, and *Bishop*, J. W. Robinson, Bombay

The American Wesleyan Church with 5 Missionaries, has in recent years taken over an independent Mission at Paidi and Daman, Gujerat District *Secretary*, Rev A E Ashton, Paidi

The Reformed Episcopal Church of American (Methodist) at Lahtpur and Lucknow U P has 2 Missionaries, 4 Outstations, 2 Orphanages, and a membership of nearly 100.

THE WESLEYAN METHODIST MISSIONARY SOCIETY commenced work in India in 1817 (Ceylon in 1814) The Mission in India is organised into 8 District Synods with 2 Provincial Synods There is a large English work connected with the Society, 20 ministers giving their whole time to Military work and English churches

The districts occupied include 64 main stations in Bengal, Madras, Mysore, Bombay, Punjab, Central Provinces, Hyderabad (Nizam's Dominions), Trichinopoli and Burma The European Staff numbers 169 with 2,292 Indian workers, Communicants 12,303, and total Christian community 44,084. Organised Churches, 93

Educational work comprises 3 Christian Colleges, students, 560, 9 Theological Institutions, pupils 80, 11 Training Institutions, pupils, 96, 13 High Schools, pupils, 5,094, 71 Boarding schools, scholars, 2,478; 10 Industrial schools, pupils, 602, 784 Elementary schools, with 30,270 scholars In Medical work there are 12 hospitals, 22 dispensaries, 18 qualified doctors, 2,984 in-patients and 75,703 out-patients for the year.

The above particulars are those published for 1913

Vice Chairman of General Synod —Rev. J. Cooling, B A, Madras

The Women's Foreign Missionary Society of the M E Mission is divided into 7 Conferences and is co-extensive with the main work of the Mission. Upwards of 172 Lady Missionaries are engaged in Educational, Zenana, and Medical work The Secretary for the Bombay Conference is Miss A A. Abbott. The Manse, Bellasis Road, Bombay.

THE FREE METHODIST MISSION of N. America—Established at Yeotmal, 1893, operates in Berar with a Staff of 19 Missionaries and 16 Indian workers. Organised church 1, Communicants 70; 1 Industrial and 6 Elementary schools, with 125 pupils.

Secretary, Miss L. D. Calkins, Yeotmal, Berar.

ROYAL ARMY TEMPERANCE ASSOCIATION.

In 1862 there was started among the British troops in Agra a small Society, under the leadership of Rev G Gregson, Baptist minister, which after a short time took the name of the Soldiers' Total Abstinence Society

For some ten years the Society struggled with varying success, spreading to other Garrison Stations, but at the end of that time, though it had obtained recognition from the Horse Guards, and was the first Society whose Pledge was so recognised, the membership was not more than 1,200 In the year 1873, however, through the influence of the then Commander-in-Chief, the work was placed on a firmer footing, the Rev Gelson Gregson gave up his whole time to it, and by accompanying the troops through the Afghan War, making an extended tour through Egypt, and bringing the work into close touch with troops, both during peace and war, in the year 1886, when he left the Society, it numbered about 11,000 members He was followed by a Madras Chaplain, who after two years gave place to the Rev J H Bateson In 1886, the late Lord Roberts, Commander-in-Chief, organised his Scheme for Regimental Institutes, which have had a wonderful effect on the life of British soldiers in the East, and the Total Abstinence Society was so far incorporated into the scheme as to be allowed ample accommodation, and many practical benefits, in every Unit At the same time the name was changed to that of the Army Temperance Association, and the work of various societies thus linked together, under one organisation The effect has been more than even the inaugurator himself ever hoped for The membership rose steadily from that date and still increases

Growth of the Society—In 1889 there were 12,140 members, in 1899, 20,688, in 1909, 30,220, while in 1913-14, the total was 35,000, or over 45 per cent of the total garrison in India In 1908, the Secretary having retired after 20 years, work, the Rev H C Martin, M A, a Chaplain in Bengal, was selected by H E Lord Kitchener, to the post of Secretary Twenty years ago, the Association, which has now for some years been the Royal Army Temperance Association, with the Patronage of King Edward VII, and later of the King Emperor, George V, organised a similar Society in Great Britain, with headquarters in London, from which the troops in South Africa, the Mediterranean, etc, are controlled, so that the whole British Army receives the attention of the Association

Varied Activities.—What primarily has been the effort of the Association, namely the decrease of Intemperance, and promotion of sobriety among soldiers has gradually grown into work of every kind, in the interests of soldiers, promotion of sport, occupation of spare time, assistance towards employment in Civil Life, advice and information on the subject of Emigration, provision of Furlough Homes, all tend to enlist the support of officers and men in the Association, and add to its value to them, and to the efficiency of its work, generally The wonderful change that in late years has taken place in the character of the British Army, in India especially, is due to various causes, including the increased interest in games and sports, the spread of education, the different class of men enlisted, and so on, but the R A T A has always been given its due share among other causes, by all authorities and Blue Books, and particularly by Officers Commanding Divisions, Brigades and Units These changes in conduct are seen most plainly in the increased good health of the Army in India

Effect in the Army.—In the year 1889, 1,174 British soldiers died in India, and 1 800 were invalided unfit for further duty, in 1910, only 330 died, and 484 were invalided In 1889, 688 underwent treatment for Delirium tremens, in 1910, only 37 In conduct the same difference is to be found, as late as 1901 as many as 515 Courts Martial were held on men for offences due to excessive drinking, in 1906 only 217 In 1904, 2,231 good conduct medals were issued, in 1910, there were 4,581 In regard to the character of the men themselves, who become members of the Association, during their service, we find that in 1912, 59 per cent on transfer from the Colours obtained Exemplary characters, and 93 per cent either Exemplary or Very Good, the remainder were for the most part men who, after some years of heavy drinking, had towards the end of their service been persuaded to try and reform themselves, but not soon enough to avoid the consequences of previous excess

Organisation.—Recent movements of the Association prove it to have lost none of its energy, as a Memorial of the Jubilee of its work, and of the visit to India of their Majesties the King Emperor and Queen Empress, the Association is erecting a large Furlough Home in Northern India, at a cost of a lakh of Rupees, while in order to strengthen its work in regard to Emigration, the Secretary was this year sent on a tour to Australia where definite arrangements have been made for the reception and settlement of ex-soldiers, a number of whom have already proved their fitness as Colonial settlers. The following is the organisation of the Council and management —

Patron, His Majesty the King Emperor.

President, His Excellency the Commander-in-Chief

Council.—

The General Officers, Heads of Departments, Army Headquarters.

The General Officers Commanding Divisions

Two Officers Commanding Regiments.

Officers of the R A M C and I. M S.

Two Regimental Quartermasters

Representatives of the various Churches

Executive Committee —
The Secretary, Army Department
The Adjutant-General
The Quarter-Master General
The Director-General, Military Works
The Military Secretary to the C-in-C
General Secretary, Rev H C Martin, M A.
Treasurer, Mr F L Shearman
Auditor, Mr H C O'Brien
Bankers, Alliance Bank of Simla
Head Office, Middlelands, Simla
Official Organ, 'On Guard," published monthly (Rs 3 per annum)

THE ANGLO-INDIAN TEMPERANCE ASSOCIATION —Founded by the late Mr W S Caine, M P, is a Home Association which has been the means of establishing a net work of Temperance Societies throughout the Indian Empire, and has provided a common platform upon which Christians, Hindus, Mahomedans and Parsis unite for the moral elevation of the Indian peoples There are 280 Indian Societies affiliated with the Association, The President is Sir J Herbert Roberts Bart, M P and Secretaries, Sir Bhalchandra Krishna, Kt, L M (Bombay) and Mr John Furner Rae (London) The interests of the Association are especially represented in Parliament by the President, and the Rt Hon T R Fetens, M P, Mr J Herbert Lewis, M P, and the Rt Hon Sir Thos Whittaker, M P, all of whom are members of the Association's Council

THE ALL INDIA TEMPERANCE CONFERENCE — Growing out of the Association mentioned above and in closest relation with it is The All India Temperance Conference, formed in 1903, which meets every year, as a matter of convenience at the same time and place as the Indian National Congress, but having no official connection with it The President is elected annually, the Secretaries are more or less permanent The President for 1913 was the Hon Dev Prasad Sarvadikari, M A, B L, of Calcutta The Secretaries are Sir Bhalchandra Krishna, L M, and Mr D D Gilder of Bombay The membership of the Conference is the 280 Indian Temperance Societies affiliated with the Anglo-India Temperance Association as above, from each of which delegates are sent to the Annual Meeting of the Conference Special Councils embracing Presidency Societies are established at Bombay, Allahabad Calcutta and Madras, each of which has its own local President, Secretary and Committee The medium of communication between the Societies composing the Conference is the *Ishan*, published quarterly from England by the A I T A Amongst the general aims of the Conference may be mentioned —

The separation of the licensing from the revenue,

The doing away with the present system of license auctioneering,

The reduction of the present number of liquor shops and the prevention of the formation of new ones in important positions especially in the crowded areas,

The later opening and the earlier closing of liquor shops, and the entire closing of them on public holidays,

The introduction of Temperance Teaching in the Government Elementry Schools and Colleges, which despite the desire of Government expressed in their Circular Letter No 730-37 of 12th Sept 1907 to "deal with the subject of intemperance in a few sensible lessons in the sanctioned Readers," has not yet been adequately treated and as in the corresponding schools in England

The general spread of Total Abstinence principles depends more largely upon the individual Societies constituting the Conference than upon the official body Amongst the methods are lantern addresses, dramatic representations and singing by itinerant preachers Twelve paid Lecturers travel through various districts holding public meetings and addressing the masses wherever possible Educational work is especially to the front in the Panjab district through the Amritsar Society

CREMATION.

Cremation as a means of disposing of the dead is commonly adopted throughout India by the Hindus, but has been little adopted among the Europeans in India A crematorium was started some years ago in Calcutta close to the Lower Circular Road Cemetery, at a cost of Rs 40,000 But the return for this expenditure is disappointing Only five or six cremations take place in Calcutta each year, in spite of the fact that the fee for cremation has been fixed by the Cremation Society of Bengal at the very low figure of Rs 30, subject to reductions in the case of poor families The reason for this is thought to be that, when possible Europeans go home to die, and the Native Christians and Eurasians are very largely Roman Catholics among whom a prejudice exists against this form of the disposal of the dead In Bombay arrangements have recently been made for a small area in the Sewri Cemetery to be walled in, and for cremations to be carried on within it in the primitive style of the country, but in such a way as to preserve the ashes.

Excise Policy.

The excise policy pursued by the Government of India has been subjected to great criticism, on the ground that it leads to an increase in the consumption of alcohol and that it has introduced alcohol to classes which were previously strangers to it These various arguments were placed before the Secretary of State by a deputation which waited upon him and were referred to the Government of India for an expression of their views The Government of India consulted the Local Governments, which are entrusted with the actual administration of the Excise, and their views, with those of the Government of India and of the Secretary of State, were published in the Gazette of India on July 25th, 1914 This resolution should be consulted by all who desire to understand the excise policy of the Government of India Its main features are summarised here

Increased Consumption.—That our excise administration is capable of still further improvement we are ready to admit and it is a subject which receives our constant and watchful attention We trust however, its foundations have been carefully and wisely laid, and that any attempt to attain by short cuts the objects which we set as permanently and consistently before us as do those most interested in temperance reform, could only end in a breakdown of the system We are convinced, in short, that we differ from our critics not so much on general principles as in the methods by which we attempt to realise them While the revenue from country spirits, opium and hemp drugs has increased by 28, 26, and 46 per cent respectively, since 1905-06, the consumption per hundred of the population has in the case of country spirits increased by only 5 per cent, that of opium has remained stationary, and that of hemp drugs has decreased by over 8 per cent We desire, in this connection specially to invite attention to the remarkable increase in wages and general prosperity which the labouring classes in India have experienced during the last decade In the absence of such progress, it would not have been possible for the still-head duty to be raised as it has been Similarly, if the duty had not been raised, the increase in consumption would, we are convinced, have been very marked It has, in fact, been trifling

Misconceptions.—In this connection, we also desire to draw attention to the theory advanced in more than one of the reported speeches that the consumption of liquor, moderate or immoderate, is contrary to the sentiment of the great majority of the population of India and that in many classes of Indian society it has never been practised Similar statements have been repeatedly made by critics of Indian excise policy, and our predecessors have frequently had occasion to refute them Indulgence in liquor and drugs was widespread before British rule "the classes whose habits of life are framed with a strict regard to religious or social restrictions form in India no larger a proportion of the population than in other countries"

Another misconception reveals itself in the tendency on the part of more than one speaker to minimise the dangers from **Illicit Manufacture and vend** This danger is very serious if not the most serious which confronts us It seems to us that, from all points of view our primary duty, and one of greater importance even than the reduction of licit consumption, is the complete suppression of illicit manufacture and vend Until this preliminary object has been effected no stability can be looked for in our excise policy, the results of which would be seriously undermined if they involved any palliation of illicit methods or any undue encouragement to illicit distillation We desire to dissociate ourselves entirely from the theory that if the licit supply were completely stopped, consumption would diminish It is difficult under present conditions, to guard against illicit manufacture If licit supplies were stopped the task, hard as it is would become impossible Possibly, the immediate results of such a course might be a reduction in the total number of consumers, but intemperance would certainly increase, as a result of lower retail prices, and we have no doubt that ultimately consumption would rise considerably beyond the level which it has now attained Nor could any moral principles justify the demoralising effect on large sections of the population of the evasion of laws which it would be impossible to enforce In these circumstances, we do not consider that we should be justified in prohibiting moderate consumption even with a view to check occasional abuse We are only justified in expecting to secure the enhancement of retail prices and thereby to impose an artificial check on the increase of consumption which would otherwise occur as a result of natural tendencies Our policy is not aimed against those who use alcohol in moderation We merely attempt by raising retail prices to minimise temptation to those who do not drink and to discourage excess among those who do We are chiefly concerned with the reduction of actual consumption, and this can only be effected when illicit supplies are suppressed by all such measures as are reasonable and practical

Success Attained.—Basing our policy, then, on these principles and bearing in mind the limitations to which it is subject, we may fairly claim that a considerable measure of success has already been attained The persistent pressing by the Government of India of the policy of substituting distilleries for outstills has had a very great effect, and is being steadily pushed forward Distilleries are ousting the more primitive outstills, duty is being steadily pushed up, the numbers of shops are being widely reduced, and excise establishments are being generally strengthened We would add that statutory penalties against smuggling and other illegal methods are being gradually enhanced, particularly in the direction of securing firmer control over the cocaine traffic In the period that has elapsed since the revision of our excise administration which followed the Report of the Excise Committee of 1905-06

we have transferred no less than 213,000 square miles of territory from the outstill to the distillery system, while in 1905-06, 39 per cent of the total excise area of India, and 28 per cent of the population of that area, were served by outstills, the proportions at the present time are only 15 and 8 per cent respectively

The number of country spirit shops per 100,000 of the population has fallen from 15 to 11 and the area served by each has risen from 27½ to nearly 37 square miles The abolition of shops of other kinds has been carried out no less effectively, and the total net reduction amounts to 22,653 It is true that our excise revenue has increased enormously and is still increasing We have, however, already shown that this increase is a necessary result of the system, and in no way constitutes the object in view That there has been in fact no proportionate increase in consumption is evident on a reference to the statements enclosed We have shown that, while the revenue from country spirit, opium and hemp drugs has increased considerably since 1905-06, the consumption of country spirit has only increased by 5 per cent during the same period, that of opium is practically stationary, and that of hemp drugs has diminished by over 8 per cent It is true that the recorded consumption of country spirit in distillery areas has risen from 7 to 10 million gallons, but almost the whole of the increase can be accounted for partly by the substitution throughout extensive areas of the distillery for the outstill system under which no record of consumption can be maintained and partly by the imposition of closer control over illicit manufacture Other statistics point to the same conclusions Although the customs duty on imported liquors increased from nearly a crore to over a crore and a quarter the increase was entirely due to the enhancements of duty, the actual imports declined during the period from 6,739,000 to 4,351,000 gallons Finally, although, for the reasons already given it is impossible to give statistics of the consumption of other country liquors, the rates of taxation of toddy has been raised by more than 50 per cent and it is more than probable that enhancements of the retail prices have checked, if not actually diminished, consumption

Temperance Work —We claim in conclusion that our policy is realising its avowed object of checking the increase of consumption Progress must be slow, for, as we have already shown, we consider the suppression of illicit methods to be a *sine qua non* to success There is one direction in which we feel that much still remains to be accomplished. Our Local Governments frequently draw attention to the desirability, and, indeed, the necessity of resolute and sympathetic work by temperance leagues among the people themselves. A certain number of leagues of this kind have, it is true, been formed The special need of the country is not merely the formation of more leagues but also more sustained effort after formation There is evidence that the promoters are too frequently content with memorialising Government, on whom they are inclined to throw the whole burden of the struggle against intemperance While fully cognisant of our own responsibilities, and resolved that they shall be adequately discharged, we are assured that, until the advantages of temperance principles are resolutely and systematically brought home to the masses by the independent efforts of non-official leagues, the natural tendencies in favour of increased consumption will continue to operate in some degree, however much we may try to counter them by increased taxation

Secretary of State —In returning the papers to the Government of India the Secretary of State said —

I concur in what I conceive to be the main position taken up in Your Excellency's despatch. For the last 25 years the aim of the Government of India, in an often-quoted declaration, has been, first, to discourage any extension of the habit of drinking, and, secondly, within the limits prescribed by the necessity of suppressing unauthorised manufacture and sale, to raise a maximum revenue from a minimum consumption of intoxicating liquors The expansion of revenue from intoxicants in recent years has been represented by temperance deputations both here and in India as concurrent with, or as evidence of, a heavy increase of consumption, and the suggestion has been put forward that the Government or its officials were fostering the increase of drinking habits to secure the expansion of revenue. The statistical table giving the consumption of country spirit in Distillery areas emphatically disposes of this contention so far as country spirit is concerned. It appears to establish that for India as a whole the increase of the consumption of country spirit per 100 of population is but slight,—not more than five per cent during the period of seven years It is true that this figure generalised for the whole of India, doubtless, loses sight of local variations and increases in particular areas; still, the broad fact that emerges is that during the period under review, a general increase of consumption, which in the present social and industrial conditions of India might have been apprehended, has in effect been held in check.

Warran of Precedence in India.

(Brought up to 1 January, 1914)

VICTORIA, by the Grace of God of the United Kingdom of Great Britain and Ireland Queen, Defender of the Faith, Empress of India,—

To all to whom these presents shall come

WHEREAS it hath been represented unto Us that it is advisable that the rank and precedence of persons holding appointments in the East Indies as regulated by Our Royal Warrant, dated the 18th day of October, 1876, should be altered, We do therefore hereby declare that it is Our will and pleasure that in lieu of the table laid down in Our said recited Warrant, the following table be henceforth observed with respect to the rank and precedence of the persons hereinafter named, *viz* —

1 Governor-General and Viceroy of India
2 Governors of Madras, Bombay and Bengal
3 President of the Council of the Governor-General
4 Lieutenant-Governor when in his own territories
5 Commander-in-Chief in India
6 Lieutenant-Governor
7 Chief Justice of Bengal
8 Bishop of Calcutta, Metropolitan of India
9 Ordinary Members of the Council of the Governor-General
10 Commander-in-Chief of Her Majesty's Naval Forces in the East Indies
11 Chief Justice of a High Court other than that of Bengal
12 Bishops of Madras and Bombay
13 Ordinary Members of Council in Madras, Bombay and Bengal
14 General Officers Commanding the Northern and Southern Armies, Chief of the General Staff
15 Chief Commissioners of the Central Provinces and Assam, Residents at Hyderabad and in Mysore, and Agents to the Governor-General in Rajputana, Central India, and Baluchistan, Executive Members of the Council of the Lieutenant-Governor of Bihar and Orissa, the Agent to the Governor-General and Chief Commissioner of the North-West Frontier Province [NOTE —When within their own jurisdiction these officers take precedence of those mentioned in Article 14].
16 Puisne Judges of a High Court
17 Chief Judge of a Chief Court.
18 Military Officers above the rank of Major-General
19. Additional Members of the Council of the Governor-General for making Laws and Regulations, Chairman of the Railway Board
20 Bishops of Lahore, Rangoon, Nagpur and Lucknow.
21 Secretaries to the Government of India, Joint Secretary to the Government of India in the Public Works Department, and Members of the Railway Board
22 Commissioner in Sind.
23 Judges of a Chief Court, Recorder of Rangoon and Judicial Commissioners, Burma.
24. Chief Secretaries to the Governments of Madras and Bombay, Chief Commissioner of Delhi.
25 Major-Generals, Members of a Board of Revenue, Commissioners of Revenue and Customs, Bombay, Financial Commissioners, Punjab and Burma, the Inspector-General of Irrigation, and the Director-General, Indian Medical Service
26 Judicial Commissioners, including Additional Judicial Commissioners of Oudh, the Central Provinces, and Sind
27 Additional Members of the Councils of the Governors of Madras, Bombay and Bengal for making Laws and Regulations, Members of the Legislative Council of a Lieutenant-Governor.
28 Vice-Chancellors of Indian Universities

FIRST CLASS

29 Members of the Indian Civil Service of 30 years' standing
30 Advocate-General, Calcutta
31 Comptroller and Auditor-General.
32 Commissioners of Divisions, the Superintendent of Port Blair, and Residents, Political Agents, and Superintends drawing Rs 2,000 a month and upwards (not being Collectors or Deputy Commissioners of British Districts), within their respective charges; the Revenue and Judicial Commissioners in Baluchistan, within Baluchistan and the Agency Territories
33 Chief Secretaries to Local Governments other than those of Madras and Bombay.
34 Surveyor-General of India, Directors-General of the Post Office, of Telegraphs in India and of Railways, Chief Engineers, first class, the Directors of Railway Construction and Railway Traffic, Accountants-General, Military and Public Works Departments, Director, Royal Indian Marine, and Manager, North-Western Railway
35 Bishops (not territorial) under license from the Crown
36 Archdeacons of Calcutta, Madras and Bombay
37 Brigadiers-General, Consuls-General.
38 Commissioners of Divisions, the Revenue and Judicial Commissioners in Baluchistan when in Kalat or Las Bela or elsewhere without the limits of his charge.
39 Commissioner of Northern India Salt Revenue, Opium Agents, Beneras and Bihar, and Director, Central Criminal Intelligence Department
40 Secretaries and Joint Secretaries to Local Governments, and Private Secretary to the Viceroy.

SECOND CLASS.

41 Members of the Indian Civil Service of 23 years' standing and Colonels, Consuls.
42. Military Secretary to the Viceroy.
43 Judicial Commissioners of the Hyderabad Assigned Districts and Baluchistan; the Superintendent of Port Blair; Residents, Political Agents, and Superintendents drawing Rs 2,000 a month and upwards (not being Collectors or Deputy Commissioners of British Districts)
44. Inspector-General of Forests in India, Director of the Geological Survey, and Director-General of Education in India, Sanitary Commissioner with the Government of India.

45 Standing Counsel to the Government of India.

46 Directors of Public Instruction, and Inspectors-General of Police and Prisons under Local Governments, and Accountants-General

47 Survey Commissioner and Director of Land Records and Agriculture, Bombay, Commissioners of Settlements, and Controllers of Military Accounts

48 Chief or Senior Civil Secretary to a Local Administration

49 Chief Engineers, second and third classes, Deputy Surveyor-General, Deputy Director-General of Telegraphs in India, and Director-in-Chief, Indo-European Telegraph Department, and Secretary to the Railway Board

50 Divisional, and District and Sessions Judges, Collectors and Magistrates of Districts, Deputy Commissioners of Districts, Deputy Superintendent of Port Blair, and the Chief Officer of each Presidency Municipality, within their respective charges, Officers in charge of Zhob, Quetta-Pishin, and Thal-Chotiali Districts throughout their respective charges

51 Archdeacons of Lahore, Lucknow, Rangoon, and Nagpur

52 Deputy Secretaries to the Government of India and Director-General of Commercial Intelligence

53 The Senior Chaplains of the Church of Scotland in Bengal, Madras, and Bombay

54 Remembrancers of Legal Affairs and Government Advocates under Local Governments, Chief Conservators of Forests

55 Officers in the First Class Graded List of Civil Offices not reserved for Members of the Indian Civil Service, Controller of Printing and Stationery

THIRD CLASS

56 Members of the Indian Civil Service of 18 years' standing and Lieutenant-Colonels

57 The Deputy Director, Royal Indian Marine

58 The Assistant Director, Royal Indian Marine

59 Commanders and Inspectors of Machinery, Royal Indian Marine

60 Political Agents and Superintendents drawing less than Rs 2,000 a month (not being Collectors or Deputy Commissioners of British Districts) within their own charges, Political Agent in Kalat, District Judges in Lower Burma and Judge of the Small Cause Court, Rangoon, within their respective charges

61 Secretaries to Local Administrations other than those already specified, the First Assistant to the Agent to the Governor-General in Baluchistan, First Assistants to the Residents at Hyderabad and Mysore, and to the Agents to the Governor-General in Rajputana and Central India

62 Consulting Engineers to the Government of India for Railways, Consulting Architect and Chief Inspector of Explosives

63. Private Secretaries to Governors

64. Military Secretaries to Governors

65. Administrators-General.

66. Sanitary Commissioners under Local Governments; Postmasters-General, the Comptroller, Post Office, and Conservators of Forests, first grade

67 Directors of Public Instruction, Inspectors-General of Police and Prisons under Local Administrations, Comptrollers and Deputy Auditors-General, and Deputy Director, Central Criminal Intelligence Department

68 Managers of State Railways other than the North-Western Railway, Chairmen of the Port Trust, Bombay, and Rangoon, and Chairman of the Port Trust, Calcutta

69 Vice-Chairman of the Port Trust, Calcutta, Directors of Traffic and Construction, Indian Telegraph Department, Directors of Telegraphs, first class, Examiners of Accounts, Public Works Department, first class, Officers of the Superior Revenue Establishment of State Railways, first class, first grade, Superintending Engineers, Public Works Department, first class, Superintendents of the Survey of India Department, first grade

70 Inspectors-General of Registration and Directors of Land Records and Agriculture, and Excise Commissioners under Local Governments

71 Senior Chaplains other than those already specified

72 Sheriffs within their own charges

73 Officers in the Second Class Graded List of Civil Offices not reserved for Members of the Indian Civil Service, Political Agents and Superintendents in Baluchistan drawing less than Rs 2,000, and Political Agents in Hazaroi and Tonk, when outside their respective charges (unless their Army rank or standing in the Civil Service gives them a higher place)

Actuary to the Government of India

FOURTH CLASS

74 Members of the Indian Civil Service of 12 years' standing, and Majors, Vice-Consuls, District Judges in Lower Burma and Judge of Small Cause Court, Rangoon (outside their respective charges)

75 Lieutenants of over 8 years' standing, and Chief Engineers of the Royal Indian Marine, Chief Accountant, Office of the Director of Ordnance Factories

76 Government Solicitors.

77 Inspectors-General of Registration, Sanitary Commissioners, and Directors of Land Records and Agriculture under Local Administrations, Civil Engineer, Adviser to the Director of Ordnance Factories

78 Officers in the Third Class Graded List of Civil Offices not reserved for Members of the Indian Civil Service, Deputy Accountant, office of the Director of Ordnance Factories

The entries in the above table apply exclusively to the persons entered therein, and, while regulating their relative precedence with each other, do not apply to the non-official community resident in India, the members of which shall take their place according to usage.

Officers in the above table will take precedence in order of the numbers of the entries Those included in one number will take precedence *inter se* according to the date of entry into that number

When an officer holds more than one position in the table, he will be entitled to the highest position accorded to him

Officers who are temporarily officiating in any number in the table will rank in that number below permanent incumbents

All officers not mentioned in the above table, whose rank is regulated by comparison with rank in the army, to have the same rank with reference to civil servants as is enjoyed by Military Officers of equal grades

All other persons who may not be mentioned in this table, to take rank according to general usage, which is to be explained and determined by the Governor-General in Council in case any question shall arise

Nothing in the foregoing Rules to disturb the existing practice relating to precedence at Native Courts, or on occasions of intercourse with Natives, and the Governor-General in Council to be empowered to make rules for such occasions in case any dispute shall arise

All ladies to take place according to the rank herein assigned to their respective husbands, with the exception of wives of Peers, and of ladies having precedence in England independently of their husbands, and who are not in rank below the daughters of Barons, such ladies to take place according to their several ranks, with reference to such precedence in England, immediately after the wives of Members of the Council of the Governor-General

Given at Our Court at Windsor this tenth day of December, in the year of Our Lord One thousand eight hundred and ninety-eight, and in the sixty-second year of Our Reign

By Her Majesty's Command
(Signed) GEORGE HAMILTON

Supplementary Graded List of Civil Offices not Reserved for Members of the Indian Civil Service Prepared Under the orders of the Governor-General in Council.

*FIRST CLASS—(No 55 of the Warrant)

Assay Master of the Mint, Calcutta and Bombay
Chief Judges of Presidency Courts of Small Causes
Commissioners of Police, Calcutta, Madras, Bombay, and Rangoon
Controller of Printing and Stationery
Deputy Comptroller-General
Director-General of Archæology
Director-General of Statistics
Director of the Botanical Survey of India
Inspector-General of Agriculture in India
Masters of the Mint, Calcutta and Bombay
Meteorological Reporter to the Government of India
Superintendent of Revenue Survey, Madras
Superintendent, Trigonometrical Surveys

*SECOND CLASS—(No 73 of the Warrant)

Adviser on Chinese Affairs in Burma
Agent General in India for the British Protectorates in Africa under the Administration of the Foreign Office
Chief Collector of Customs, Burma
Chief Constructor of the Royal Indian Marine Dockyard at Bombay
Chief Inspector of Mines in India
Chief Presidency Magistrates
Chief Superintendents of the Telegraph Department
Collector of Customs and Salt Revenue, Sind
Collectors and Magistrates of Districts, and Deputy Commissioners of Districts and of Settlements
Conservators of Forests, 2nd and 3rd Grades
Deputy Accountants-General under Local Governments
Deputy Directors of Telegraphs
Deputy Inspectors-General of Police
Deputy Superintendent of Port Blair
Directors of the Persian Gulf Section, and of the Persian Section of the Indo-European Telegraph Department
Director of Telegraphs, 2nd, 3rd and 4th Classes
Divisional and District and Sessions Judges
Examiners of Accounts Public Works Department, 2nd and 3rd Classes
Government Astronomer, Madras
Government Emigration Agents at Calcutta for British Guiana and Natal, and for Trinidad, Fiji, Jamaica, and Mauritius
Imperial Bacteriologist
Inspector of Mines to the Government of India
Librarian, Imperial Library
Officers in charge of the Records of the Government of India
Officers of the Indian Educational Service, and of the graded Educational Service drawing Rs 1,250 a month and upwards
Officers of the Superior Revenue Establishment of State Railways, 1st Class, 2nd and 3rd Grades
Principal of the Mayo College at Ajmere
Principal of the Rajkumar College at Rajkot
Reporter on Economic Products
Superintendent of the Royal Botanical Gardens, Calcutta
Superintendents Geological Survey of India
Superintendents of Revenue Survey and Assessment, Bombay
Superintendents of the Survey of India Department, 2nd Grade
Superintending Engineers, Public Works Department, 2nd and 3rd Classes
Under Secretaries to the Government of India.

*THIRD CLASS—(No 78 of the Warrant)

Agricultural Chemist
Assistant Directors of Dairy Farms
Assistant Inspector-General of Forests
Assistant Secretaries to the Government of India
Chief Chemical Examiner, Central Chemical Laboratory, Namital
Collector of Stamp Revenue, Superintendent of Excise Revenue, and Deputy Collector of Land Revenue, Calcutta
Commander of the steamer employed in the Persian Gulf Section of the Indo-European Telegraph Department
Constructors of the Royal Indian Marine

* The entries in each class are arranged in alphabetical order

Dockyards at Bombay and Kidderpore

Deputy Administrator-General, Bengal

Deputy Collector of Salt Revenue, Bombay

Deputy Commissioner of Northern India Salt Revenue.

Deputy Commissioners of Police, Calcutta and Bombay.

Deputy Commissioners of Salt, Abkari and Customs Department, Madras

Deputy Conservators of Forests drawing Rs 800 a month and upwards

Deputy Director of Land Records and Agriculture, Madras and Burma

Deputy Director of the Imperial Forest School, Dehra Dun

Deputy Directors of Revenue Settlements and Deputy Superintendents of Revenue Surveys, Madras.

Deputy Postmasters-General of the 1st, 2nd and 3rd grades

Deputy Superintendents, Geological Survey of India

Deputy Superintendents, Survey of India Department

District Superintendents of Police drawing Rs, 800 a month and upwards

Engineer and Electrician of the Persian Gulf Section of the Indo-European Telegraph Department

Examiners of Accounts, Public Works Department, 4th class, 1st and 2nd grades

Executive Engineers, Public Works Department, 1st and 2nd Grades.

Inspector-General of Railway Mail Service.

Judge of the City Civil Court, Madras.

Judges of Presidency Courts of Small Causes, and First Judge of the Small Cause Court, Rangoon

Manager of the Cordite Factory, Aruvankad

Officers of the Indian Educational Service and of the graded Educational Service, drawing less than Rs 1,250 a month, but more than Rs 1,000 a month

Officers of the Superior Revenue Establishments of the State Railways, Second Class, 1st and 2nd Grades

Palæontologist, Geological Survey of India

Presidency Magistrates

Protector of Emigrants and Superintendent of Emigration, Calcutta

Public Prosecutor in Sind

Registrars to the High Courts and to the Chief Court, Punjab

Sub-Deputy Opium Agents drawing Rs 800 a month and upwards

Superintendent of the Indian Museum.

Superintendent of Land Records and Agriculture in Sind

Superintendents of Stamps and Stationery.

Superintendents, Telegraph Department, 1st and 2nd Grades

SALUTES IN INDIA.

The following is the official table of salutes in Indian Territories—a term which includes all the waters of India within three miles of the coast "Indian seas," within which some of the salutes are to be given, extend from the North-West entrance of the Straits of Malacca to Cape Comorin, excepting Ceylon, and from Cape Comorin to Aden, including the Maldive and Laccadive Islands, and the Persian Gulf

Persons	No of Guns
Imperial Salute	101
The King and Emperor when present in person	101
Members of the Royal Family	31
Royal Standard and Royal Salute	31
Viceroy and Governor-General in India	31
Independent Asiatic Sovereigns	21
Other Foreign Sovereigns	21
Members of their Families and their Standards	21
Ambassadors	19
Governors of Presidencies	17
The President of the Council of India	17
Governor-General of Portuguese Settlements in India	17
Governor of Pondicherry	17
Governors of His Majesty's Colonies	17
Lieutenant-Governors of Provinces in India	15
Commander-in-Chief in India (If a Field Marshal)	19
Commander-in-Chiefin India (If a General)	17
Commander-in-Chief of His Majesty's Naval Forces	
Generals and Admirals, or their Flags	15
Members of Council	15
Plenipotentiaries and Envoys	15
Lieut Governors of His Majesty's Colonies	15
Vice-Admirals, Lieut-Generals, or their Flags	13
Agents to the Viceroy and Governor-General	13
Agent to the Governor of Bombay in Kathiawar	13
Residents	13
Chief Commissioners of Provinces, and Commissioner of Sind	13
Rear-Admirals & Major-Generals, or their Flags	11
Political Agents and Charges d'Affaires	11
Commodores of the first-class, and Brigadier-Generals	9
The Portuguese Governor of Damaun	9
The Governor of Diu	9
Return salutes to Foreign Men-of-war	
Return salutes to Captains of the Navy, and Naval Officers of inferior rank	1

Salutes to Chiefs.

Salutes of 21 *guns.*

Baroda The Maharaja (Gaekwar) o
Hyderabad. The Nizam of
Mysore. The Maharaja of.

Salutes of 19 *guns.*

Bhopal. The Begam (or Nawab) of.
Gwalior. The Maharaja (Sindhia) of.
Indore. The Maharaja (Holkar) of.
Jammu and Kashmir The Maharaja
Kalat. The Khan (Wali) of.
Kolhapur. The Maharaja of.

Mewar (Udaipur) The Maharana of
Travancore The Maharaja of.

Salutes of 17 *guns.*

Bahawalpur The Nawab of
Bharatpur The Maharaja of.
Bikaner The Maharaja of.
Bundi The Maharao Raja of
Cochin The Raja of
Cutch The Rao of
Jaipur The Maharaja of
Karauli The Maharaja of
Kotah The Maharao of
Marwar (Jodhpur) The Maharaja of
Patiala. The Maharaja of
Rewa The Maharaja of
Tonk. The Nawab of

Salutes of 15 *guns*

Alwar The Maharaja of
Banswara The Maharawal of
Bhutan The Maharaja of
Datia The Maharaja of
Dewas (Senior Branch) The Raja of
Dewas (Junior Branch) The Raja of
Dhar The Raja of
Dholpur The Maharaj Rana of
Dungarpur The Maharawal of
Idar. The Maharaja of
Jaisalmer. The Maharawal of
Khairpur The Mir of
Kishangarh The Maharaja of
Orchha The Maharaja of
Partabgarh The Maharawat of
Sikkim The Maharaja of
Sirohi. The Maharao of

Salutes of 13 *guns*

Benares The Raja of
Cooch Behar The Maharaja of
Jaora The Nawab of
Rampur. The Nawab of
Tippera The Raja of.

Salutes of 11 *guns.*

Ajaigarh The Maharaja of
Baoni The Nawab of.
Bhavnagar The Thakur Sahib of
Bijawar The Maharaja of
Cambay. The Nawab of
Chamba The Raja of
Charkhari The Maharaja of
Chhatarpur The Raja of
Dhrangadhra The Raj Sahib of
Faridkot The Raja of
Gondal The Thakur Sahib of
Janjira The Nawab of
Jhabua The Raja of
Jhalawar The Raj-Rana of
Jind. The Maharaja of.
Junagadh (or Junagarh) The Nawab of
Kahlur (Bilaspur). The Raja of.
Kapurthala The Maharaja of
Mandi The Raja of
Manipur. The Raja of
Morvi. The Thakur Sahib of.
Nabha. The Maharaja of
Narsinghgarh The Raja of.
Navanagar (or Nawanagar). The Jam of.
Palanpur The Diwan of.
Panna. The Maharaja of.
Porbandar. The Rana of.
Pudukkottai (or Puddukottai). The Raja of.
Radhanpur. The Nawab of.
Rajgarh The Raja of
Rajpipla The Raja of
Ratlam The Raja of
Sailana The Raja of
Samthar The Raja of
Sirmur (Nahan) The Raja of
Sitamau The Raja of
Suket The Raja of
Tehri (Garhwal) The Raja of

Salutes of 9 *guns*

Ali Rajpur The Raja of
Balasinor (or Vadasinor) The Nawab (Babi) o
Bansda The Raja of
Baraundha The Raja of.
Bariya The Raja of
Barwani The Rana of
Chhota Udepur (or Mahun) The Raja of
Dharampur The Raja of
Dhrol The Thakur Sahib of
Fadthli (Shukra) The Sultan of
Hsipaw (or Thibaw) The Sawbwa of
Karond (Kalahandi) The Raja of
Kengtung (or Kyaington) The Sawbwa of.
Khilchipur The Rao of
Kishn and Socotra The Sultan of
Lahej (or Al Hauta) The Sultan of
Limri The Thakur Sahib of
Lunawara (or Lunavada) The Raja of.
Maihar The Raja of
Maler Kotla The Nawab of
Mong Nai The Sawbwa of
Nagod The Raja of
Palitana The Thakur Sahib of.
Rajkot The Thakur Sahib of
Sachin The Nawab of
Savantvadi The Sar Desai of
Shehr and Mokalla The Sultan of
Sunth The Raja of
Vankaner (or Wankaner) The Raj Sahib of.
Wadhwan (or Vadwan) The Thakur Sahib of.
Yawnghwe (or Nyaungywe) The Sawbwa of.

Personal Salutes.

Salutes of 21 *guns*

Gwalior Honorary Major-General His Highness Maharaja Sir Madho Rao Sindhia Bahadur, GCSI, GCVO, ADC, LLD, Maharaja of

Jaipur Honorary Major-General His Highness Maharajadhiraja Sir Sawai Madho Singh Bahadur, GCSI, GCIE, GCVO, LLD, Maharaja of

Kolhapur His Highness Sir Shahu Chhatrapati Maharaj, GCSI, GCIE, GCVO, LLD, Maharaja of

Mewar (Udaipur) His Highness Maharajadhiraja Maharana Sir Fatch Singh Bahadur, GCSI, GCIE, Maharana of

Travancore His Highness Sri Maharaja Raja Sir Bala Rama Varma Bahadur, G.C.S.I., GCIE, Maharaja of

Salutes of 19 *guns*

Cochin. His Highness Raja Sree Sir Rama Varmah, GCSI, GCIE, Raja of

Mysore Her Highness Maharani Kempa Nanjammani Avaru Vanivilas, CI, of

Nepal. Honorary Major-General His Excellency Maharaja Sir Chandra Shumshere Jung, Bahadur Rana, GCB., GCSI, G.C.V.O. D.C.L, Prime Minister, Marshal of.

Salutes of 17 *guns*

Jodhpur Honorary Major-General His Highness Maharaja Bahadur Sir Pratab Singh, GCSI, GCVO, KCB, ADC, Regent of
Orchha His Highness Maharaja Mahindra Sawai Sir Partap Singh Bahadur, GCSI, GCIE, Maharaja of

Salute of 13 *guns*

Palanpur His Highness Nawab Sir Sher Muhammad Khan Zorawar Khan, GCIE, Diwan of

Salutes of 11 *guns*

Barwani His Highness Rana Ranjit Singh of
Bhor His Highness Shankar Rav Chimnaji Pant Sachiv of
Lahej (or Al Hauta) His Highness Sir Ahmad Fadthl, KCSI, Sultan of
Maler Kotla His Highness Ahmud Ali Khan Bahadur, Nawab of
Shehr and Mokalla His Highness Sultan Ghalib-bin-Awadth Al-Kayti, Sultan of

Salutes of 9 *guns*

Kanker Maharajadhiraja Komal Deo, of
Las Bela Mir Kamal Khan, Jam of
Loharu Nawab Sir Amir-ud-din Ahmad Khan Bahadur, KCIE, of
Mudhol Meherban Malojirao Vyankatrav Raje Ghorpade, *alias* Nana Saheb, of

Local Salutes.

Salutes of 21 *guns*

Bhopal The Begam (or Nawab) of
Gwalior. The Maharaja (Sindhia) of
Indore The Maharaja (Holkar) of
Jammu and Kashmir The Maharaja of

Salutes of 5 *guns*

The Sheikh of Koweit
The Sheikh of Bahrein
The Sheikh of Abu Thabi

Salutes of 3 *guns.*

The Sheikh of Debai
The Sheikh of Shargah
The Sheikh of Ajman
The Sheikh of Um-el-Kawain
The Sheikh of Ras-al-Kheima

Local Personal Salutes.

These are fired on the termination of an official visit

Salute of 13 *guns*

His Excellency the Govr of Bushire

Salutes of 12 *guns*

The Sheikh of Mohammerah
The Sheikh of Koweit

Salute of 11 *guns*

The Sheikh of Bahrein

Salutes of 5 *guns*

Eldest son of the Sheikh of Mohammerah
Eldest son of the Sheikh of Koweit

Salutes of 5 *guns*

The Govr of Mohammerah
The Govr of Bunder Abbas
The Govr of Lingah

Salute of 3 *guns*

Eldest son of the Sheikh of Bahrein

SALARIES OF CHIEF OFFICERS.

The following are the tables of salaries sanctioned for the Chief Officers of the Administration of India The tables are liable to variation, and it should be noted that the pay of members of the Indian Civil Service is subject to a deduction of 4 per cent for subscription towards annuity

	Pay per Annum Rs
Viceroy and Governor-General	2,50,800
Private Secretary to Viceroy	24,000
Military Secretary and Aide-de-Camp to Viceroy	18,000
Surgeon to Viceroy	14,400
Commander-in-Chief of the Forces in India	1,00,000
Military Secretary to Commander-in-Chief in India	18,000
Members (6) of the Governor-General's Council	80,000
President, Railway Board	60,000 or 72,000
2 Members, Railway Board	48,000
Secretaries to the Government of India in the Army and Public Works and Legislative Departments	42,000
Secretaries to the Government of India in the Finance, Foreign, Home, Revenue and Agriculture, and Commerce and Industry Departments	48,000
Secretary to the Government of India in the Education Department	36,000
Joint Secretary " " " " "	30,000
Comptroller and Auditor-General	42,000
2 Accountants-General, Class I	33,000
2 " " " II	30,000
4 " " " III	27,000
1 Commissioner of Northern India Salt Revenue	30,000
1 Director-General of Posts and Telegraphs	36,000 to 42,000
4 Postmasters-General	21,000 to 24,000
6 " "	18,000 to 21,000
1 Director, Geological Survey of India	24,000
Deputy Secretaries to the Government of India in the Finance and Foreign Departments	27,000

	Pay per Annum Rs
Deputy Secretaries to the Government of India in the Legislative and Home Departments	24,000
Superintendent of Port Blair	30,000 to 36,000
1 Chief Commissioner of Delhi	36,000
1 Director, Criminal Intelligence	36,000
1 Deputy Director, Criminal Intelligence	18,000 to 24,000
Inspector-General of Forests	31,800
Surveyor-General, Survey of India	36,000
1 Chief Inspector of Mines in India	24,000
1 Inspector-General of Agriculture in India	21,000 to 27,000
1 Director-General, Indian Medical Service	36,000
1 Sanitary Commissioner with the Government of India	24,000
1 Director-General of Archæology in India	20,400
1 Administrator-General of Bengal	26,400
1 Director-General of Commercial Intelligence	24,000
1 ,, ,, Indian Observatories	18,000 to 24,000
Controller of Stationery and Printing	18,000 to 27,000
Governors of Madras, Bombay, and Bengal	1 20,000
Private Secretaries to Governors of Madras, Bombay, and Bengal	18,000
Surgeons to Governors of Madras, Bombay, and Bengal	12,000
Military Secretary and Aide-de-Camp to Governors of Madras, Bombay, and Bengal	12,000
Bishop of Calcutta	45,980
Bishop of Madras	25,600
Bishop of Bombay	25,600
Chief Justice of Bengal	72,000
Chief Justices of Madras, Bombay, and the North-Western Provinces	60,000
Puisne Judges of the High Courts of Calcutta (15), Madras (7) Bombay (7), and the North-Western Provinces (6)	48,000
Chief Judge of the Chief Court, Punjab	48,000
,, ,, ,, Burma	48 000
Judges of the Chief Court, Punjab (5), and Burma (4), except Chief Judges	42 000
Political Residents, 1st class	48,000
,, ,, 2nd class	33,000
Officers on time scale	5,400 to 28,800

Provincial Salaries.

N B—Acting and other allowances are not included in the salaries shown

Bengal.

3 Members of Council	64,000
1 Member of the Board of Revenue	45,000
5 Commissioners of Divisions	35,000
1 Chief Secretary to Government	40,000
3 Secretaries to Government	33,000
3 Under Secretaries to Government	12,000
1 Excise Commissioner	27,000
1 Chairman of Corporation of Calcutta	42,000
1 Deputy Ditto	18,000
11 Collectors of Customs, Calcutta	27,000
12 Magistrates and Collectors, 1st grade	27,000
13 ,, ,, 2nd ,,	21,600
14 ,, ,, 3rd ,,	18,000
17 Joint Magistrates and Deputy Collectors, 1st grade	10,800
17 ,, ,, ,, ,, 2nd ,,	8,400
–Assistant Magistrates and Collectors	4,800 to 6,000
3 District and Sessions Judges, 1st grade	36,000
13 ,, ,, ,, 2nd ,,	30,000
15 ,, ,, ,, 3rd ,,	24,000
1 Chief Judge, Presidency Courts of Small Causes	24,000
4 Judges ,, ,, ,, ,,	12,000, 13,500 and 15,600 16,800
1 Advocate General	48,000
1 Solicitor to Government	60,000
2 Registrars, High Court	20,400 and 22,500
1 Inspector-General of Police	30,000 to 36,000
1 Director of Public Instruction	24,000 to 30,000

		Pay per Annum. Rs.
	Bihar and Orissa.	
1	Lieutenant Governor	1,00,000
2	Members of the Board of Revenue	42,000
1	Chief Secretary to Government	36,000
2	Secretaries to Government	27,000
3	Under Secretaries to Government	12,000
5	Commissioners	35,000
7	Magistrates and Collectors, 1st grade	27,000
10	" " 2nd "	21,600
10	" " 3rd "	18,000
10	Joint Magistrates and Deputy Collectors, 1st grade	10,800
9	" " " 2nd "	8,400
—	Assistant Magistrates and Collectors	4,800 to 6,000
2	District and Sessions Judges, 1st grade	36,000
5	" " 2nd "	30,000
5	" " 3rd "	24,000
1	Inspector-General of Police	30,000 to 36,000
1	Director of Public Instruction	24,000
	Assam.	
1	Chief Commissioner	56,000
2	Commissioners	35,000
2	Secretaries to Chief Commissioner	27,000 and 21,600
5	Deputy Commissioners, 1st grade	27,000
6	" " 2nd "	21,600
6	" " 3rd "	18,000
4	Assistant " 1st "	10,800
3	" " 2nd "	8,400
—	" " 3rd "	4,800 — 6,000
2	Under Secretaries to Chief Commissioner	12,000
1	District and Sessions Judge	24,000
1	Inspector-General of Police	27,000
1	Director of Public Instruction	15,000 to 18,000
	United Provinces of Agra and Oudh.	
1	Lieutenant Governor	1,00,000
1	Chief Secretary to Government	36,000
2	Members of the Board of Revenue	42,000
2	Secretaries to Government	20,000 and 22000
1	Secretary to Board of Revenue	20,000
3	Under Secretaries to Government	12,000
9	Commissioners of Divisions	35,000
1	Commissioner for Kumaon	30,000
1	Opium Agent	30,000 to 36,000
19	Magistrates and Collectors, 1st grade	27,000
17	" " 2nd "	22.000
4	Deputy Commissioners, 1st grade	22,000
10	" " 2nd "	20,000
14	Joint Magistrates, 1st grade	12,000
6	Assistant Commissioners, 1st grade	9,600
20	Joint Magistrates and Assistant Commissioners, 2nd grade	8,460
—	Assistant " "	4,800 to 6,000
3	Deputy Commissioners for Kumaon	12,000, 12,000 and 18,000
1	City Magistrate, Lucknow.	12,000
1	Superintendent, Dehra Dun	18,000
1	Judicial Commissioner	48,000
2	Additional Judicial Commissioners	34,000 and 40,000
2	District and Sessions Judges, 1st grade	36,000
7	" " 2nd "	30,000
6	" " 3rd "	27,000
10	" " 4th "	22,000
3	" " 5th "	20,000
1	Registrar, High Court	19,200
1	Inspector-General of Police	30,000 to 36,000
1	Director of Public Instruction	24,000
	Punjab.	
1	Lieutenant Governor	1,00,000
1	Chief Secretary to Government	36,000
2	Secretaries to Government	18,000

	Punjab—*ctd.*	Pay per Annum. Rs
2	Under Secretaries to Government ..	12,000
1	Under Secretary, Police Department, and Inspector-General of Police ..	30,000 to 36,000
1	Under Secretary, Educational Department ..	22,800
2	Financial Commissioners .	42,000
2	Secretaries to Financial Commissioner	10,800 and 18,000
5	Commissioners .	33,000
10	Deputy Commissioners, 1st grade .	27,000
11	,, ,, 2nd ,,	21,600
13	,, ,, 3rd ,,	18,000
14	Assistant Commissioners, 1st grade .	10,800
15	,, ,, 2nd ,,	8,400
–	,, ,, 3rd ,,	4,800 to 6,000
2	Divisional Judges, 1st grade .	33,000
3	,, ,, 2nd ,,	30,000
5	,, ,, 3rd ,, ..	27,000
6	,, ,, 4th ,, .	21,600
8	District Judges . ..	18,000
1	Registrar of the Chief Court	15,000
1	Legal Remembrancer	24,000
1	Inspector-General of Police	30,000 to 36,000
1	Director of Public Instruction .	18,000 to 24,000
	Burma.	
1	Lieutenant Governor . .	1,00,000
1	Chief Secretary to Government .. .	36,000
2	Secretaries ,,	21,600
2	Under Secretaries	14,400
1	Assistant Secretary	14,000
1	Financial Commissioner .	42,000
1	Settlement Commissioner and Director of Land Records	33,000
1	Secretary to Financial Commissioner . ..	14,800
1	Director of Agriculture . . .	18,000
8	Commissioners of Divisions . .	33,000
12	Deputy Commissioners, 1st grade	27,000
13	,, ,, 2nd ,,	21,600
14	,, ,, 3rd ,,	18,000
11	Assistant ,, 1st ,,	12,000
13	,, ,, 2nd ,,	8,400
10	,, ,, 3rd ,,	7,200
52	,, ,, 4th ,,	5,400 to 6,000
1	Judicial Commissioner .	42,000
2	Divisional Judges, 1st grade	33,000
2	,, ,, 2nd ,,	27,000
2	,, ,, 3rd ,,	21,600
8	District ,, .	18,000
1	Registrar, Chief Court, Lower Burma .	14,400
1	Government Advocate ..	18,000 to 21,600
	Central Provinces.	
1	Chief Commissioner	62,000
1	Financial Commissioner	42,000
4	Commissioners of Divisions .	2 at 30,000 and 2 at 33,000
4	Deputy Commissioners, 1st class . . .	27,000
10	,, ,, 2nd ,,	21,600
12	,, ,, 3rd ,, ...	18,000
4	Assistant ,, 1st ,, ..	10,800
10	,, ,, 2nd ,, .	8,400
–	,, ,, 3rd ,, . .	4,800 to 6,000
1	Judicial Commissioner	42,000
2	Additional Judicial Commissioners .. .	36,000 and 33,000
1	Inspector-General of Police	21,600
1	Director of Public Instruction	18,000 to 24,000
	Berar.	
1	Commissioner	33,000
2	District and Sessions Judges	22,000 and 20,000
3	Deputy Commissioners, 1st class	22,000
2	,, ,, 2nd ,, ...	20,000
2	,, ,, 3rd ,, ...	18,000
2	Assistant ,, 1st ,, ...	10,800
3	,, ,, 2nd ,, ...	8,400

		Pay per Annum Rs
	Madras.	
3	Members of Council	64,000
1	First Member, Board of Revenue	45,000
1	Second Member ,,	42,000
1	Third Member ,,	36,000
1	Fourth Member ,,	36,000
1	Chief Secretary to Government	45,000
1	Revenue Secretary to Government	37,500
1	Secretary to Government	30,000
1	Private Secretary to Governor	18,000
2	Under Secretaries to Government	12,000
1	Secretary to Commissioners of Land Revenues	18,000 to 21,600
1	Secretary to the Commissioners of Salt, &c	18,000 to 21,600
22	District and Sessions Judges	24,000 to 36,000
1	Registrar, High Court	18 000 to 21,600
1	Advocate General	21,600
1	Government Solicitor	13,200
1	Chief Judge, Small Cause Court	24,000
1	Resident in Travancore and Cochin	33,600
1	Inspector-General of Police	30,000 to 36,000
7	Collectors, 1st grade	30,000
14	,, 2nd ,,	27,000
1	Commissioner of Coorg	21,600 to 24,000
1	President, Corporation of Madras	24,000
6	Collectors, 3rd grade	21,600
18	Sub-Collectors and Joint Magistrates, 1st grade	14,400
16	,, ,, ,, 2nd ,,	10,800
16	,, ,, ,, 3rd ,,	8,400
–	Assistant Collectors and Magistrates	4,800 to 6,000
1	Director of Public Instruction	24,000 to 30,000
	Bombay.	
3	Members of Council	64 000
1	Chief Secretary to Government	45,000
1	Secretary to Government	37 500
1	,, ,,	30,000
1	Private Secretary to Governor	18,000
2	Under Secretaries to Government	15,000
1	Inspector-General of Prisons	21,600 to 24,000
1	Inspector-General of Police	30,000 to 36,000
4	Commissioners of Divisions	36,000 and 42,000
1	Commissioner in Sind	45,000
1	Municipal Commissioner, Bombay	30,000
13	Senior Collectors	27,900
15	Junior ,,	21,600
5	Assistant Collectors, 1st grade	14,400
19	,, ,, 2nd ,,	10,800
19	,, ,, 3rd ,,	8,400
–	,, ,, 4th ,,	4 800 to 6,000
1	Collector in Sind	21,600
2	Deputy Commissioners in Sind	18,000
1	Assistant Commissioner in Sind	13,200
1	Judicial Commissioner in Sind	36,000
1	Additional Judicial Commissioner in Sind	33,000
2	District and Sessions Judges—1st grade	30,000
6	,, ,, ,, 2nd ,,	27,900
9	,, ,, ,, 3rd ,,	21,600
1	Prothonotary and Registrar, High Court	20,400 to 24,000
1	Administrator General and Official Trustee	24,000 to 30,000
1	Registrar, High Court	20,400
1	Chief Judge, Small Cause Court	24,000
1	Remembrancer of Legal Affairs	30,000
1	Government Solicitor	30,000
1	Advocate General	24,000
1	Agent to the Governor in Kathiawar	36,000
1	Resident and Senior Political Agent	27,000
2	Political Agents, 1st grade	21,600
3	,, ,, 2nd ,,	18,000
7	,, ,, 3rd ,,	14,400
17	Assistant Political Agents on time scale of pay	6,000 to 14,400
1	Director of Public Instruction	24,000 to 30 000

Indian Orders

The Star of India.

The Order of the Star of India was instituted by Queen Victoria in 1861, and enlarged in 1866, 1876, 1897, 1902, and 1911, and the dignity of Knight Grand Commander may be conferred on Princes or Chiefs of India, or upon British subjects for important and loyal service rendered to the Indian Empire, the second and third classes for services in the Indian Empire of not less than thirty years in the department of the Secretary of State for India It consists of the Sovereign, a Grand Master (the Viceroy of India), the first class of forty-four Knights Grand Commanders (22 British and 22 Indian), the second class of one hundred Knights Commanders, and the third class of two hundred Companions, exclusive of Extra and Honorary Members, as well as certain additional Knights and Companions

The Insignia are (i) the Collar of gold, composed of the lotus of India, of palm branches tied together in satire, of the united red and white rose, and in the centre an Imperial Crown, all enamelled in their proper colours and linked together by gold chains (ii) The Star of a Knight Grand Commander is composed of rays of gold issuing from a centre, having thereon a star of five points in diamonds resting upon a light blue enamelled circular riband, tied at the ends and inscribed with the motto of the Order, *Heaven's Light our Guide*, also in diamonds That of a Knight Commander is somewhat different, and is described below (iii) The Badge, an onyx cameo having Her Majesty Queen Victoria's Royal Effigy thereon, set in a perforated and ornamental oval, containing the motto of the Order surmounted by a star of five points, all in diamonds (iv) The Mantle of light blue satin lined with white, and fastened with a cordon of white silk with blue and silver tassels On the left side a representation of the Star of the Order

The ribbon of the Order (four inches wide for Knights Grand Commanders) is sky-blue, having a narrow white stripe towards either edge, and is worn from the right shoulder to the left side A Knight Commander wears (a) around his neck a ribbon two inches in width, of the same colours and pattern as a Knight Grand Commander, and pendent therefrom a badge of a smaller size, (b) on his left breast a Star composed of rays of silver issuing from a gold centre, having thereon a silver star of five points resting upon a light blue enamelled circular ribbon, tied at the ends, inscribed with the motto of the Order in diamonds A Companion wears from his left breast a badge of the same form as appointed for a Knight Commander, but of a smaller size pendent to a like ribbon of the breadth of one and a half inches All Insignia are returnable at death to the Central Chancery, or if the recipient was resident in India, to the Secretary of the Order at Calcutta

Sovereign of the Order.—H I M The King

Grand Master of the Order.—The Viceroy for the time being, Baron Hardinge of Penshurst

Honorary Knights Grand Commanders (G. C. S. I.)

The Zil-es-Sultan of Persia
Prince Louis d'Arenberg

Extra Knights Grand Commanders (G. C. S. I.)

H M the Queen
H R H The Duke of Connaught

Knights Grand Commanders (G. C S I)

H H the Gackwar of Baroda
H H the Maharana of Udaipur
H H the Maharajah of Jaipur
H H the Maharaja of Travancore
The Marquis of Lansdowne
Baron Reay
H H the Maharaja of Jammu and Kashmir
Viscount Cross
The Earl of Elgin
H H the Maharaja of Kolhapur
H H the Maharaja of Gwalior
Lord Harris
H H the Maharaja of Rewa
Baron Macdonnell
H H the Maharaja of Idar
Earl Curzon of Kedleston
Baron Sandhurst
Lord George Hamilton
H H the Raja of Cochin
Baron Ampthill
Maharaja Sir Chandra Shamshere Jung of Nepa
H H the Maharaja of Orchha
H H the Maharaja of Mysore
Field-Marshal Viscount Kitchener
H H the Begum of Bhopal
Sir Stuart Bayley
Sir Dennis Fitz-Patrick
Sir Dighton Probyn
Baron Sydenham
Sir Arthur Lawley
Sir John Hewett
H H the Maharaja of Bikaner
H H. Maha Rao of Kotah
General Sir O'Moore Creagh
H H the Raja of Kapurthala
H H the Nizam of Hyderabad
H H the Aga Khan
H H the Nawab of Tonk

Knights Commanders (K C S I)

The Earl of Cromer
Sir Joseph West Ridgeway
Sir Theodore Cracraft Hope
Sir William Chichele Plowden
Sir James Broadwood Lyall
Sir Charles Haukes Tod Crosthwaite
Sir David Miller Barbour
Sir Andrew Richard Scoble
Sir Philip Perceval Hutchins
Sir Henry Edward Stokes
Sir Henry Mortimer Durand
Maj.-Gen Sir Oliver Richardson Newmarch
Sir Frederick William Richards Fryer
H H Maharao of Sirohi
Sir Courtenay Peregrine Ilbert
Lieut.-Col Sir George Scott Robertson
Gen Sir Henry Brackenbury
Sir William Erskine Ward
Brig Surg.-Lieut.-Col Sir Alfred Swaine Lethbridge
H H Maharao of Bundi
Sir Edward Charles Buck
Sir William Mackworth Young
Sir Charles James Lyall

Sir Robert Joseph Crosthwaite
Sir William John Cunningham
Sir Richard Udny
Colonel Sir Howard Mellis
Sir Arthur Charles Trevor
Sir John Frederick Price
Sir Charles Montgomery Rivaz
Sir James Digges La Touche
Sultan Sir Ahmad Fadthl, of Lahej
Lieut -Col Sir David William Keith Barr
Sir Henry John Stedman Cotton
Admiral Sir Charles Carter Drury
Sir Henry Martin Winterbotham
Sir James Monteath
Lieut -Col Sir Donald Robertson
Sir Andrew Henderson Leith Fraser
Sir Hugh Shakespear Barnes
Sir William Roe Hooper
Col Sir Colin Campbell Scott Moncrieff
Kunwar Sir Ranbir Singh, of Patiala
Sir Arundel Tagg Arundel
Sir Thomas Raleigh
H H. Thakur Sahib of Bhaunagar
Sir Arthur Henry Temple Martindale
Sir James Thomson
Sir Joseph Bampfylde Fuller
H. H. Raja of Chamba
Lieut -Col Arthur John, Baron Stamfordham
Maj -Genl Sir Stuart Brownlow Beatson
Sir Thomas William Holderness
Sir Lancelot Hare
Sir Charles Stuart Bayley
H H Raj Rana of Jhalawar
Raja Sir Tasadduk Rasul Khan of Jahangirabad, Oudh
Sir John William Pitt Muir-Mackenzie
Nawab Bahadur Sir Khwaja Sallimulla of Dacca
Sir James Wilson
H H Maharaja of Alwar
H H Raja of Jind
Sir Henry Erle Richards
Sir Gabriel Stokes
Sir George Stuart Forbes
H. H. Raja of Ratlam
James Lyle, Baron Inchcape
Sir Harvey Adamson
Gen Sir Beauchamp Duff
Nawab of Murshidabad
Lieut -Col Sir James Robert Dunlop-Smith
Sir John Ontario Miller
Sir Lionel Montague Jacob
Sir Murray Hammick
Sir Krishna Gobinda Gupta
Sir Leslie Alexander Selim Porter
Sir Spencer Harcourt Butler
Sir Robert Warrand Carlyle
H. H Maharaja of Kishangarh
Sir Reginald Henry Craddock
Sir James McCrone Doule
Sir James Scorgie Meston
Sir Benjamin Robertson
Sir Richard Amphlett Lamb
Maharajadhiraja of Burdwan
Sir Elliot Graham Colvin
Sir Trevredyn Rashleigh Wynne
Surg -Gen Sir Charles Pardey Lukis
Sir Stanley Ismay
Sir George Casson Walker
H H. Raja of Dhar
H. H. Raja of Dewas State (Senior Branch)
Surg -Gen Sir Francis Wollaston Trevor
H. H. Maharaja of Bhutan
Sir John Nathaniel Atkinson
Sir William Thomson Morison
Sir George Head Barclay
Lieut -Gen. Sir James Willcocks
Lieut -Col. Sir G. Roos-Keppel
Sir M F O'Dwyer
Sir Saiyid Ali Imam
Sir D C Baillie

Companions (C. S. I.)

Lieut -Col William Dickinson
Gen Sir Peter Stark Lumsden
Major-Gen Beresford Lovett
Gen Sir Thomas E Gordon
Major-Gen Philip Durham Henderson
Col Leopold John Herbert Grey
Sir George Christopher Molesworth Birdwood
Major-Gen Henry Wylie
Major-Gen William Tweedie
Sir Henry William Primrose
Herbert John Reynolds
Lieut -Gen Michael Weeks Willoughby
Raja Piari Mohan Mukharji of Uttarpara
Sir Frederick Russell Hogg
Col Charles Edward Yate
William Rudolph Henry Merk
Rao Chhatrapati Bahadur, Jagirdar of Allpura
Col Edward L Ommanney
Col John Clerk
James Richard Naylor
David Robert Lyall
Sardar Jiwan Singh, of Shahzadpur
Col George Herbert Trevor
Col Frederick J Home
Lieut -Col Henry St Patrick Maxwell
Sir Jervoise Athelstane Baines
Sir Thomas Salter Pyne
Major-Gen Robert Charles Boileau Pemberton
Col Wm Francis Prideaux
Alan Cadell
Arthur Forbes
Kerala Varma Valiya Koil Tamburan, of Travancore
Sir Arthur Upton Fanshawe
Col George Fletcher Ottley Boughey
James Fairbairn Finlay
Joseph Parker
Sir John Molesworth Macpherson
Charles Walter Bolton
Horace Frederick D'Oyly Moule
Surg -Gen. James Cleghorn
Col Thomas Gracey
Col James Aloysius Miley
Sir Henry Babington Smith
Henry Aiken Anderson
Lieut -Col Sir Arthur Henry McMahon
Sir Henry Evan Murchison James
James Knox Spence
Charles William Odling
Alexander Walmesley Cruickshank
David Norton
Thomas Stoker
Col Maule Campbell Brackenbury
Sir Edward Richard Henry
Lucas White King
Sir Mackenzie Dalzell Chalmers
Surgn -Gen David Sinclair
Henry Farrington Evans
Lt.-Col John Muir Hunter
Richard Gillies Hardy
Sir Frederick Robert Upcott
Herbert Charles Fanshawe
Sir Frederick Styles Philpin Lely
George Robert Irwin

Lieut -Gen. Sir George Lloyd Reilly Richardson
Robert Burton Buckley
Arthur Frederick Cox
Charles Gerwien Bayne
Hartley Kennedy
Sir Edwin Grant-Buds
Major-Gen Trevor Bruce Tyler
William Charles Macpherson
Lt.-Col James Alexander Lawrence Montgomery
Lt.-Gen Henry Doveton Hutchinson
Lieut -Col Sir Hugh Daly
Raja of Burdwan
Nawab of Pahasu
Sardar Badan Singh of Malaudh
Sir Thomas Gordon Walker
Col. James White Thurburn

Alfred Brereton
William Thomas Hall
Richard Townsend Greer
Col. Robert Henry Jennings
Sir Harold Arthur Stuart
Sir Louis William Dane
Sir Alfred Macdonald Bulteel Irwin
Lt -Col James Bird Hutchinson
Raja Ram Pal of Kotlehr
Hermann Michael Kisch
Sir Cecil Michael Wilford Brett
Herbert Bradley
Sir Frank Campbell Gates
John Mitchell Holms
Percy Seymour Vesey Fitzgerald
Lt -Col Willoughby Pitcairn Kennedy
William Henry White
Raja Narendra Chand
Arthur Delaval Younghusband
Oscar Theodore Barrow
Col. Howard Goad
Francis Alexander Slacke
Saiyid Husain Bilgrami
Percy Comyn Lyon

Algernon Robert Sutherland
Sir George Watson Shaw
William Arbuthnot Inglis
Romer Edward Younghusband
Col Herbert Mullaly
John Alexander Broun
Col Henry Finnis
Maharaj Bhairon Singh
Maj -Gen. Sir Alfred William Lambart Bayly
Maurice Walter Fox-Strangways
William Lochiel Sapte Lovett Cameron
Sir Edward Douglas Maclagan
Raja Madho Lal
John Stratheden Campbell
Lieut -Col Charles Herbert
Sir Ashutosh Mukharji
Maj -Gen. Sir Henry Montague Pakington Hawkes
Dr Rash Behari Ghosh
Francis Capel Harrison
Lieut.-Col. Sir Percy Zachariah Cox

Comdr. Sir Hamilton Pym Freer-Smith
Andrew Edmond Castlestuart Stuart
Brig.-Gen William Riddell Birdwood
Norman Goodford Cholmeley
Walter Francis Rice
Alexander Gordon Cardew
Sir Frederick William Duke
Havilland Le Mesurier
Claud Hamilton Archer Hill
Cecil Edward Francis Bunbury
Col. Reginald Henry Mahon
Michael William Fenton

Lieut -Col Alexander Fleetwood Pinhey
Capt Allen Thomas Hunt
Walter Badock
James Mollison
Pirajirao Bapu Sahib Ghatge
Robert Woodburn Gillan
John Walter Hose
Charles Ernest Vear Gourment
Harrington Verner Lovett
Herbert Lovely Eales
George Gilbert White
Col Sidney Gerald Burrard
Frederick Beadon Bryant
Lieut -Col Herbert Lionel Showers

Frank George Sly
George Moss Harriott
Ernest Herbert Cooper Walsh
Edward Vere Levinge
Robert Nathan
Arthur Meredith
Lieut -Col Charles Archer
James Peter Orr
Herbert Alexander Casson
William Axel Hertz
Mahadev Bhaskar Chaubal
George Seymour Curtis
William Henry Clark
Major Francis Aylmer Maxwell
Major Clive Wigram
Herbert Thompson
Rao Bahadur Nanak Chand
Lieut -Col William Burney Bannerman
Lieut -Col John Ramsay
Stuart Lockwood Maddox
Gilbert Thomas Walker
Lieut -Col Phillip Richard Thornhagh Gurdon
Khan Zulfikar Ali Khan of Maler Kotla

Col George Francis Angelo Harris
Edmund Vivian Gabriel
John Stuart Donald
Henry Montague Segundo Mathews
Arthur Crommelin Hankin
Faridoonji Jamshedji
Maulvi Ahmad Hussain
Horace Charles Mules
H H. Raja Bije Chand, Chief of Kahlur
Lieut -Col Arthur Russell Aldridge
Maj Mathew Richard Henry Wilson
John Charles Burnham
Brev -Col Thomas Francis Bruce Renny-Tailyour
Michael Kennedy
Thakor Karansinghji Vajirajji
Meherban Mudhojirao Janrao Naik Nana Nimbalkar
Lieut -Col. Alain Chartier de Lotbiniere Joly de Lotbiniere
Brig -Gen Herbert Vaughan Cox

Brev -Col. Robert Smeiton Maclagan
Lieut -Col. Charles Mowbray Dallas
Edward Henry Scamander Clarke
Jagadish Chundra Bose
Abbas Ali Baig
Oswald Campbell Lees
Lt -Col G G Giffard
F. W. Johnston
William Henry Lucas
A. L. Saunders
Vakhatsinghji Kesrisinghji
Paul Gregory Melitus
Lieut -Col Albert Edward Woods
William Exall Tempest Bennett
Hon. Maj. Sahibzada Obaidullah Khan

William Ogilvie Horne
Pazhamaneri Sundaran Aiyar Sivaswami Aiyar
William Harrison Moreland, C I E
Edward Albert Gait, C I.E
Diwan Bahadur Chaube Raghunath Das, of Kotah
Col Lestock Hamilton Reid
Surg -Gen Henry Wickham Stevenson
Hon Lieut -Col Raja of Lambagraon
Lionel Davidson
George Carmichael
Lieut.-Col Donald John Campbell MacNabb
Lieut -Col Henry Walter George Cole
Stuart Mitford Fraser
Henry Venn Cobb
Behari Lal Gupta
Henry Wheeler
F W Newmarch

OFFICERS OF THE ORDER

Secretary, Lieut -Col Sir A H McMahon
Registrar, Col Sir Douglas Dawson

The Most Eminent Order of the Indian Empire.

This Order, instituted by H M Queen Victoria, Empress of India, Jan 1st, 1878 and extended and enlarged in 1886, 1887, 1892, 1897, and 1902,is conferred for services rendered to the Indian Empire, and consists of the Sovereign, a Grand Master, thirty-two Knights Grand Commanders (of whom the Grand Master is first and principal), ninety-two Knights Commanders, and an indefinite number of Companions (not exceeding, without special statute, 20 nominations in any one year), also Extra and Honorary Members over and above the vacancies caused by promotion to a higher class of the Order, as well as certain Additional Knights and Companions appointed by special statute Jan 1st, 1909, commemorative of the 50th Anniversary of the assumption of Crown Govt in India

The Insignia are (*i*) The COLLAR of gold, formed of elephants, lotus flowers, peacocks in their pride, and Indian roses, in the centre the Imperial Crown, the whole linked together with chains, (*ii*) The STAR of the Knight Grand Commander, comprised of five rays of silver, having a small ray of gold between each of them, the whole alternately plain and scaled, issuing from a gold centre, having thereon Her Majesty Queen Victoria's Royal Effigy, within a purple circle, edged and lettered gold, inscribed *Imperatricis Auspicus*, and surmounted by an Imperial Crown gold, (*iii*) The BADGE, consisting of a rose, enamelled gules, barbed vert, and having in the centre Her Majesty Queen Victoria's Royal Effigy, within a purple circle, edged and lettered gold, inscribed *Imperatricis Auspicus*, surmounted by an Imperial Crown, also gold, (*iv*) The MANTLE is of Imperial purple satin, lined with and fastened by a cordon of white silk, with purple silk and gold tassels attached On the left side a representation of the Star of the Order

A Knight Commander wears (*a*) around his neck a ribbon two inches in width, of the same colour (purple) and pattern as a Knight Grand Commander, pendent therefrom a badge of smaller size: (*b*) on his left breast a star, similar to that of the first class, but the rays of which are all of silver.

The above mentioned Insignia are returned at death to the Central Chancery, or if the Knight was resident in India to the Secretary of the Order at Calcutta

A Companion wears from the left breast a badge (not returnable at death) of the same form as appointed for a Knight Commander, but of smaller size, pendent to a like ribbon of the breadth of one and a half inches

Sovereign of the Order —The King Emperor of India

Grand Master of the Order.—Lord Hardinge

Honorary Knights Grand Commanders, (G C I E)

The ex-Emperor of Korea

Extra Knight Grand Commander (G C I E)

The Duke of Connaught

Knights Grand Commanders (G C I.E)

Lord Reay
The Rao of Cutch
Lord Lansdowne
Lord Harris
The Nawab of Tonk
Sir James Lyall
Lord Elgin
The Wali of Kalat
Lord Sandhurst
Maharaja of Katauli
Thakur Sahib of Gondal
Thakur Sahib of Morvi
Sir George Faudel-Phillips
The Maharaja of Benares
Sir Sher Muhammad Khan of Palanpur
Lord Curzon of Kedleston
The Maharaja of Jaipur
The Maharaja of Orchha
Lord Ampthill
Maharao of Bundi
General Sir Alfred Gaselee
The Maha Rao of Sirohi
The Aga Khan
The Maharaja of Travancore
Lord Lamington
The Begam of Bhopal
Sir Edmund Ellis
The Nawab of Janjira
Sir Walter Laurence
Sir Arthur Lawley
The Maharaja of Bikaner
The Maha Rao of Kota
Lord Sydenham
Lord Kitchener
The Nawab of Rampur
Maharaj Sir Kishen Parshad
Lord Carmichael
Maharaja of Kashmir
Sir Louis Dane
Maharaja of Bobbili
Lord Stamfordham
Sir Guy Fleetwood Wilson
Sir John Jordam
The Maharana of Udaipur
The Maharaja of Patiala
The Mir of Khairpur
The Raja of Cochin
The Nawab of Dacca
Lord Pentland

The Raja of Pudukottai
Lord Willingdon
Maharaja of Kolhapur

Honorary Knights Commanders (K C I E.)

Sir Leon E Clement-Thomas
H E Sir Hussein Kuli Khan, Mokhber-ed-Dowlet
Sir Sven Hedin
The Sheikh of Mohammerah
Gen Sir Albert Houtum Schindler
The Sheikh of Koweit

Knights Commanders (K C I E)

Sir Alexander Meadows Rendel
Sir George Christopher Molesworth Birdwood
Surg -Gen Sir Benjamin Simpson
Sir Albert James Leppoc Cappel
Sir Donald Mackenzie Wallace
Sir Alfred Woodley Croft
Sir Bradford Leslie
Sir Arthur Nicolson
Sir Guildford Molesworth
Sir Frederick Russell Hogg
Raja of Venkatagiri
Sir Henry Mortimer Durand
Sir Arthur George Macpherson
Sir William Markby
Sir Henry Stuart Cunningham
Raja of Lunawara
Sir Roper Lethbridge
Sir Edward Charles Kayll Ollivant
Sir Henry Hoyle Howorth
Sir Henry Seymour King
Sir Wm Brereton Hudson
Gen Sir Thomas Edward Gordon
Sir John Lambert
Baron Inchcape
Col Sir Henry Revenshaw Thuillier
Sir Wm R Brooke
Maharaja of Gidhaur
Lieut -Col Sir Adelbert Cecil Talbot
Maj -Gen Sir Thomas Dennehy
H H Maharaja of Ajaigarh
Sir Henry William Bliss
Nawab of Loharu
Col Sir William Bisset
Gen Sir Edward Stedman
Sir John Jardine
Rear-Admiral Sir John Hext
Sir Mancherjee Bhownaggree
Col Sir Thomas Holdich
Sir Arthur Wilson
Sir Andrew Wingate
Kunwar Sir Harnam Singh, Ahluwalia
Sir S Subramaniya Aiyar
Sir Alexander Cunningham
Sir Henry Evan Murchison James
Nawab Sir Shahbaz Khan, Bugti of Baluchistan
Sir James George Scott
Maharaja of Darbhanga
Col Sir Samuel Swinton Jacob
Sir Lawrence Hugh Jenkins
Sir Herbert Thirkell White
Surg.-Gen Sir Benjamin Franklin
Sir Frederick Augustus Nicholson
Sir Arthur Upton Fanshawe
Raja Dhiraj of Shahpura
Sir Gangadhar Rao Ganesh, Chief of Miraj (senior Branch)
Sardar Sir Ghaus Bakhsh, Raisani
Sir Henry Thoby Prinsep
Sir Pherozeshah Merwanji Mehta
Brevet-Col Sir Buchanan Scott
Col Sir John Walter Ottley
H H Raja of Sailana
Lieut -Col Sir Francis Edward Younghusband
Major-General Sir James R L Macdonald
Sri Sir Ugyen Wangchuk, Tongsa Penlop of Bhutan
Sir Frederic Styles Philpin Lely
Lt -Col Sir Arthur Henry McMahon
Gen Sir Donald James Sim McLeod
Maharaja of Bahampur
Sir Francis Whitmore Smith
Nawab of Pahasu
Rajgarh H H Raja Sir Bane Singh Bahadur
Sir Thomas Gordon Walker
Sir Arthur Naylor Wollaston
Sir Muhammad Aslam Khan
Sir Thomas Henry Holland
Nawab of Hyderabad
Lieut -Col Sir George Olaf Roos-Keppel
H H Maharajadhiraja of Kishangarh
Raja of Mahmudabad
Sir Trevredyn Rashleigh Wynne
Surg -Gen Sir Gerald Bomford
Sir Richard Morris Dane
Maharajadhiraja of Burdwan
Raja of Poonch
Prince Ghulam Muhammad Ali Khan Bahadur
Sir William Stevenson Meyer
Sir Wilhelm Schlich
Sir Theodore Morison
Maj -Gen Sir Robert Irvin Scallon
Sir John David Rees
Rear-Admiral Sir Edmond John Warre Slade
Sir John Benton
Sir Frederick William Duke
Sir Archdale Earle
Sir Charles Stewart-Wilson
Maj -Gen Sir Malcolm Henry Stanley Grover
Sir Charles Raitt Cleveland
Lieut -Gen Sir Douglas Haig
Yuvaraja of Mysore
Lieut -Col Sir Hugh Daly
Sir Henry Parsall Burt
Sir James Houssemayne DuBoulay
H H Maharajadhiraja of Charkhari State, Bundelkhand
Sir Rajendra Nath Mukharji
Lieut -Col Sir Henry Beaufoy Thornhill
Sir Gangadhar Madho Chitnavis
H H Nawab of Jaora State
H H Raja of Sitamau State
Raj Sahib Sir Amarsinhji Banesinhji (Vankaner)
Sir Ram Krishna Gopal Bhandarkar
Sir Michael Filose
Rear-Adm Sir Colin Richard Keppel
Surg -Gen Sir Arthur Mudge Branfoot
Sir John Stanley
Sir Saint-Hill Eardley-Wilmot
Col Sir Percy Zachariah Cox
Sir Francis Edward Spring
Maharaja Sri Sir Vickrama Deo
H H. Maharaja of Sikkim
Rana of Thalrai (Khajuragaon)
Raja of Salempur
H H Maharaja of Alwar
H. H. Maharawal of Partabgarh
H H. Raja of Rajpipla
Diwan Bahadur Sir Seth Kasturchand Daga
H. H. Maharaja of Bijawar State, Bundelkhand

Gen Sir Mowbray Thomson
Sir John Twigg
Sir George Abraham Grierson
Sir Marc Aurel Stein
Maj -Gen Sir Francis Henry Rutherford Drummond
H H Maharawal of Dungarpur
Nawab Sir Bahram Khan
Sir Henry Alexander Kirk
Sir Alfred Gibbs Bourne
Chief of Jamkhandi
Sir Frank Campbell Gates
Sir George Macartney
Sir Edward Douglas Maclagan
Maj.-Gen Sir George John Younghusband

Ex-Officio Companions (C. I. E)

The Earl of Cromer
Sir Courtenay P Ilbert
Sir Theodore C Hope

Honorary Companions (C. I. E.)

Laurent Marie Emile Beauchamp
Jean Etienne Justin Schneider

Companions (C. I. E.)

Richard Kaye Puckle
Lieut -Gen Sir Henry Moore
Gen. William Gordon
Thomas Mitchell Gibbon
George Smith
Col John H Rivett-Carnac
Lieut -Col The Hon. George Campbell Napier
Roscoe Bocquet
Lieut -Gen James F Tennant
Pierre Francois Henri Nanquette
Stephen Paget Walter Vyvyan Luke
Sir Charles James Lyall
Charles Edward Pitman
Raja Sir Saurindra Mohan Tagor
Richard Isaac Bruce
Sir Steuart Colvin Bayley
Lieut -Col Charles William Owen
George Felton Mathew
Khan Bahadur Pestanji Jehangir
Hony Col John Robertson
Sir Henry Christopher Mance
Henry George Keene
Maj -Genl. Thomas Ross Church
Thakur Bichu Singh
John Faithfull Fleet
Rev. William Miller
Benjamin Lewis Rice
Col Robert Parry Nisbet
James Burgess
Mortimer Sloper Howell
Rai Bahadur Surat Chandra Das
Maj -Gen Viscount Downe
Frederick Charles Kennedy
Sir George Watt, M B
Lieut -Gen Augustus Le Messurier
Lieut Joseph Ralph Edward John Royle
Rai Mahta Punna Lalji
Lieut -Col Frederick D Raikes
William Wordsworth
Henry Montagu Matthews
Colonel John Stewart
The Rt. Hon Saiyid Ameer Ali
William James Maitland
Col Charles Weymss Muir
Sir Frank Forbes Adam
Frederick Thomas Granville Walton
Major -Gen Charles Smith Maclean
Major-Gen. James Cavan Berkeley
Charles Henry Tawney
Henry Irwin
Arthur H Hildebrand
Sir James L Walker
Surgn -Maj John Findlay
Rayner Childe Barker
Lieut -Col Charles Henry, Ellison Adamson
Col William Merriman, R E
Gen William Percival Tomkins
Berthold Ribbentrop
Langton P Walsh
Jeremiah G Horsfall
Edmund Neel
Major George L Holford
Maj -Gen L H E Tucker
James Edward O'Conor
Col Thomas Holbein Hendley
Ernest Octavius Walker
Sir John Prescott Hewett
Mancherji Kavasji Murzban, Khan Bahadur
Frederick C Daukes
Lieut -Col Henry Percy Poingdestre Leigh
Sir J Bampfylde Fuller
George Pringle Rose
Diwan Ganpat Rai
Sir William Turner Thiselton-Dyer
William B Oldham
Major-Gen G F L Marshall
Edward Horace Man
Commdr Alexander Campbell
Shaikh Baha-ud-din, Nawab-i-Am
Col David D Cunningham, M B.
Bertram S Carey
Lieut -Gen Sir G. L R. Richardson
Paul Gregory Melitus
Col Ernest H Fenn
Lt -Col Sir Richard Carnac Temple
Edward C S George
Robert W E H Vincent
Lt -Col J Manners Smith
John Stuart Donald
Col Frank William Chatterton
Graham Anderson
Sri Ram Bhikaji Jatar
Fazulbhai Visram
Col H S Jarett
Col H B Sanderson
Arthur C Hankin
Adam G Tytler
Charles E Buckland
Alexander B Patterson
Harry A Acworth
Col C A Porteous
Col C T Lane
Sir Steyning W Edgerley
Maulvi Abdul Jabbar, Khan Bahadur
Col W R Yeilding
Henry J Stanyon
Sir Patrick Playfair
Frederick John Johnstone
Col Samuel Haslett Browne
Dr Rash Behari Ghosh
Frank Henry Cook
Francis Erskine Dempster
Col John Shakespear
Lieut -Col James John Macleod
Capt Norman Franks
Sir William Earnshaw Cooper
Maharaj Rajashri Sankara Subbaiyar
Khan Bahadur Naoroji Pestonji Vakil
Col. Russell Richard Pulford
Col Algernon George Arnold Durand
Frederick Shore Bullock

ten. Sir Beauchamp Duff
Col. Robert Alexander Wauhope
Edwin Darlington
. Strachan
Dr. Waldemar M Haffkine
Dr. Augustus Frederick Rudolf Hoernle
Rustamji Dhanjibhai Mehta
Charles Godolphin William Hastings
Khan Bahadur Mancherji Rustamji Dholu
Col. John Charles F Gordon
Charles Stewart Crole
Sir Benjamin Robertson
Duncan James Macpherson
John Campbell Arbuthnott
Sir Robert Warrand Carlyle
Henry Cecil Ferard
Lieut -Col John Ramsay
Robert Batson Joyner
Charles George Palmer
Lieut -Col Samuel John Thomson
Lieut -Col Sir David Parkes Masson
Lieut -Col Frederick Fitzgerald MacCartie
Rai Bahadur Sir Bipin Krishna Bose
. C H Snow
Hony Lieut -Col Kunwar Bir Bikram Singh
Major A B Minchin
W T Van Someren
Col Charles Still
Col H K McKay
A Izat
Rai Bahadur Dhanpat Rai
Lieut -Col W B Browning
Lieut -Col J J Holdsworth
Jack Francis Needham
Edalji Dinshah
Robert Giles
Vishwanath Patankar Madhava Rao
Col. Walter Gawen King
James Sykes Gamble
Sir George William Forrest
Lieut -Col Frank Popham Young
Reginald Hawkins Greenstreet
Khan Bahadur Kazi Jalal-ud-din, Akhundzada, of Kandahar
John Sturock
John Stuart Beresford
Lieut -Col Malcolm John Meade
Edward Louis Cappel
Sir Lancelot Hare
George Moss Harriott
Frederick George Brunton Trevor
Rai Bahadur Kalka Das Datta
Diwan Bahadur P Rajaratna Mudaliyar
Sir Walter Charleton Hughes
Edmund Penny
Henry Marsh
Col. Almer Martin Crofts
Lieut -Col Bertrand Evelyn Mellish Gurdon
Rai Bahadur Kailash Chandra Bose
Henry Felix Hertz
Courtenay Walter Bennett
H. H. Raja Sir Bhure Singh
Rear-Admiral Walter Somerville Goodridge
Col. Solomon Charles Frederick Peile
Bertram Prior Standen
Henry Alexander Sim
Lieut -Col Sir James Robert Dunlop-Smith
Lt -Col John Crimmin
Lieut -Col. Granville Henry Loch
Fardunji Kuvarji Tarapurvala
Babu Kali Nath Mitter
Sir William Jameson Soulsby
Col. William John Read Rainsford
Col Oswald Claude Radford
Col George Kenneth Scott-Moncrieff
Lieut -Col Thomas Edwin Scott
Lieut -Col Laurence Austine Waddell
Sardar Mir Asaf Ali Khan
Subadar-Major Sardar Khan
Hony Capt Yasin Khan
Commander Gerald Edward Holland
Sidney Preston
Sir Murray Hammick
Sir Alexander Pedler
Sir Richard Amphlett Lamb
Alexander Lauzun Pendock Tucker
Diwan Bahadur Kanchi Krishnaswami Rao
Lieut -Col John Chbborn
Col George Wingate
Lieut -Col George Hart Desmond Gimlette
Arthur Henry Wallis
Alexander Johnstone Dunlop
George Herbert Dacres Walker
Lieut -Col Alexander Fleetwood Pinhey
Rai Bahadur Nanak Chand
Sir Spencer Harcourt Butler
Major Frank Cooke Webb Ware
Hony Major Thomas Henry Hill
Alexander Porteous
Col Thomas Elwood Lindsay Bate
Hon Lockhart Mathew St Clair
Marshall Reid
Rao Bahadur Pandit Sakhdeo Parshad
Stuart Mitford Fraser
John Gordon Lorimer
Lieut -Col Herbert Lionel Showers
Maj -Gen Francis Edward Archibald Chamier
Lt -Gen Ernest De Brath
Rai Bahadur Sir Pratul Chandar Chatterji
Frederick Gurr Maclean
Walter Bernard de Winton
Algernon Elliott
Lt -Col Charles Arnold Kemball
Sir Herbert William Cameron Carnduff
Lieut -Col John Hodding
Edward Giles
Havilland Le Mesurier
Robert Nathan
Lieut -Col Alfred William Alcock
Arthur Hill
Douglas Donald
Jagadish Chandra Bose
Mehtar Shuja-ul-Mulk, of Chitral
Mir Muhammed Nazim Khan, Mir of Hunza
Raja Sikandar Khan, of Nagar
Sir William Dickson Cruickshank
Thomas Jewell Bennett
Henry Wenden
Charles Henry Wilson
Rao Bahadur Shyam Sundar Lal, Diwan of Kishangarh
Robert Herriot Henderson
Kun Kyi, Sawbwa of Mong Nai
Mir Mehrulla Khan, Raisani
Nawab Fateh Ali Khan, Kazilbash
Faridoonji Jamshedji
Charles Henry West
John Pollen
Charles Brown
George Huddleston
Lieut -Col. Montagu William Douglas
Charles James Keene
Lieut -Col. Havelock Hudson
Lieut -Col. Arthur D'Arcy Gordon Bannerman
Rai Bahadur Gunga Ram
Gopal Krishna Gokhale

Robert Douglas Hare
William Bell
Claude Hamilton Archer Hill
Edward Henry Scamander Clarke
Webster Boyle Gordon
James Walker
Lieut.-Col. Robert Arthur Edward Bonn
Madhu Sudhan Das
George James Perram
Raja of Kila Partabgarh
Sir C. Sankaran Nayar
William Nimmo Potter
Stephen Finney
Edward Waller Stoney
Alexander Monro
Walter Home
C. W. Waddington
Raja Rampal Singh of Kont Sadhuli
Khan Bahadur Barjorji Dorabji Patel
John Claude White
Major W. F. F. O'Connor
Lionel Trunninger
Lieut.-Col. Robert Bird
David Bayne Horn
Lieut.-Col. Charles Brooke Rawlinson
Richard Grant Peter Purcell McDonnell
Captain George Wilson
Commdr. Thomas Webster Kemp
William Harrison Moreland
Edward Sneade Boyd Stevenson
Pirajirao Bapu Saheb Ghatge
Sardar Jallab Khan
Henry Robert Conway Dobbs
Rai Sri Ram Bahadur
Surg.-Gen. William Richard Browne
Montague de Pomeroy Webb
Hugh William Orange
Lieut.-Col. Charles Archer
Lionel Maleng Wyndh
Arthur William Uglow Pope
Nicholas Dodd Beatson-Bell
George Frederick William Thibaut
Col. William Arthur Watson
Major Alain Chartier de Lotbinière Joly de Lotbinière
Major Arthur Francis Ferguson-Davie
Major Aubrey John O'Brien
Herbert Cunningham Clogstoun
Thomas Robert John Ward
Brig.-Gen. Sir Rolls Estouteville Grimstone
Lieut.-Col. Charles Ferguson Campbell
Lieut.-Col. Harry Davis Watson
Hon. Derek William George Keppel
Commander Sir Charles Leopold Cust
Lt.-Col. Sir David Prain
Col. William John Daniell Dundee
Bijan Egerton
Hony. Capt. Malik Umar Hayat Khan, Tiwana of Kalra
Sir Ibrahim Rahimtoola
Pandit Sundar Lal
Edward Albert Gait
Robert Greig Kennedy
Hony. Col. Arthur Hills Gleadowe-Newcomen
Edward Anthony Doran
Col. Henry Thomas Pease
Lieut.-Col. Malcolm Sydenham Clarke Campbell
Lieut.-Col. Arthur Le Grand Jacob
John Bolster
John Strathedeen Campbell
Frederick Palmer
Shrimant Anand Rao Gaekwar
Thomas Henry Stillingfleet Biddulph
Surgn.-Lieut.-Col. Sir Warren Roland Crooke-Lawless
Lieut.-Col. Alexander John Maunsel MacLaughlin
George Claudius Beresford Sterling
Francis St. George Mannes-Smith
Major David Melville Ballington
Sir Chinubhai Madhavlal
Samuel Digby
Pazhamaneri Sundaram Aiyar Sivaswamy Aiyar
Francis Guy Selby
Brig.-Gen. William Riddell Birdwood
William Herbert Dobbie
Alfred Hamilton Grant
Sao Mawng, K.S.M., Sawbwa of the Shan State of Yawngwe Hwe
Lieut.-Col. John Norman Macleod
Sir Arthur Mitford Ker
Rear-Admiral George Hayley-Hewett
Ralph Buller Hughes-Buller
Lieut.-Col. Francis Frederic Perry
Lt.-Col. Francis Granville Bevill
Rai Sahib Diwan Daya Kishen Kaul
Lieut.-Col. Stuart Hill Godfrey
Major Denys Brooke Blakeway
Khan Bahadur Sahebzada Abdul Qaiyum Khan
Maung Ba Tu
Col. Ernest William Stuart King Maconchy
William Maxwell
William Ellis Lardine
Thomas Corby Wilson
Lieut.-Col. Alfred Horsford Bingley
Sir Frederick Loch Halliday
Lt.-Col. Charles Thorp Jessop
Percy Wyndham
Hugh Spencer
Charles Ernest Low
Lieut.-Col. Keith David Erskine
Cecil Ward Chichele-Plowden
William King-Wood
Lieut.-Col. Richmond Trevor Crichton
Hkun Lu Sawlwa of Laihka
Albert Claude Verrieres
Raja Ram Singh of Rampura
Diwan Bahadur P. Rajagopala Charlyar
Maulvi Rahim Baksh
Munshi Aziz-ud-din
Nilambar Mukharji
Alfred Thomas Whittle
Rai Bahadur Kali Prasanna Ghosh
Godfrey Butler Hunter Fell
John Newlands
Col. James Henry Elias Beer
Lieut.-Col. Henry Parkin
Col. Robert Neil Campbell
Montagu Sherard Dawes Butler
Major Stuart George Knox
Capt. Cecil Godfrey Rawling
Edgar Thurston
Rai Natthi Mal Bahadur of Khurja
Rai Bahadur Buta Singh
James Bennett Brunyate
Frederick James Wilson
Henry Wheeler
Reginald Edward Enthoven
Col. Wilfred Malleson
Henry Venn Cobb
Reginald Hugh Brereton
Nrittya Gopal Basu
William Lochiel Berkeley Souter
Prabashankar Pattani

Joseph John Mullaly
William Didsbury Sheppard
Col Roderick Macrae
Lieut -Col Victor Reginald Brooke
Oswald Vivian Bosanquet
Tanjore Madava Rao Ananda Rao
John Hubert Marshall
William Arthur Johns
Charles Michie Smith
Lieut -Col Arthur Grey
John Barry Wood
Lt -Col George Grant Gordon
Major-General Ralph Champneys Broome
Col Frank Goodwin
Lieut -Col George Frederick Chenevix-Trench
Archibald Young Gibbs Campbell
Andrew Bigoe Barnard
James Adolphus Gunder
John Paul Warbarton

James William Douglas Johnstone
Fakir Sayad Iftakhar-ud-din
James Herbert Seabrooke
Walter Culley Madge
Lieut -Col Wallace Christopher Ramsay Stratton
James Scott
Major Edward Charles Bayley
Rai Bahadur Lala Shiv Prasad
Frederick William Johnstone
Maj Arthur Louis Bickford
Edward Gelson Grigson
William Malcolm Hailey
Col Benjamin William Marlow
Herbert Gerald Tomkins
Henry Whitby Smith
Major Francis Boville Prideaux
Major Arthur Prescott Trevor
Lieut -Col Ramsay Frederick Clayton Gordon

Lieut -Col Charles MacTaggart
Nawab Muza Mahdi Husain
Rai Kishan Shah Bahadur
Hopetoun Gabriel Stokes
Lieut -Col Leonard Rogers
Nawab Abdul Majid
Ludovic Charles Porter
Henry Sharp
Arthur Venis
Mahamahopadya Hara Prasad Shashtri
Lt -Col Allen McConaghey
Nawab Kaisar Khan, Chief of the Magassi Tribe
Rai Bahadur Diwan Jamiat Rai
Robert Charles Francys Volkers
Henry Hubert Hayden
Alexander Muirhead
The Maharaj of Sikkim
Lieut -Col Edulji Palanji Frenchman

Alexander Emanuel English
George Frederick Arnold
Maung Myat Tun Aung
George Cunningham Buchanan
William Rucker Stikeman
Edward Robert Kaye Blenkinsop
George Sanky Hart
Nawab Muhammad Salamullah Khan Bahadur Jagirdar of Deulghat
John Henry Kerr
Lieut -Col George Henry Evans
Major Henry Burden
Maharaja Raghunath Singh, of Dhasuk
George William Kuchler
John Ghest Cumming
Rev John Anderson Graham
Francis Hugh Stewart

Louis James Kershaw
William Taylor Cathcart
Maneckjee Byramjee Dadabhoy
Hugh Murray
Sawai Rao Raja Raghunath Rao Dinkar (Gwalior)
Pandit Kailas Narayan Haksar
Major Ernest Douglas Money
Major Hugh Roderick Stockley
Mokshagundam Visvesvaraya
Lieut -Col Richard Godfrey Jones
Jaghirdar Desraj Urs
Major Armine Biereton Dew
Rai Sahib Diwan Amar Nath (Kashmir)
Lieut -Col James Reed Roberts
Lieut Col Lawrence Impey
Raja of Kothi
Col Alexander William Macrae
Arthur Ernest Lawson

Albion Rajkumar Banerji
Major Frederick Fenn Elwes
Col William Burgess Wright
Cecil Archibald Smith
Sardar Shamsher Singh, of the Jind State
Baba Gurbaksh Singh Bedi
Col Gilbert Walter Palin
Lieut -Col Robert Edward Pemberton Pigott
Major William Daniel Henry
Gerald Francis Keatinge
Major John Glennie Greig
Sardar Naoroji Pudamji
Vala Laksman Moram Chief of Dhana-Devli
Claude Alexander Barron
Leonard William Reynolds
Major Percy Molesworth Sykes
Charles Archibald Walker Rose
Major Arthur Dennys Gilbert Ramsay

Capt John Mackenzie
Pierce Langrishe Moore
Alfred Chatterton
Major Arthur Abercromby Duff
Major John Lawrence William ffrench-Mullen
Bernard Coventry
Albert John Harrison
Richard Hamilton Campbell
Rao Bahadur Bangalore Perumal Annaswami Mudaliar
Sidney Kilner Levett-Yeats
Frederick George Wigley
Prafulla Chandra Ray
Col Francis Raymond
Col Michael Joseph Tighe
Lieut -Col William Bernard James
Major Sydney D'Aguilar Crookshank
Edward Denison Ross
John Hugh Cox

Khan Bahadur Muhammad Israr Hasan Khan
Major Reginald O'Bryan Taylor
David Wann Aikman
Rai Bahadur Pandit Hari Kishan Kaul
Lieut -Col Frederick William Wodehouse
Col Richard Henry Ewart
Col Maitland Cowper
Thomas Walker Arnold
Lieut -Col Charles Henry James
Rana Hira Singh of Dhami
Alexander Blake Shakespear
John Hope Simpson
Major Hugh Stewart
Major William Glen Liston
Lieut -Col Edwin Henry de Vere Atkinson
Walter Stanley Talbot
Frank Adrian Lodge

Col Robert William Layard Dunlop
Lieut.-Col Walter James Buchanan
Hrishi Kesh Laha
Nallini Kesh Laha
Nalini Bhusan Gupta
Joseph Terence Owen Barnard
Lieut -Col. Townley Richard Filgate
Alexander Macdonald Rouse
Charles Cahill Sheridan
Capt Herbert de Lisle Pollard-Lowsley
Major William Wilfrid Bickford
Lieut.-Col John George Knowles
Major George Dodd
Henry Cuthbert Streatfeild
Major Cecil Kaye
William Foster
Lt.-Col Appaji Rao Ankkar
W. H. Arden-Wood
Sardar Arur Singh
W. C. Ashmore
Major Blackham
P R Cadell
Capt W L Campbell
Major G S Crawford
W C M Dundas
Lt -Col V N Hickley
H. F Howard
J H. Lace
L. Mercer
Bhupendra Nath Mitra
A P Muddiman
J R Pearson
Sheo Shankar Sahay
H L Stephenson
Major H B St John
J. H. Stone
Abanindra Nath Tagore
Major G K Walker
C C Watson
Hugh Edward Clark
Percy James Mead
Deba Prosad Sarbadhikari
Frank Charles Daly
Mir Soams Shah, Khan Bahadur
Haji Bukhsh Ellahie, Khan Sahib
Frank Edwin Gwythier
James Gargrave Covernton
Louis E. B Cobden-Ramsay
William Pell Barton
George Batley Scott
Rangnath Narsingh Mudholkar
Major Charles Bliss
Hebbalalu Velpanur Nanjundayya
Major James Curry Robertson
William Sinclair Marris
George Frederick Buckley
Major J. D. E. Holmes
Raghunath Venkaji Sabnis

OFFICERS OF THE ORDER.

Secretary, Lieut -Col Sir A. H. McMahon
Registrar, Col Sir Douglas Dawson

The Imperial Order of the Crown of India.

This Order was instituted Jan. 1, 1878, and for a like purpose with the simultaneously created Order of the Indian Empire. It consists of the Queen and Queen Mother with some Royal Princesses, and the female relatives of Indian Princes or of persons who have held conspicuous offices in connection with India.

Badge, the royal cipher in jewels within an oval, surmounted by an Heraldic Crown and attached to a bow of light blue watered ribbon, edged white. Designation, the letters C. I.

Sovereign of the Order.

THE KING-EMPEROR OF INDIA.

Ladies of the Order (C. I.)

Her Majesty The Queen
H M Queen Alexandra
H M the Queen of Norway
H. R H. the Princess Royal
H. R. H the Princess Victoria
H R H the Princess Christian of Schleswig-Holstein
H R H the Princess Louise (Duchess of Argyll)
H R H Princess Henry of Battenberg
H I and R H the Dowager Duchess of Saxe-Coburg and Gotha
H R H the Duchess of Connaught
H R H. the Duchess of Albany
H. R H the Duchess of Cumberland
H. R H the Princess Fredericka Baroness of von Pawel-Rammingen
H R H the Dowager Grand Duchess of Mecklenburg-Strelitz
H R H the Princess Ferdinand of Roumania
H I and R H the Grand Duchess Cyril of Russia
H R H the Hereditary Princess of Hohenlohe-Langenburg
H R H the Crown Princess of Sweden
H. R H the Princess Patricia of Connaught
H. R H the Princess Victoria Elizabeth Augustine Charlotte, Hereditary Princess of Saxe-Meiningen
H H the Princess Victoria of Schleswig-Holstein
H. H the Princess Marie-Louise of Schleswig-Holstein
Baroness Kinloss
Dowager Countess of Mayo
Mrs Charles Coates
Lady Jane Emma Crichton
Dowager Countess of Lytton
Dowager Baroness Lawrence
Lady Temple
Dowager Baroness Napier of Magdala
Lady Grant Duff
Dowager Marchioness of Dufferin and Ava
Mrs George Cornwallis-West
Baroness Reay
H H Maharani of Cooch Behar
Marchioness of Lansdowne
Baroness Harris
H. H Maharani of Gwalior
Constance Mary Baroness Wenlock
H H Maharani Sahib Chimna Bai Gaekwar
H H Rani Sahib of Gondal
H H the Dowager Maharani of Mysore
Lady George Hamilton
H H. the Maharani Sahiba of Udaipur
Alice, Baroness Northcote
Nora Henrietta, Countess Roberts
Amelia Maria, Lady White
Mary Katherine, Lady Lockhart
Baroness Ampthill
Countess of Minto
Baroness Hardinge of Penshurst
Marchioness of Crewe
H. H. Begum of Bhopal
H. H. Maharani Shri Nundkanvarba

THE KAISAR-I-HIND MEDAL.

This decoration was instituted in 1900, the preamble to the Royal Warrant—which was amended in 1901 and 1912—being as follows —"Whereas We, taking into Our Royal consideratio that there do not exist adequate means whereby We can reward important and use ul services rendered to Us in Our Indian Empire in the advancement of the public interests of Our said Empire, and taking also into consideration the expediency of distinguishing such services by some mark of Our Royal favour Now for the purpose of attaining an end so desirable as that of thus distinguishing such services aforesaid, We have instituted and created, and by these presents for Us, Our Heirs and Successors, do institute and create a new Decoration" The decoration is styled "The Kaisar-i-Hind Medal for Public Service in India" and consists of two classes The Medal is an oval shaped Badge or Decoration—in gold for the First Class and in silver for the Second Class—with the Royal Cypher on one side and on the reverse the words "Kaisar-i-Hind for Public Service in India" it is suspended on the left breast by a dark blue ribbon

Recipients of the 1st Class.

Abdus Samad Khan of Rampur
Allnut, The Rev Samuel Scott
Amarchand, Rao Bahadur Ramnarayan
Ampthill, Margaret, Baroness
Ashton, Albert Frederick
Barber, Benjamin Russell
Barnes, Major Ernest
Beaty, Francis Montagu Algernon
Beck, Miss Emma Josephine
Benson, Lady
Bikanir, Maharaja of
Bingley, Colonel Alfred
Bonig, Max Carl Christian
Booth-Tucker Frederick St. George de Lautour
Bosanquet, Oswald Vivian
Bose, Dr Kailash Chandra
Bramley, Percy Brooke
Bray, General Denys DeSaumarez, in Baluchistan
Broadway, Alexander
Brunton, James Forest
Buchanan, Rev John
Burn, Richard
Burnett, General Sir Charles John
Calnan, Denis
Campbell, Lieutenant-Colonel Robert Neil
Campion, John Montriou
Carleton, Marcus Bradford
Chandra, Rai Bahadur Hari Mohan
Chatterton, Alfred
Chaudhuri, Raja Sarat Chandra Rai
Chetty, Dewan Bahadur K. P. Pultanna
Chinai, Ardeshir Dinshaji
Chitnavis, Shankar Madho
Coldstream William
Comley, Mrs Alice
Cousens, Henry
Cowasjee, Merwanjee
Cox, Arthur Frederick
Crawford, Francis Colomb
Dane, Lady
Darbhanga, Maharaja of
Das, Ram Saran
Davies, Arthur
Davies, Mrs Edwin
Dawson, Lieutenant-Colonel Charles Hutton
Deane, Lieutenant-Colonel Herbert Edward
deLotbiniere, Lieutenant-Colonel Alain C. Joly
Dewas (Junior Branch), Raja of
Dyal Singh, Sardar Man, Sardar Bahadur
DuBern, James Emile
Dyson, Lieutenant-Colonel Thomas Edward
Earle, The Hon'ble Sir Archdale
Egerton, William
Ewing, The Rev Dr J C R
Firth, Mrs E J (with Gold Bar)
Ghosal, Mr Jyotsnanath
Glazebrook, N S
Gonzaga, Rev Mother
Graham, The Rev John Anderson
Grattan, Major Henry William
Guilford, The Rev E.
Gwalior, Maharaja of
Gwyther, Major Arthur
Hahn, The Rev Ferdinand
Haig, Lieutenant-Colonel Patrick Balfour
Hall, Harold Fielding Patrick
Hamilton, Major Robert Edward Archibald
Harvest, Major Herbert deVere
Hardinge, Wimifred Selina
Hickie, Edward George
Hildesley, The Rev Alfred Herbert
Hodgson, Edward Marsden
Hogan, W J Alexander
Holderness, Sir Thomas William
Home, Walter
Howard, Mrs Gabrielle Louise Caroline
Hume, The Rev R A.
Humphreys, Robert
Hutchinson, Sir Sydney Hutton Cooper
Hutchinson, Captain William Gordon
Hutwa, The Maharani Jnan Manjari Kuori of
Hydari, Mrs Amina
Irvine, Lieutenant-Colonel Thomas Walter
Ismail, Muhammad Yusuf
Ives, Harry William Maclean
Jacob, Colonel Sir Samuel Swinton
James, Lieutenant-Colonel Charles Henry Jankibai
Joshi, Ram Bhau Meghasham, Rao Bahadur
Kapur, Raja Ban Bihari
King, Mrs D
Kirkpatrick, Clarence
Klopsch, Dr Louis
Ko, Taw Sein
Kothari, The Hon'ble Mr Jehangir Hormusj
Lamb, The Hon'ble Sir Richard Amphlett
Lindsay, D'Arcy
Ling, Miss Catharine Frances
Lovett, The Hon'ble Mr Harrington Verney
Luck, Wilfred Henry
Lyall, Frank Frederick
Lyons, Colonel Robert William Steele
Macwatt, Lieutenant-Colonel Robert Charles
Madhava Rao, Vishwanath Pattankar
Madhavan Nair, M R Ry T. Avergal
Mahdi Husain, Nawab Mirza
Malegaon, Raje of
Malvi Tribhuvandas Narottandas
Manners-Smith, The Hon'ble Mr. Francis St George
Mary of St Paula, Rev. Mother
Mayes, Herbert Frederick
McCarrison, Major Robert
McCloghry, Colonel James
Mechtilda, Rev. Mother
Miller, The Rev. William

Minto, Mary Caroline
Mitra, Dr A
Morgan, George
Morrison, Honorary Captain James
Mudliar, Sardar Coopuswamy Vizianagram
Muir Mackenzie, Lady Thérèse
Murray, George Ramsay
Naidu, Mrs Sarojini
Nanak Chand
Nariman, Dr Temulji Bhikaji
Neve, Dr Ahrtur
Nisbet, John
Noyce, William Florey
Oldham, Charles Evelyn Arbuthnot William
O'Meara, Major Eugene John
O'Donnel, Dr Thomas Joseph
Pandit, Sitaram Narayan
Pitcher, Colonel Duncan George
Plant, Captain William Charles Trew Gray Gambier
Poynder, Lieutenant-Colonel John Leopold
Ravi Varma, Koil Tamburan
Reid, Frederick David
Reynolds, Leonard William
Rondy, The Very Rev The Abbe Noel
Rost, Major Ernest Reinhold
Row, Dr Raghavendra
Roy, Babu Harendra Lal
Roy, Rao Jogendra Narayan
Sailana, Raja of
Sell, The Rev Canon Edward
Semple, Lieutenant-Colonel Sir David
Sewell, The Rev J D W , S J
Samthar, Maharaja of
Sharp, Henry
Shepherd, Rev. James
Sheppard, Mrs Adeline B
Sheppard, William Didsbury
Shore, Lieutenant-Colonel Robert
Shoubridge, Major Charles Alban Grevis
Singh, Raja Bhagwan Bakhsh
Singh, Rai Hira
Singh, Raja Kamaleshwari Pershad
Sinha, Purnendu Narayan
Skiefsrud, The Rev Larsorsen
Smith, Lieutenant-Colonel Henry
Sorabji, Miss Cornelia
Southon, Major Charles Edward
Spence, Christina Philippa Agnes
Sri Ram
Stanes, Robert
Stark, John Theodore Roebuck
Stokes, Dr William
Sukhdeo Prasad, Pandit
Talati, Edalji Dorabji
Taylor, The Rev George Pritchard
Taylor, Dr Herbert F Lechmere
Thomas, The Rev Stephen Sylvester
Thurston, Edgar
Tilly, Harry Lindsay
Tucker, Major William Hancock
Turner, Dr John Andrew
Tyndale-Biscoe, The Rev. Cecil Earle
Tyrrell, Captain Jasper Robert Joly
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Venugopala, Raja Bahadur
Wagner, Rev Paul
Wake, Lieutenant-Colonel Edward St Aubyn
Wakefield, George Edward Campbell
Walker, Lady Fanny
Walter, Major Albert Elijah
Ward, Major Ellacott Leamon
Wheeler, The Rev. Edward Montague
Whitton, The Rev. David
Wilkins, Lieutenant-Colonel James Sutherland
Wilkinson, Lieutenant-Colonel Edmund
Wilson-Johnston, Joseph
Winter, Edgar Francis Latimer
Wood, Arthur Robert
Young, Albert Meredyth
Young, The Rev. John, Cameron
Younghusband, Arthur Delaval
Younghusband, Lieutenant-Colonel Sir Francis Edward

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Abdul Ghani
Abdul Hussain, Mian Bhai
Abdul Kadir
Abdul Majid Khan, Colonel Muhammad
Abdul Majid Khan
Abdul Rahman, Mahommed
Abdul Rahim
Abdur Razzak Khan, Subadar
Adavani, Motiram Showkiram
Agha Mohamed Khalil-Bin-Mohamed Karim
Ali Shabash, Shaikh
Allen, Rev Frank Van
Amar Nath, Lala
Amar Singh
Anastasie, Sister
Anderson, Andrew
Andrew, The Rev Adam
Anscomb, Major Allen Mellers
Apte, Hari Narayan
Askwith, Miss Anne Jane
Atkinson, Lady Constance
Augustin, The Rev Father
Aziz Husain, Khan Sahib Mir
Badri Parshad
Bahmanji Mancharji
Baker, Captain Thomas
Banerji, Professor Jamini Nath
Banks, Dr Charles
Bapat, Risaldar Sadashiva Krishna
Bardsley, Miss Jane Blissett
Bayley, Lieut -Colonel Edward Charles
Beatson-Bell, Nicholas Dodd
Beg, Mirza Kalich Beg Fridun
Best, James Theodore
Beville, Lieutenant-Colonel Francis Granville
Bhagwandas, Bai Zaoerbai
Bhajan Lal
Bhate, Pandit Balkrishna Govind
Bhide, Raoji Janardhan
Bhutt, Chhotelal Goverdhan
Bisheshwar Nath, Lala
Biswas, Babu Anonda Mohan
Blackham, Major Robert James
Blackwood, John Ross
Blake, The Rev William Henry
Bland, Miss Sophia
Blenkinsop, Edward Robert Kaye
Bolster, Miss Anna
Borrah, Babu Bolmarayan
Bowen, Griffith
Brahamanand, Pundit
Brander, Mrs Isabel
Bremner, Major Arthur Grant
Brock, Miss Lilian Winifred
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Browne, Charles Edward
Brown. Dr Edith
Burt, Bryce Chudleigh
Cain, Mrs. Sarah

Campbell, The Rev. Andrew
Campbell, Miss Kate
Campbell, Miss Susan
Campbell, The Rev. Thomas Vincent
Carr, Miss Emma
Carr, Thomas
Catherine, Sister
Cattell, Major Gilbert Landale
Cecilia, Sister Fannie
Chamberlain, The Rev William Isaac
Chandler, The Rev. John Scudder
Chatterji, The Rev K C
Chitale, Ganesh Krishna
Churchward, P. A.
Chye, Leong
Clancey, John Charles
Clerke, Honorary Major Louis Arthur Henry
Clutterbuck, Peter Henry
Correa, Miss Marie
Corthorn, Miss Alice
Coxon, Stanley William
Cumming, James William Nicol
Cummings, The Rev John Ernest
Cutting, Rev William
Dalrymple-Hay, Charles Vernon
Das, Ram, Lala
Das, Mathura, Lala
Das, Niranjan
Datta, Dr Dina Nath Pritha
Dawe, Miss Ellen
Dawson, Mrs Charles Hutton
Deane, George Archibald
Deogi, Hazi Ahmed, Khan Sahib
deKantzow, Mrs Mary Aphrasia
Desmond, Sergeant J
Dewes, Lieutenant-Colonel Frederick Joseph
Dhanpatrai, Sardar Bahadur
Dharm Chand, Lala
Dip Singh, Lieutenant
Douglas, The Rev John
Dun, Maung Ne
Dundas, Charles Lawrence
Dunlop, Alexander Johnstone
Durjan Singh, Thakur
Eaglesome, George
Edgell, Lieutenant-Colonel Edward Arnold
Emanuel, Mrs.
Evans, The Rev John Ceredig
Evans, Miss Josephine Annie
Farrer, Miss Ellen Margaret
Farzand-i-Ahmad, Khan Bahadur, Kazi
Freynet, The Rev. Father Etienne
Ffrench, Lieutenant-Colonel Thomas
Flashman, Thomas Charles
Fletcher, Miss
Forman, The Rev. Henry
Fox, Alfred Charles
Frances, Sister Jane
Fraser, William
Gajjar, Mrs Shivagauri
Garthwaite, Liston
George, Miss Jessie Eleanor
Godfrey, Thomas Leonard
Goenka, Baijnath
Goodbody, Mrs
Gorman, Patrick James
Goswami, Sri Sri Naradev Dakhinpat Adhikar
Govardhandas, Chatrabhuj
Grant, Major John Weymis
Grant, Mrs , *nee* Miss Lilian Blong
Grant, Miss Jean
Gray, Commissary William David
Greany, Peter Mawe
Greenfield, Miss R
Griessen, Albert Edward Pierre
Gulzad, Mackertish
Gumbley, Mr Douglas
Gune, Trimbak Raghunath
Gyi, Ma Ma
Haiyati Inabh Malik
Hanrahan, W G
Harrison, Henry
Harrison, Robert Tullis
Hart, Miss Louisa
Harvey, Miss Rose
Hatch, Miss Sarah Isabella
Haworth, Major Lionel Berkeley Holt
Hayes, Miss Mary Lavinia
Henderson, Miss Agnes
Henderson, Mrs Alice Robert
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Hoffman, The Rev Father John, S J.
Holbrooke, Major Bernard Frederick Roper
Holden, Major Hyla Napier
Holland, Dr Henry Tristram
Homer, Charles John
Hope, Dr. Charles Henry Standish
Hughes, Thomas Onslow
Hunter, Honorary Captain James
Hutchison, Dr John
Ihsan Ali
Jamath, Pandit
Jambusarvala, A Hormusjee
Joglekar, Rao Sahib Ganesh Venkatesh
Johnson, Augustus Frederick
Jones, The Rev John Peter
Jones, The Rev Robert
Jones, The Rev John Pengwern
Joshi, Trimbak Waman
Joss, Miss F
Joti Prasad, Lala
Judd, C R
Jwala Prasad, Mrs
Jwala Singh, Sirdar
Kanow, Yasuf
Kapadia, Miss Motibai
Karve, Dhando Keshav
Kastur Chand Daga, Seth, Su
Kelavkar, Miss Krishnabai
Kelly, Miss Eleanor Sarah
Ker, Thomas
Khujoorina, Nadirshah Nowrojee
Kidar Nath, Lala
King, Robert Stewart
Knollys, Major Robert Walter Edmond
Knox, Major Robert Welland
Ko, U
Kothewala, Mulla Yusuf Ali
Kreyer, Lieutenant-Colonel Frederick Augus Christian
Kugler, Miss Anna Sarah
Kyaw, Maung
Lang, John
Langhorne, Frederick James
Lankester, Dr Arthur Colborne
Lawrence, Henry Staveley
Leslie-Jones, Leycester Hudson
Locke, Robert Henry
Low, Charles Ernest
Lund, George
MacAlister, The Rev G.
Macdonald, Captain Charles Reginald
Mackenzie, Alexander McGregor

Mackenzie, Howard
Mackinnon, Miss Grace
Macleod, Lieut.-Colonel John Norman
Mackellar, Dr. Margaret
Macphail, The Rev. James Merry
Macphail, Miss Alexandrina Matilda
Madan, Mr Rustamji Hormasji
Maddox, Lieutenant-Colonel Ralph Henry
Mahadevi, Srimati
Mahommed Allanur Khan
Maiden, J. W.
Mai Thai Bai
Maitra, Babu Bhuban Mohan
Mallik, Sashi Bhusan
Maracan, Esmail Kadir
Margoschis, The Rev A.
Marie, Sister
Mary, of St Vincent, Sister
McCowen, Oliver Hill
McDonald, Joseph James
McGregor, Duncan
Mead, Rev Cecil Silas
Mitcheson, Miss
Mitra, Rajeswar
Mitter, Mrs.
Moore, Nursing Sister Dora Louisa Truslove
Moore, Miss Eleanor Louisa
Morris, Major Robert Lee
Motilal, Seth of Piparia
Mount, Lieutenant Alan Henry
Moxon, Miss Lais
Mozumdar, Jadu Nath
Mudali, Valappakkam Daivasigomoni Thandavaroyan
Mudaliar, Bangalore Perumal Annaswam
Mohammed Khan
Muhammad Yusuf, Shams-Ul-Ulama, Khan Bahadur
Mukharji, Babu Jogendra Nath
Muller, Miss Jenny
Mulier, Osvald Valdemar
Murli Dhar
Myat, Maung Htoon
Nabi Baksh
Nag, Mrs Sasi Mukhi
Naimullah, Mohamed
Napier, Alan Bertram
Narayana Aiyar, Pichu Aiyar
Narayan Pershad, Babu
Nariman, Khan Bahadur Manekji Kharsedji
Narpat Singh, Babu
Nasrulla Khan, Mirza
Nawaz Khan, Usman
Norris, Miss Margaret
O'Maung Po
O'Brien, Major Edward
O'Conor, Brian Edward
O'Hara, Miss Margaret
Old, Frank Shepherd
Orman, Honorary Captain Charles Henry
Orr, Adolphe Ernest
Orr, James Peter
Outram, The Rev. A.
Owen, Captain Robert James
Owen, C. B
Pal, Babu Baroda Sundar
Pandit, Vasudeo Ramkrishna
Parbati Bai, Mussammat
Park, The Rev. George W.
Parsons, Richard
Parsons, Ronald
Parsons, W
Patel, Barjorji Dorabji
Patel, Jeona
Pathak, Vithal Narayan
Pattack, Ram Sahai
Paterson, Miss Rachel
Patrick, Sister
Perroy, Rev. Father
Pennell (*nee* Sorabji), Mrs Alice Maude
Peters, Lieutenant-Colonel Charles Thomas
Phailbus, Miss Rose Margaret
Pierce, Miss Ada Louise
Pillay, Chinnappa Singaravalu
Pinney, Major John Charles Digby
Pinto, Miss Preciosa
Plowden, Major Trevor Chichele
Powell, John
Pribhdas Shevakram
Prideaux, Frank Winckworth Austice
Purshotamdas Thakurdas
Pyo, Maung Tet
Rai Chaudhuri, Parbati Sankar
Raikes, Mrs Alice
Rait, Miss Helen Anna Macdonald
Raj Bahadur, Pandit
Ram, Mr Bhagat
Ramchandra, Daji
Ramgopal, Mallani, Seth
Ram Singh, M V O
Ranade, Mrs Ramabai
Ranjit Singh
Rattansi Mulji
Ray, Harendra Nath
Ray, Babu Sarat Chandra
Raza Ali Khan, Sardar
Robarts, Captain Charles Stuart Hamilton
Robinson, James
Robinson, Lieutenant-Colonel William Henry Banner
Roe, Lieutenant-Colonel Cyril Harcourt
Roe, Mrs Edith Mary
Roshan Lal, Lala
Rukmabai, Dr
Rustomji Faridoonji
Sahan Ram Kali
Sahay, Lala Deonath
Salkield, Tom
Samarth, Wasudeo Mahadeo
Samuels, Joseph
Schultze, The Rev. Frederick Volkomor Pau
Scotland, Lieutenant-Colonel David Wilson
Shah, Babu Lal Behari
Shah, Mohamed Kamal, Saiyid
Shah, Mohammad Nawaz
Shamnath
Sheore, Raghunath Balwant
Shepherd, The Rev Ames
Shyam Rikh, Raja Francis Xavier
Shyam Sunder Lall
Simcox, Arthur Henry Addenbrooke
Simkins, Charles Wylkins
Simon, Sister M.
Sinclair, Reginald Leahy
Singh, Apji Dhul
Singh, Babu Harnath
Singh, Makkhan
Singh, Raja Bahadur, Padmanand
Singh, Babu Ramdhari
Singh, Sitla Baksh
Singh, Subadar, Sher
Singh, Risaldar Major, Hanwant

Smith, Miss Ellen
Smith, The Rev Frederick William Ambery
Smith, Mrs. Henry
Sommerville, The Rev. Dr James
Sri Ram Kunwar, Thakurain
Starte, Oliver Harold Baptist
Steele, The Rev John Ferguson
Stephens, John Hewitt
Stevens, Mrs. (Ethel)
Stevenson, Surgeon General Henry Wickham
Stewart, Major Hugh
Stewart, Mrs Lilian Dorothea
Stewart, Thomas
St. Joseph, J. D
Strip, Samuel Algernon
Sultan Ahmed Khan
Sunder Lal
Surebhan Janji
Swainson, Miss Florence
Taleyarkhan, Mr Manekshah Cawasha
Talib Mehdi Khan, Malik
Tambe, Dr. Gopal Rao Ramchandra
Tarapurwalla, Fardunji Kuvarji
Taylor, Rev. Alfred Prideaux
Taylor, Mrs. Florence Prideaux
Taylor, John Norman
Tha, Maung Shive
Them, Maung Po
Theobald, Miss
Thomas, Samuel Gilbert
Timothy, Samuel
Thompson, R. C
Thomson, Robert Douglas
Thomssen, The Rev G, Nicholas
Tok, Masung, Ba
Tok, Maung Po
Thorn, Miss Bertha
Tomkins, Lionel Linton
Tudball, Miss Emma
Umar Khan, Malik Zorawar Khan
Visvesvaraya, Mokshagundam
Wakefield, George Edward Campbell
Walewalker, P Baburao
Waller, Frederick Chighton
Wanless, Dr William James
Wares, Donald Horne
Webb-Ware, Mrs. Dorothy
Weir, Henry
Western, Miss Mary Priscilla
Wildman, Miss Elizabeth Ennie
Wiseman, Honorary Captain Charles, Sheriffe
Woerner, Miss Lydia
Wood, The Rev A
Yerbury, Miss J
Young, Dr M Y
Zahur-ul-Husain, Muhammad

INDIAN NAMES AND TITLES.

There is a bewildering multiplicity of Indian titles, made all the more difficult inasmuch as there is a difference of nomenclature between the titles of Hindus and Mahomedans. Some titles are hereditary and represent ruling chiefs or those nominally such (and of these there are no less than some 620, whilst of the titles themselves some 200 are known), others are personal honours conferred on individuals by the Indian Government, and even then sometimes made hereditary Yet again, there are numerous complimentary titles, or specifications of office, expressed in Hindu phrases, of which we have occasionally supplied the interpretations. It must be added that though *caste* is often figuring in the names it has nothing whatever to do with the titles Amir, Khan, Mir, Sultan, Sri, &c, are confusingly used as both titles and names

The order of rank is thus given by Sir R Lethbridge in "The Golden Book of India."

Hindu—Maharaja Bahadur, Maharaja, Raja Bahadur, Raja, Rai Bahadur, Rai Saheb, Rai.

Mohammedan—Nizam, Nawab Bahadur, Nawab, Khan Bahadur, Khan Saheb, Khan.

Parsis and Bene-Israelities—Khan Bahadur, Khan Saheb.

Afsur—a corruption of the English "officer."

Ahluwalia—name of a princely family resident at the village of Ahlu, near Lahore.

Akhundzada—son of a Head Officer.

Alijah (Sindhi)—of exalted rank.

Ali Raja—Sea King (Laccadives).

Amir (corruptly *Emir*)—a Mohammedan Chief; often also a personal name.

Asaf—a Minister.

Baba—lit. "father;" a respectful "Mr.;" Irish "Your Honour."

Babu—strictly a 5th or still younger son of a Raja, but often used of any son younger than the heir, whilst it has also grown into a term of address=Esquire. There are, however, one or two Rajas whose sons are known respectively as—1st, Kunwar, 2nd, Diwan, 3rd, Thakur, 4th, Lal, 5th, Babu.

Bahadur—lit "brave" or "warrior;" a title used by both Hindus and Mohammedans, often bestowed by Government; added to other titles it increases their honour, but alone it designates an inferior ruler

Bakhshi—a revenue officer or magistrate.

Begum or *Begam*—the feminine of "Nawab," combined in Bhopal as "Nawab Begum"

Besar—apparently a large land-owner.

Bhonsle—name of a Maratha dynasty.

Bhup—title of the ruler of Cooch Behar.

Bhugti—name of a Baluch tribe.

Chhatrapati—one of sufficient dignity to have an umbrella carried over him

Dada—lit "grandfather" (paternal); any venerable person.

Daula and *Daulat*—State, also one in office

Deb—a Brahminical priestly title; taken from the name of a divinity.

Dhiraj—"Lord of the Lands:" added to "Raja," &c, it means "paramount."

Diwan—a Vizier or other First Minister to a native Chief, either Hindu or Mohammedan, and equal in rank with "Sardar," under which see other equivalents. The term is also used of a Council of State.

Elaya Raja—title given to the heir of the Maharaja of Travancore.

Farzand (with defining words added)—"favorite" or "beloved."

Fateh—"victory."

Fath Jeang—"Victorious in Battle" (a title of the Nizam).

Gaekwar (sometimes *Guicowar*)—title with "Maharaja" added of the ruler of Baroda It was once a caste name and means "cowherd *i.e.*, the protector of the sacred animal; but

later on, in common with "Holkar" and "Sindhia," it came to be a dynastic appellation and consequently regarded as a title Thus, a Prince becomes "Gaekwar" on succeeding to the estate of Baroda," Holkar," to that of Indore, and 'Sindhia," to that of Gwalior

Hafiz—guardian

Haji—one who has made pilgrimage to Mecca

Hira Lal—"diamond ruby,"

Holkar—see "Gaekwar"

Jah—a term denoting dignity

Jam (Sindhi or Baluch)—Chief

Kazi—(better written *Qazi*)—a Mohammedan magistrate

Khan—originally the ruler of a small Mohammedan State, now a nearly empty title though prized It is very frequently used as a name especially by Afghans and Pathans

Khwaja—a Persian word for "master," sometimes a name

Kunwar or *Kumar*—the heir of a Raja

Lal—a younger son of a Raja (strictly a 4th son, but see under "Babu")

Lokendra or *Lokindra*—"Protector of the World," title of the Chiefs of Dholpur and Dattia

Mahant—a feudal title borne by the heads of a Hindu religious body

Maharaja—the highest or hereditary rulers among the Hindus, or else a personal distinction conferred by Government It has several variations as under "Raja," with the addition of *Maharaj Rana*, its feminine is *Maharani* (*mahag*=great)

Malik—master, proprietor

Mian—title of the son of a Rajput Nawab, resembling the Scottish 'Master"

Mir—a leader, an inferior title which, like "Khan," has grown into a name It is especially used by descendants of the Chiefs of Sind

Mirza—if prefixed, "Mr" or "Esquire"

Mong, Moung, or *Maung* (Arakanese)—leader

Moulvi or *Maulvi*—a learned man or teacher

Mudaliyar or *Mud-liar*—a personal proper name, but implying 'steward of the lands"

Mumtaz-ud-Daula—distinguished in the State (*Mulk*, in the country)

Munshi—president, or presiding official

Myowun—"Mr."

Nawab—originally a Viceroy under the Moghal Government, now the regular leading title of a Mohammedan Prince, corresponding to "Maharaja" of the Hindus

Nazim—a ruler (not to be confused with following).

Nizam—the title of the ruler of Hyderabad, the one Mohammedan Prince superior to Nawab

Nono (Thibetan)—the ruler of Spitta

Pandit or *Pundit*—a learned man

Peshkar—manager or agent

Prince—term used in English courtesy for "Shahzada," but specially conferred in the case of "Prince of Arcot" (called also "Arminı-Arcot")

Raja—a Hindu Prince of exalted rank, but inferior to "Maharaja" The feminine is *Rani* (Princess or Queen), and it has the variations *Raj, Rana, Rao, Rai, Rawal, Rawat Raikwar, Raikbar*, and *Raikat* The form *Rai* is common in Bengal, *Rao* in S & W India

Raj Rajeshwar—King of Kings

Risaldar—commander of a troop of horses

Saheb—the Native Hindu term used to or of a European ("Mr Smith" would be mentioned as "Smith Saheb" and his wife "Smith Mem-Saheb," but in *addressing* it would be "Saheb," fem 'Saheba," without the name) occasionally appended to a title in the same way as 'Bahadur," but inferior (=master). The unusual combination "Nawab Saheb" implies a mixed population of Hindus and Mohammedans.

Sahibzada—son of a person of consequence

Said, Sayid, Sayed, Sa'id, Syed, Syud—various forms for a title adopted by those who claim direct male descent from Mohammed's grandson Husain

Sardar (corrupted to *Surdar*)—a leading Government official, either civil or military even a Grand Vizier Nearly all the Punjab Barons bear this title It and "Diwan" are like in value and used by both Hindus and Mohammedans So but Mohammedans only are "Wali," "Sultan," "Amir," "Mir," "Mirza," 'Mian" and "Khan"

Sawai—a Hindu title implying a slight distinction (lit, one-fourth better than others)

Sawbwa (Burmese)—a Chief

Shahzada—son of a King

Shaikh or *Sheikh* (Arabic)—a Chief

Shams-ul-Ulama—a Mohammedan title denoting "learned"

Shamshir-Jang—"Sword of Battle" (a title of the Maharaja of Travancore)

Sidi—a variation of "Said"

Sindhia—see under "Gaekwar"

Sri or *Shri*—lit fortune, beauty a Sanscrit term used by Hindus in speaking of a person much respected (never addressed *to* him, nearly="Esquire"), used also of divinities The two forms of spelling are occasioned by the intermediate sound of the *s* (that of *s* in the German *Stadt*)

Subadar—Governor of a province

Sultan—like "Sardar"

Syed, Syud—more variations of "Said."

Talukdar—an Oudh landlord

Talpur—the name of a dynasty in Sind

Thakur—a Hindu term equivalent to "Bahadur," whether as affix or alone

Tumandar—a Persian word denoting some office

Umara—term implying the Nobles collectively

Wali—like "Sardar" The Governor of Khelat is so termed, whilst the Chiefs of Cabul are both "Wali" and "Mir"

Zemindar or *Zamindar*—a landowner, orig a Mohammedan collector of revenue

Distinctive Badges—An announcement was made at the Coronation Durbar in 1911 that a distinctive badge should be granted to present holders and future recipients of the titles of 'Diwan Bahadur', 'Sardar Bahadur', 'Khan Bahadur', 'Rai Bahadur', 'Rao Bahadur', 'Khan Sahib', Rai Sahib' and 'Rao Sahib' Subsequently the following regulations in respect of these decorations were issued —(1) The decoration to be worn by the holders of the titles above mentioned shall be a badge or medallion bearing the King's effigy crowned and the name of the title, both to be executed on a plaque or shield surrounded by a five-pointed star surmounted by the Imperial Crown, the plaque or shield being of silver gilt for the titles of Diwan, Sardar, Khan, Rai and Rao Bahadur, and of silver for the titles of Khan, Rai, and Rao Sahib (2) The badge shall be worn suspended round the neck by a ribbon of one inch and a half in width, which for the titles of Diwan and Sardar Bahadur shall be light blue with a dark blue border, for the titles of Khan, Rai and Rao Bahadur light red with a dark red border, and for the titles of Khan, Rai and Rao Sahib dark blue with light blue border

A Press Note issued in November, 1914 states —The Government of India have recently had under consideration the question of the position in which **miniatures** of Indian titles should be worn, and have decided that they should be worn on the left breast fastened by a brooch, and not suspended round the neck by a ribbon as prescribed in the case of the Badge itself When the miniatures are worn in conjunction with other decorations, they should be placed immediately after the Kaiser-i-Hind Medal

The Indian **Distinguished Service Medal** was established in 1907 as a reward for commissioned or non-commissioned officers of any forces employed in India It is a silver medal with the King's effigy on one side and on the obverse a laurel wreath with the words "For Distinguished Service" It is to be worn on the left breast by a red ribbon edged with blue It may be conferred also by the Viceroy of India

Laws and the Administration of Justice.

The indigenous law of India is personal and divisible with reference to the two great classes of the population, Hindu and Mahomedan Both systems claim divine origin and are inextricably interwoven with religion, and each exists in combination with a law based on custom. At first the tendency of the English was to make their law public and territorial, and on the establishment of the Supreme Court at Calcutta in 1773 and the advent of English lawyers as judges, they proceeded to apply it to Europeans and Indians alike This error was rectified by the Declaratory Act of 1780, by which Parliament declared that as against a Hindu the Hindu law and usage, and as against a Mahomedan the laws and customs of Islam should be applied The rules of the Shastras and the Koran have been in some cases altered and relaxed Instances can be found in the Bengal Sati Regulation Act of 1829, the Indian Slavery Act, 1843, the Caste Disabilities Removal Act of 1850, the Hindu Widows' Remarriage Act, 1856, and other Acts and Codes. To quote the Imperial Gazetteer, "A certain number of the older English statutes and the English common law are to a limited extent still in force in the Presidency Towns as applicable to Europeans, while much of the old Hindu and Mahomedan law is everywhere personal to their native fellow subjects, but apart from these, and from the customary law, which is as far as possible recognised by the Courts, the law of British India is the creation of statutory enactments made for it either at Westminster or by the authorities in India to whom the necessary law-giving functions have from time to time been delegated"

Codification

Before the transfer of India to the Crown the law was in a state of great confusion Sir Henry Cunningham described it as "hopelessly unwieldy, entangled and confusing" The first steps toward general codification were taken in 1833, when a Commission was appointed, of which Lord Macaulay was the moving spirit, to prepare a penal code Twenty-two years elapsed before it became law, during which period it underwent revision from his successors in the Law Membership, and especially by Sir Barnes Peacock, the last Chief Justice of the Supreme Court of Calcutta The Penal Code, which became law in 1860, was followed in 1861 by a Code of Criminal Procedure Substantially the whole criminal law of British India is contained in these two Codes One of the most eminent lawyers who

ever came to India, Sir James Stephen, said "The Indian penal code may be described as the criminal law of England freed from all technicalities and superfluities, systematically arranged and modified in some few particulars (they are surprisingly few) to suit the circumstances of British India It is practically impossible to misunderstand the code" The rules of Civil Procedure have been embodied in the Code of Civil Procedure The Indian Penal Code has from time to time been amended The Code of Civil Procedure was remodelled in 1908 and the Code of Criminal Procedure in 1898. These Codes are now in force.

European British Subjects.

Whilst the substantive criminal law is the same for all classes, certain distinctions of procedure have always been maintained in regard to criminal charges against European British subjects. Until 1872 European British subjects could only be tried or punished by one of the High Courts. It was then enacted that European British subjects should be liable to be tried for any offences by magistrates of the highest class, who were also justices of the peace, and by judges of the Sessions Courts, but it was necessary in both cases that the magistrate or judge should himself be a European British subject In 1883 the Government of India announced that they had decided "to settle the question of jurisdiction over European subjects in such a way as to remove from the code at once and completely every judicial disqualification which is based merely on race distinctions" This decision, embodied in the Ilbert Bill, aroused a storm of indignation which is still remembered The controversy ended in a compromise which is thus summarised by Sir John Strachey ("India"). "The controversy ended with the virtual, though not avowed, abandonment of the measure proposed by the Government Act III of 1884, by which the law previously in force was amended, cannot be said to have diminished the privileges of European British subjects charged with offences, and it left their position as exceptional as before. The general disqualification of native judges and magistrates remains; but if a native of India be appointed to the post of district magistrate or sessions judge, his powers in regard to jurisdiction over European British subjects are the same as those of an Englishman holding the same office. This provision however is subject to the condition that every European British subject brought for trial before the district magistrate or sessions judge has the right, however trivial be the charge, to claim to be tried by a jury of which not less than half the number shall be Europeans or Americans.....Whilst this change was made in the powers of district magistrates, the law in regard to other magistrates remained unaltered" Since 1836 no distinctions of race have been recognised in the civil courts throughout India.

High Courts.

The highest legal tribunals in India are the High Courts of Judicature. These were constituted by the Indian High Courts Act of 1861 for Bengal, Bombay and Madras, and later for the United Provinces, superseding the old supreme and Sudder Courts. The Judges are appointed by the Crown, they hold office during the pleasure of the Sovereign; at least one-third of their number are barristers, one-third are recruited from the judicial branch of the Indian Civil Service, the remaining places being available for the appointment of Indian lawyers Trial by jury is the rule in original criminal cases before the High Courts, but juries are never employed in civil suits in India

For other parts of India High Courts have been formed under other names, the chief difference being that they derive their authority from the Government of India, not from Parliament. In the Punjab and Burma there are Chief Courts, with three or more judges; in the other provinces the chief appellate authority is an officer called the Judicial Commissioner In Sind the Judicial Commissioner is termed Judge of the Sudder Court and has two colleagues

The High Courts are the Courts of appeal from the superior courts in the districts, criminal and civil, and their decisions are final, except in cases in which an appeal lies to His Majesty in Council and is heard by the Judicial Committee of the Privy Council in England. The High Courts exercise supervision over all the subordinate courts Returns are regularly sent to them at short intervals and the High Courts are able, by examining the returns, by sending for proceedings, and by calling for explanations, as well as from the cases that come before them in appeal, to keep themselves to some extent acquainted with the manner in which the courts generally are discharging their duties

Lower Courts

The Code of Criminal Procedure provides for the constitution of inferior criminal courts styled courts of session and courts of magistrates Every province, outside the Presidency towns, is divided into sessions divisions, consisting of one or more districts, and every sessions division has a court of session and a sessions judge, with assistance if need be. These stationary sessions courts take the place of the English Assizes, and are competent to try all accused persons duly committed, and to inflict any punishment authorised by law, but sentences of death are subject to confirmation by the highest court of criminal appeal in the province Magistrates' courts are of three classes with descending powers. Provision is made and largely utilised in the towns, for the appointment of honorary magistrates; in the Presidency towns Presidency magistrates deal with magisterial cases and benches of Justices of the Peace or honorary magistrates dispose of the less important cases.

Trials before courts of session are either with assessors or juries Assessors assist, but do not bind the judge by their opinions; on juries the opinion of the majority prevails if accepted by the presiding Judge. The Indian law allows considerable latitude of appeal. The prerogative of mercy is exercised by the Governor-General-in-Council and the Local Government concerned without prejudice to the superior power of the Crown.

The constitution and jurisdiction of the inferior civil courts varies. Broadly speaking, one district and sessions judge is appointed for

each district as District Judge he presides in its principal civil court of original jurisdiction, his functions as Sessions Judge have been described. For these posts members of the Indian Civil Service are mainly selected though some appointments are made from the Provincial Service. Next come the Subordinate Judges and Munsiffs, the extent of whose original jurisdiction varies in different parts of India The civil courts, below the grade of District Judge, are almost invariably presided over by Indians There are in addition a number of Courts of Small Causes, with jurisdiction to try money suits up to Rs 500. In the Presidency Towns, where the Chartered High Courts have original jurisdiction, Small Cause Courts dispose of money suits up to Rs 2,000 As Insolvency Courts the chartered High Courts of Calcutta, Bombay and Madras have jurisdiction in the Presidency towns In the mofussil similar powers were conferred on the District Courts by the Insolvency Act of 1906.

Coroners are appointed only for the Presidency Towns of Calcutta and Bombay Elsewhere their duties are discharged by the ordinary staff of magistrates and police officers unaided by jurors

Legal Practitioners

Legal practitioners in India are divided into Barristers-at-Law, Advocates of the High Court, Vakils and Attorneys (Solicitors) of High Courts, and Pleaders, Mukhtiars and revenue agents Barristers and Advocates are admitted by each High Court to practise in it and its subordinate courts, and they alone are admitted to practise on the original side of some of the chartered High Courts Vakils are persons duly qualified who are admitted to practise on the appellate side of the chartered High Courts and in the Courts subordinate to the High Courts Attorneys are required to qualify before admission to practise in much the same way as in England The rule that a solicitor must instruct counsel prevails only on the original side of certain of the High Courts Pleaders practise in the subordinate courts in accordance with rules framed by the High Courts

Law Officers.

The Government of India has its own law colleague in the Legal Member of Council All Government measures are drafted in this department. Outside the Council the principal law officer of the Government of India is the Advocate-General of Bengal, who is appointed by the Crown, is the leader of the local Bar, and is always nominated a member of the Provincial Legislative Council. In Calcutta he is assisted by the Standing Counsel and the Government Solicitor. There are Advocates-General and Government Solicitors for Bombay and Madras, and in Bombay there is attached to the Secretariat a Legal Remembrancer and an Assistant Legal Remembrancer, drawn from the Judicial Branch of the Indian Civil Service The Government of Bengal consults the Bengal Advocate-General, the Standing Counsel and the Government Solicitor, and has besides a Legal Remembrancer (a Civil Servant) and a Deputy Legal Remembrancer (a practising barrister), the United Provinces are equipped with a civilian Legal Remembrancer and professional lawyers as Government Advocate and Assistant Government Advocate, the Punjab has a Legal Remembrancer, Government Advocate and a Junior Government Advocate, and Burma a Government Advocate, besides a Secretary to the Local Legislative Council

Sheriffs are attached to the High Courts of Calcutta, Madras and Bombay They are appointed by Government, selected from non-officials of standing, the detailed work being done by deputy sheriffs, who are officers of the Court.

Legislative Power

The supreme power of Parliament to legislate for the whole of India cannot be questioned In practice, however, this power is little used, there being a majority of officials on the Imperial Legislative Council—a majority deliberately reserved in the India Councils Act of 1909—the Secretary of State is able to impose his will on the Government of India and to secure the passage of any measure he may frame, regardless of the opinion of the Indian authorities Legislative Councils have been established both for the whole of India and for the principal provinces. Their constitution and functions are fully described in detailing the powers of the Imperial and Provincial Councils (q v) To meet emergencies the Governor-General is vested with the power of issuing ordinances, having the same force as Acts of the Legislature, but they can remain in force for only six months The power is very little used The Governor-General-in-Council is also empowered to make regulations, having all the cogency of Acts, for the more backward parts of the country, the object being to bar the operation of the general law and permit the application of certain enactments only.

Bengal Judicial Department.

Jenkins, The Hon'ble Sir Lawrence Hugh, Kt, K C I E.	Chief Justice.
Stephen, The Hon'ble Sir Harry Lushington, Bar.-at-Law	Puisne Judge
Beaumont, The Hon'ble Mr. William, I C S ..	Ditto.
Woodroffe, The Hon'ble Mr. John George, M.A, Bar.-at-Law.	Ditto.
Mukharji, The Hon'ble Sir Ashutosh, Kt, C S I, M.A, D.L	Ditto.
Richardson, The Hon'ble Mr. Thomas William, I C S, Bar.-at-Law.	Ditto.
Holmwood, The Hon'ble Mr. Herbert, I C.S	Ditto.
Chitty, The Hon'ble Mr. Charles William, Bar -at-Law.	Ditto.
Fletcher, The Hon'ble Mr. Ernest Edward, Bar.-at Law	Ditto.
Shaf-ud-din, The Hon'ble Mr. Saiyid, Bar-at-law. ..	Ditto.

Bengal Judicial Department.—*Contd*

Coxe, The Hon'ble Mr Henry Reynell Holled, I C S	Puisne Judge
Carnduff, The Hon'ble Sir Herbert William Cameron, C I E , I C S , Bar -at-Law	Ditto
Chatarji, The Hon'ble Mr Digamber, M A , B L	Ditto
Chatarji, The Hon'ble Mr Nalini Ranjan, M A , B L	Ditto
Chaudhuri, The Hon Mr Asutosh, Bar -at-Law	Ditto
Beachcroft, The Hon'ble Mr Charles Porten, I C S	Ditto (Officiating Additional.)
Mullick, The Hon'ble Mr Basanta Kumar	Ditto Ditto
Imam, The Hon'ble Mr Sayid Hassan, Bar -at-Law	Ditto Ditto
Chapman, The Hon'ble Mr Edmund Pelly I C S	Ditto Ditto
Kenrick, The Hon'ble Mr George Harry Blair, K C , LL D , Bar -at-Law	Advocate-General
Mitra, Bimod Chandra, Bar -at-Law	Standing Counsel
Kesteven, Charles Henry	Government Solicitor
Newbold, The Hon'ble Mr B B	Officiating Superintendent and Remembrancer of Legal Affairs
Orr, John Williams, Bar -at-Law	Deputy Superintendent and Remembrancer of Legal Affairs
Ram Charan Mitra	Senior Government Pleader
Hume, J T	Public Prosecutor, Calcutta
Hechle, James Herbert	Registrar, Keeper of Records, Taxing Officer, Accountant-General, and Sealer, etc , Original Jurisdiction
Remfry, Maurice	Officiating ditto
Nalini Mohan Chatarji Bar -at-Law	Master and Official Referee
Joyce, William Henry	Deputy Registrar
Ryper, George	Assistant Registrar (Offg Dy Regtr)
Bonnaud, William Augustus, Bar -at-Law	Clerk of the Crown for Criminal Sessions.
Cullis, Henry Thoreau, B A , I C S	Registrar and Taxing Officer, Appellate Jurisdiction
Counsell, Frank Bertram	Assistant Registrar
Grey, Charles Edward, Bar -at-Law	Officiating Official Trustee and Official Assignee
Bonnerjee, K K Shelly, Bar -at-Law	Official Receiver, sub *pro tem*
Dobbin, F K , Bar -at-Law	Coroner of Calcutta
Stewart, F H	Sheriff
Bose, B D , Bar-at-Law	Offg Editor of Law Reports
Waite, Thomas John	Secretary to the Chief Justice and Head Clerk Decree Department.

Bombay Judicial Department.

Scott, The Hon'ble Sir Basil, Kt , M A , Bar -at-Law	Chief Justice
Shah, The Hon'ble Mr Lallubhai Asharam, M A , LL B	Puisne Judge.
Batchelor, The Hon'ble Sir Stanley Lockhart, Kt B A , I C S	Ditto.
Davar, The Hon'ble Sir Dinsha Dhanjibhai, Kt , Bar -at-Law	Ditto
Beaman, The Hon'ble Mr Frank Clement Offley, I C S	Ditto
Heaton, The Hon'ble Mr Joseph John, I C S	Ditto
McLeod, The Hon'ble Mr Norman Cranstoun, B A , Bar -at-Law	Ditto.
Strangman, Thomas Joseph, B A , LL B , Bar -at-Law	Advocate-General
Percival, Philip Edward, B A , Bar -at-Law	Remembrancer of Legal Affairs.
Nissim, Joseph, M A , LL B , Bar-at-Law, I C S.	Assistant Remembrancer of Legal Affairs
Nicholson, Eustace Ferrers	Government Solicitor and Public Prosecutor
Slater, John Sanders, B A , Bar -at-Law	Administrator-General and Official Trustee
Abdeali Muhammad Ali Kazizi, B A., LL B , Bar.-at-Law	Prothonotary, Testamentary and Admiralty Registrar.

Bombay Judicial Department.—*contd.*

Jijibhai Edalji Modi, Bar-at-Law	Master and Registrar in Equity and Commissioner for taking Accounts and Local Investigations, and Taxing Officer.
Jijibhoy, The Hon'ble Sir Jamsetji	Sheriff
Elliot, Robert Ernest Algernon, I C S	Registrar, Appellate Side
Nasurwanji Dinshahji Gharda, B A, LL B	Deputy Registrar and Sealer, Appellate Side
Chalk, George Frederick	Coroner
Sitaram Sundernao Patkar, LL B	Government Pleader
COURT OF THE JUDICIAL COMMISSIONER OF SIND	
Platt, Edward Millard, I C S	Judicial Commissioner
Fawcett, Charles Gordon Hill	Acting Additional Judicial Commissioner.
Hayward, Maurice Henry Weston, LL B, Bar-at-Law	Additional Judicial Commissioner, Acting High Court Judge
Boyd, Charles Clifford I C S	Acting Additional Judicial Commissioner (On special leave)

Madras Judicial Department.

White, The Hon'ble Sir Charles Arnold, Kt, Bar-at-Law	Chief Justice
Oldfield, The Hon'ble Mr Francis Du Pre, I C S	Puisne Judge
Wallis, The Hon'ble Sir John Edward Power, Kt M A, Bar-at-Law	Ditto
Nair, The Hon'ble Sir C Sankaran, Kt, B A, B L, C I E	Ditto
Abdur Rahim, The Hon'ble Mr, M A Bar-at-Law	Ditto
Ayling, The Hon'ble Mr William Bock, I C S	Ditto
Bakewell, The Hon'ble Mr James Herbert, LL B, Bar-at-Law	Ditto Temporary (Additional)
Sadashiva Aiyar, The Hon'ble Mr T, B A, M L, Dewan Bahadur	Ditto Temporary (Additional)
Faiz Hasan Badruddin Tyabji, The Hon Mr, M A, Bar-at-Law	Ditto (Officiating)
Seshagiri Ayyar, The Hon Mr T V, B A B L, Dewan Bahadur	Offg Judge Temporary (Additional)
Corbet, Frederick Hugh Mackenzie, Bar-at-Law	Advocate-General
David, William Ontario	Government Solicitor
Napier, Charles F, Bar-at-Law . .	Government Pleader and Public Prosecutor
Adam, John, M A, Bar-at-Law . .	Crown Prosecutor
Grant, P R, Bar-at-Law	Law Reporter
Odgers, The Hon'ble Mr C E, M A, Bar-at-Law	Administrator-General and Official Trustee
Mackay, Charles Gordon, M A, I C S	Registrar
Govindas Chatoorbhoojadas, Dewan Bahadur .	Sheriff

Assam Judicial Department.

Graham, John Fuller .	Judge, Assam Valley Districts, Gauhati
Jeffries, Francis Joseph .	District and Sessions Judge, Sylhet and Cachar
Mukharji, Hari Prasanna, B L ..	Additional District and Sessions Judge Sylhet and Cachar

Burma Judicial Department.

Fox, The Hon'ble Sir Charles Edmund, Kt, Bar-at-Law	Chief Judge, Chief Court, Lower Burma.
Hartnoll, The Hon'ble Sir Henry Sulivan, Kt., I C S, Bar.-at-Law	Judge
Ormond, The Hon'ble Mr Ernest William, B A, Bar-at-Law	Judge (On leave)
Twomey, The Hon'ble Mr Daniel Harold Ryan, I C S, Bar-at-Law	Judge (On leave)

Burma Judicial Department—*contd.*

Robinson, The Hon'ble Mr. Sydney Maddock, Bar-at-Law	Judge (On leave)
Parlett, The Hon'ble Mr Leonard Montague	Judge (Officiating)
Shaw, Sir George Watson, C S I, I C S. . .	Judicial Commissioner, Upper Burma. (On leave)
Young, The Hon'ble Mr Charles Philip Radford, B A., Bar-at-Law	Government Advocate.
Sen, Purna Chundra, Bar-at-Law .	Official Assignee and Receiver, Rangoon.
Christopher, S A . Bar-at-Law	Government Prosecutor, Rangoon
Darwood, Arthur John, Bar.-at Law	Government Prosecutor, Moulmein
Casson, Randall, B A, I C S .	Registrar, Chief Court, Lower Burma
Millar, Edward	Registrar, Court of Judicial Commissioner, Upper Burma

Central Provinces Judicial Department.

Drake Brockman, Sir H V, M A LL M, Bar-at-Law, I C S	Judicial Commissioner
Batten, J K, I C S	First Additional Judicial Commissioner.
Stanyon, H J, C I E, V D, A D C, Bar-at-Law	Second Additional Judicial Commissioner
Roughton, N J, I C S.	Registrar
Parande, K G	Deputy Registrar

N.-W. Frontier Province Judicial Department.

Dobbs, H R C, C I E. I C S	Judicial Commissioner
Muhammad Yakub, Mufti	Registrar.

Punjab Judicial Department.

Kensington, The Hon'ble Sir Alfred, Kt, B A, I C S	Chief Judge
Johnstone, The Hon'ble Mr Donald Campbell, I C S	Judge (On leave)
Rattigan, The Hon'ble Mr. Henry Adolphus Byden, B A, Bar-at-Law	Judge
Shah Din, The Hon'ble Mian Muhammad, Bar-at-Law	Judge
Chevis, The Hon'ble Mr William, I C S	Judge
Smith, The Hon Mr H Scott, I C S	First Temporary Additional (Judge)
Shadi Lal, The Hon Mr Rai Bahadur, Bar-at-Law ..	Second Temporary Additional (Judge)
Gracey, S. W, B A, I C S	Legal Remembrancer.
Petman, Charles Bevan, B A, Bar-at-Law	Government Advocate.
Campbell, Archibald, B A, I C S	Registrar.

United Province Judicial Department.

Richards, The Hon'ble Sir Henry George, Kt, Bar-at-Law, K C	Chief Justice
Knox, The Hon'ble Sir George Edward, Kt, LL D, I C S	Puisne Judge
Banarji, The Hon'ble Sir Pramada Charan, Kt, B A, B L	Ditto.
Piggott The Hon'ble Mr Theodore Caro, I C S .	Ditto
Tudball, The Hon'ble Mr. William, I C S .	Ditto
Chamier, The Hon'ble Mr. Edward Maynard Des Champs, Bar-at-Law.	Ditto
Rafiq, The Hon'ble Mr Muhammad, Bar-at-Law .	Ditto
Murray, George Ramsay, I C S	Registrar.
Ashworth, The Hon'ble Mr. E H, I C.S .	Legal Remembrancer.
Ryves, Alfred Edward, B A., Bar-at-Law ..	Government Advocate.
Porter, Wilfred King, Bar-at-Law	Law Reporter and Secretary, Legislative Council
Lalit Mohan Banarji	Government Pleader.

COURT OF JUDICIAL COMMISSIONER OF OUDH—LUCKNOW.

Lindsay Benjamin, I.C.S.	Judicial Commissioner.
Stuart, Louis, I C S.	First Additional Judicial Commissioner.
Rai Kanhaiya Lal, Bahadur	Second Additional Judicial Commissioner.
Shirreff, Alexander Grierson, I.C.S.	Registrar.
Nagendra Nath Ghosal	Government Pleader.

NUMBER AND DESCRIPTION OF CIVIL SUITS INSTITUTED.

Administrations		Suits for Money or Moveable Property.	Suits under the Rent Law.					Title and other Suits					Grand Total
			Arrears of Rent with or without Ejectments	Enhancement or Abatement of Rent	For Ejectment or Recovery of Possession alone.	All other Suit under the Rent Law	Total	Suits for Immovable Property	Suits for Specific Relief	Mortgage Suits.	Other Suits not falling under any of the preceding Heads	Total	
Bengal ..		183,885	229,684	432	403	173	230,692	23,468	2,461	19,412	5,310	50,651	465,228
United Provinces		149,440	.	.		.		13,606	3,139	11,613	4,658	33,016	182,456
Punjab .		152,074	.					13,854	2,817	4,334	9,103	30,108	182,182
North-West Frontier Province.		18,367	.					2,470	438	772	1,880	5,560	23,927
Burma . .		63,551	.	..	.	.	.	1,861	580	2,586	1,760	6,787	70,338
Central Provinces and Berar.		89,125	10,188	.	326	7	10,521	8,268	1,125	5 520	457	15,370	115,016
Eastern Bengal & Assam		216,646	172,610	229	1,159	84	174,152	19,620	4,835	13,427	3,194	41,076	431,874
Ajmer-Merwara .		7,366	326	135	3	7	471	211	6	..	158	375	8,212
Coorg . .		2,306	..	..	..	.	..	42	5	135	20	202	2,508
Madras . ..		379,342	1	.	.	.	1	21,047	4,353	21,795	764	47,959	427,302
Bombay .		100,640	..	.	..	.	..	10,198	1,263	11,765	6,565	29,791	130,431
British Baluchistan		3,752	.	..	1	3	4	84	5	13	75	177	3,933
TOTAL, 1911		1,366,494	412,809	866	1,892	274	415,841	114,729	21,027	91,372	33,944	261,072	2,043,407
TOTALS .	1910	1,377,428	391,541	807	1,894	2,315	396,557	120 995	21 798	177,183	41,446	361,422	2,135,407
	1909	1,358,105	347,214	934	2,096	2,146	352,390	119,726	22,653	107,892	40.242	290,513	2,001,008
	1908	1,286,837	349,043	728	1,785	396	351,952	112,136	23,428	101,298	39,377	276,239	1,915,028
	1907	1,253,034	335,135	839	1,647	4,134	341,755	100,635	23,418	103,967	36,186	273,206	1,867,995
	1906	1,243,596	357,178	1,076	1,473	3,570	363,297	106,450	21,488	108,678	36,697	273,313	1,880,206
	1905	1,186,223	357,660	690	1,458	4,182	363,990	95,527	19,340	105,850	33,550	254,267	1,804,480
	1904	1,208,505	352,735	704	1,428	632	355,499	95,462	19,396	105,819	32,824	253,501	1,817,505
	1903	1,177,672	334,127	547	1,136	575	336,385	91,215	19,121	104,634	35,518	250,488	*1,767,995
	1902	1,189,325	317,297	513	1,133	1,004	319,947	102,239	20,240	107,373	31,326	261,178	*1,775,231

* Details not given for 4,781 Bombay suits in 1902, and 3,450 in 1903

THE INDIAN POLICE.

The Indian Government employ 189,995 men in the ranks of the Indian Police, who are controlled by 749 Gazetted European Officers In large cities, the Force is concentrated and under direct European control, in the mofussil the men are scattered throughout each District and located at various Outposts and Police Stations The smallest unit for administrative purposes is the Outpost which generally consists of 3 or 4 Constables under the control of a Head Constable Outpost Police are maintained to patrol roads and villages and to report all matters of local interest to their superior, the Sub-Inspecto They have no powers to investigate offences and are a survival of the period when the country was in a disturbed state and small bodies of Police were required to keep open communications and afford protection against the raids of dacoits It is an open question whether they are now of much use Each Outpost is under a Police Station which is controlled by an officer known as a Sub-Inspector

Distribution of Police—The area of a Police Station varies according to local conditions The latest figures available are —

	Average area per Police Station	Average number of Regular Civil Police per 10,000 of Population
	Square miles	
Bengal *	138	4 4
Eastern Bengal and Assam	358	3 4
United Provinces	127	7 6
Punjab	210	9 6
North-West Frontier Province	179	18 5
Central Provinces and Berar	275	8 6
Burma *	500	13 1
Madras	106	7 8
Bombay *	290	12 9

* Excluding the towns of Calcutta, Bombay and Rangoon The figures include the Railway police, but not Military police

Organisation of Police.

The Police Station Officer (the Sub-Inspector) is responsible for the investigation of all cognisable crimes, that is to say, all offences in which the Police can arrest without a warrant from a Magistrate, which occur within his jurisdiction, he is also held responsible for the maintenance of the public peace and the prevention of crime. From the point of view of the Indian Ryot, he is the most important Police Officer in the District and may rightly be considered the backbone of the Force

Superior to the Sub-Inspector is the Inspector who holds charge of a Circle containing 4 or 5 Police Stations His duties are chiefly those of supervision and inspection He does not ordinarily interfere in the investigation of crime unless the conduct of his subordinates renders this necessary.

The Inspector is usually a selected and experienced Sub-Inspector Each District contains 3 or 4 Circles, and in the case of large Districts, is divided into 2 Sub-divisions—one of which is given to an Assistant Superintendent of Police, a European gazetted Officer. The Police Force in each District is controlled by a District Superintendent of Police, who is responsible to the District Magistrate (Collector or Deputy Commissioner) for the detection and prevention of crime and for the maintenance of the public peace, and, to his Deputy Inspector-General and Inspector-General, for the internal administration of his Force Eight or ten Districts form a Range administered by a Deputy Inspector-General, an officer selected from the ranks of the Superintendents At the head of the Police of each Province is the Inspector-General who is responsible to the Local Government for the administration of the Provincial Police

Separate but recruited from the District Force is the Criminal Investigation Department, which is under the control of a specially selected European Officer of the rank and

standing of a Deputy Inspector-General The Criminal Investigation Department, usually called the C I D, is mainly concerned with political inquiries, sedition cases and crimes with ramifications over more than one District or which are considered too important to leave in the hands of the District Police It is a small force of Sub-Inspectors and Inspectors who have shown their ability and intelligence when working in the mofussil and forms in each Province a local Scotland Yard

The larger Cities of Calcutta, Bombay, and Madras have their own Police Force, independent of the Inspector-General of Police, and under the control of a Commissioner and 2 or more Deputies The latter are selected Superintendents who have learnt their work in the mofussil For Police purposes, the City area is divided into divisions under the control of non-gazetted European officers, styled Superintendents but not to be confused with District Superintendents Each division contains a number of Police Stations controlled as in the mofussil, by Inspectors and Sub-Inspectors A comparatively small number of Europeans are recruited in cities from British regiments for the control of traffic They have no powers of investigation

The Supreme Government at Delhi and Simla keeps in touch with the Provincial Police by means of the Director of Criminal Intelligence and his Staff The latter do not interfere in the Local Administration and are mainly concerned with the publication of information regarding international criminals, interprovincial crime and Political inquiries in which the Supreme Government is interested

Recruitment.—The constable is enlisted locally Certain castes are excluded from service and the formation of cliques by filling up the Force from any particular caste or locality is forbidden In some Provinces a fixed percentage of foreigners must be enlisted Recruits must produce certificates of good character and pass a medical test They must be above certain standards of physical development The constable rises by merit to the rank of Head Constable and, prior to the Police Commission, could rise to the highest Indian subordinate appointments Since 1906, his chances of promotion have been greatly curtailed, this has certainly lowered the standard coming forward for service in the Force in the lower ranks.

The Sub-Inspector, until 1906, was a selected Head Constable, but Lord Curzon's Commission laid down that Sub-Inspectors should be recruited direct from a socially better class of Indians In most Provinces, eighty per cent of the Sub-Inspectors are selected by nomination, trained for a year or 18 months at a Central Police School, and, after examination, appointed direct to Police Stations to learn their work by actual experience It is too early to judge this system by results, but it has no doubt great disadvantages and undetected crime in India is increasing rapidly.

An Inspector is generally a selected Sub-Inspector Direct nomination is the exception, not the rule.

The Deputy Superintendent, a new class of officer, instituted on the recommendation of the Commission, is an Indian gazetted officer and is the native Assistant to the District Superintendent of Police. He is either selected by special promotion from the ranks of the Inspectors or is nominated direct, after a course at the Central Police School

Prior to 1893, the gazetted ranks of the Force were filled either by nomination or by regimental officers seconded from the Army for certain periods In 1893, this system was abandoned and Assistant Superintendents were recruited by examination in London On arrival in India they were placed on probation until they had passed their examinations in the vernacular, in law, and in riding and drill The establishment of Police Training schools in 1906 has done much to improve the training of the Police Probationer, and selection by examination has given Government a better educated officer but open competition does not reveal the best administrators and should be tempered, as in the Navy, by selection

Pay—The monthly salaries drawn by each grade of Police Officer are as follows —

A constable draws from	Rs	10 to 12
A Head Constable draws	,,	15 to 20
A Sub-Inspector from	,,	50 to 100
An Inspector from	,,	150 to 250
Deputy Superintendents from	,,	250 to 500
Assistants from	,,	300 to 500
District Superintendents of Police from	Rs	700 to 1,200
Deputy Inspectors-General from	Rs	1,500 to 1,800
Inspectors-General from	Rs	2,000 to 3,000

The appointments of Commissioner of Police, Calcutta, Bombay, and Madras and all Provincial Inspectors-General, may be held by a member of the Indian Civil Service if no Police Officer is found suitable for such appointments

Internal Administration—The District Force is divided into 2 Branches—Armed and Unarmed As the duties of the armed branch consist of guarding Treasuries, escorting treasure and prisoners and operating against dangerous gangs of dacoits, they are maintained and controlled on a military basis. They are armed and drilled and taught to shoot after military methods The unarmed branch are called upon to collect fines magisterially inflicted, serve summonses and warrants, control traffic, destroy stray dogs, extinguish fires enquire into accidents and non-cognizable offences The lower grades are clothed and housed by Government without expense to the individual The leave rules are fairly liberal but every officer, European or Native, must serve for 30 years before he is entitled to any pension, unless he can obtain a medical certificate invaliding him from the service This period of service in an Eastern climate is generally admitted to be too long and the efficiency of the Force would be considerably improved if Government allowed both the officers and men to retire after a shorter period of service

Statistics of Police Work.

The undesirability of attaching undue importance to statistical results as a test of the merits of police work was a point upon which considerable stress was laid by the Indian Police Commission, who referred to the evils likely to result from the prevalence among subordinate officers of an impression that the advancement of an officer would depend upon his being able to show a high ratio of convictions, both to cases and to persons arrested, and a low ratio of crime. The objection applies more particularly to the use of statistics for small areas; but they cannot properly be used as a basis of comparison even for larger areas without taking into account the differences in the conditions under which the police work; and, it may be added, they can at the best indicate only very imperfectly the degree of success with which the police carry out that important branch of their duties, which consists in the prevention of crime. These considerations have been emphasized in recent orders of the Government of India. Subject to these observations, the figures below, which relate to cognisable crime only, may be given as some indication of the volume of work falling upon the police, and of the wide differences between the conditions and the statistical results in different provinces —

—	Cases reported during the year.	Cases in which Investigation was refused	Cases proved or declared to be False	Cases due to Mistakes of Law or Fact or declared non-cognisable.	Cases ending in Conviction.	Cases ending in Discharge or Acquittal	Cases not Detected or Apprehended
Bengal . .	167,200	6,553	2,826	9,476	97,618	4,330	43,491
Eastern Bengal and Assam	54,512	12,255	1,636	5,180	12,909	1,984	19,528
United Provinces . ..	150,250	68,495	2,981	905	37,271	4,614	34,099
Punjab	56,497	64	3,386	5,231	21,429	6,058	18,952
North-West Frontier Province	5,834	58	327	654	2,377	901	1,487
Central Provinces and Berar .	25,338	10,148	1,044	170	5,974	2,116	7,072
Burma	69,232	1,394	5,298	15,543	34,170	3,042	8,724
Madras .	169,646	1,830	5,134	8,048	124,838	9,257	17,129
Bombay . .	78,964	2,276	1,528	9,852	49,733	2,291	12,465
Total British India, 1911 ..	784,067	103,715	24,318	55,153	391,238	34,812	163,599
Total 1909 . ..	768,841	119,331	23,917	57,684	381,219	35,552	148,279
Total 1907 ..	796,848	141,326	23,632	55,748	393,633	35,003	138,824
Total 1905 ..	789,241	120,052	24,860	57,439	408,271	38,396	133,454

The form of the returns having been altered in 1905, corresponding figures for earlier years are not available

One or two notes in explanation of noticeable features of the above table will at the same time serve to illustrate the difficulty of drawing inferences of a general nature from the figures The very large proportion of convictions in Madras is due to the preponderating influence of cases under the head "public and local nuisances," of which 110,350 were reported in 1911, all but a small percentage ending in conviction. In Bengal and Bombay offences under special and local laws in the Presidency towns colour in the same way the total figures for the province. The very numerous cases in the United Provinces in which investigation was refused were almost all under the heads of lurking, house-trespass and common theft; the proportion of cases fell continuously in the last four years of the decade, but it is considered that investigation is still not infrequently refused in cases in which it should be made

The statistics in regard to stolen property show that property is recovered on an average in something like 40 per cent of cases, while the total value of property recovered is generally about one-fourth of the value of property stolen. The figures vary considerably from province to province from year to year. In 1911, the value of property recovered was £ 256,000, and the total value of property reported as stolen being £1,118,000.

Principal Police Offences

Administrations.	Cases													
	Offences against the State and Public Tranquility		Murder		Other serious Offences against the Person		Dacoity.		Cattle Theft		Ordinary Theft		House-trespass and Housebreaking with intent to commit Offence.	
	Reported.	Conviction obtained	Reported.	Conviction obtained	Reported	Conviction obtained	Reported	Conviction obtained.	Reported	Conviction obtained.	Reported.	Conviction obtained	Reported	Conviction obtained
Bengal	1,757	654	338	49	5,323	1,201	232	36	1,715	609	28,521	5,638	34,948	2,517
Calcutta Town and Suburbs.	84	40	16	2	702	169	1	2	34	23	4,751	1,437	1,127	278
United Provinces	1,321	660	653	230	7,959	2,677	662	90	5,861	1,177	39,288	5,545	74,399	4,446
Punjab	1,766	465	594	189	6,828	1 841	146	23	3 389	891	10,497	2,786	21,099	2,151
N.-West Frontier Province.	231	104	284	172	1,393	503	90	26	208	33	1,044	328	1,946	289
Burma	545	321	562	149	10,032	2,984	221	49	5,724	1,471	15,277	5,677	7,955	2,641
Rangoon	26	11	9	1	285	88	5	1			1,287	612	164	63
Central Provinces and Berar	421	214	244	106	2,040	758	58	9	850	365	11,675	1,687	7,637	1,051
Eastern Bengal and Assam	2,532	987	313	59	5,063	1,226	197	21	810	287	16,546	2,868	27,687	2,035
Coorg	6	3	10	5	44	11	1		16	9	158	53	24	7
Madras	1,744	598	667	140	5,067	1,276	638	88	4,111	1,196	20,041	4,575	17,003	2,470
Bombay	1,351	329	461	168	4,041	1,107	203	22	3,234	728	12,753	3,821	10,158	1,758
Bombay Town and Island	89	70	12	11	531	282				.	4,466	2,474	1,127	359
TOTAL, 1911 ..	11,873	4,456	4,163	1,281	49,308	14,123	2,454	367	25,952	6,789	166,304	37,501	205,274	20,065
1910	11,700	4,599	4,031	1,092	47,750	13,749	2,150	369	27,237	7,200	159,280	37,279	199,604	19,784
1909	11,919	4,614	3,885	1,143	44,960	12,947	2,524	453	27,833	7,710	169,451	40,872	207,283	21,296
1908	12,411	4,797	4,014	1,203	43,838	12,678	2 984	659	29,456	8,927	194,246	48,448	236,280	24,972
1907	12,181	4,454	3,603	1,106	42,921	12,506	2,360	428	27,809	7,492	178,898	41,173	212,299	21,679
TOTALS 1906	12,386	4,490	3,555	1,090	42,993	12,452	2,085	419	27,577	7,831	184,915	45,112	203,701	22,654
1905	12,313	4,456	3,386	1,048	43,828	12,920	2,276	434	25,847	7,038	174,091	40,401	194,232	21,760
1904	14,839	4,619	3,448	1,001	49,999	13,577	2,209	379	25,553	5,850	138,838	36,525	138,998	20,037
1903	15,528	4,453	3,340	1,103	47,805	12,576	2,339	443	23,683	6,657	129,394	35,644	136,805	18,562
1902	15,350	5,103	3,144	1,109	45,538	13,326	2,360	652	26,502	7,454	171,045	41,475	126,167	16,084

JAILS.

Jail administration in India is regulated generally by the Prisons Act of 1894, and by rules issued under it by the Government of India and the local governments The punishments authorised by the Indian Penal Code for convicted offenders include transportation, penal servitude, rigorous imprisonment (which may include short periods of solitary confinement), and simple imprisonment Accommodation has also to be provided in the jails for civil and under-trial prisoners

There are three classes of jails in the first place, large central jails for convicts sentenced to more than one year's imprisonment, secondly, district jails, at the head-quarters of districts, and, thirdly, subsidiary jails and "lock-ups" for under-trial prisoners and convicts sentenced to short terms of imprisonment The jail department in each province is under the control of an Inspector-General, he is generally an officer of the Indian Medical Service with jail experience, and the Superintendents of certain jails are usually recruited from the same service The district jail is under the charge of the civil surgeon, and is frequently inspected by the district magistrate The staff under the Superintendent includes, in large central jails, a Deputy Superintendent to supervise the jail manufactures, and in all central and district jails one or more subordinate medical officers The executive staff consists of jailors and warders, and convict petty officers are employed in all central and district jails, the prospect of promotion to one of these posts being a strong inducement to good behaviour

Employment of Prisoners.—The work on which convicts are employed is mostly carried on within the jail walls, but extramural employment on a large scale is sometimes allowed, as, for example, when a large number of convicts were employed in excavating the Jhelum Canal in the Punjab Within the walls prisoners are employed on jail service and repairs, and in workshops The main principle laid down with regard to jail manufactures is that the work must be penal and industrial The industries are on a large scale, multifarious employment being condemned, while care is taken that the jail shall not compete with local traders As far as possible industries are adapted to the requirements of the consuming public departments, and printing, tent-making, and the manufacture of clothing are among the commonest employments Schooling is confined to juveniles, the experiment of teaching adults has been tried, but literary instruction is unsuitable for the class of persons who fill an Indian jail

The conduct of convicts in jail is generally good, and the number of desperate characters among them is small Failure to perform the allotted task is by far the most common offence In a large majority of cases the punishment inflicted is one of those classed as "minor" Among the "major" punishments fetters take the first place Corporal punishment is inflicted in relatively few cases, and the number is steadily falling.

Juvenile Prisoners—As regards "youthful offenders"—*i e*, those below the age of 15—the law provides alternatives to imprisonment, and it is strictly enjoined that boys shall not be sent to jail when they can be dealt with otherwise The alternatives are detention in a reformatory school for a period of from three to seven years, but not beyond the age of 18, discharge after admonition, delivery to the parent or guardian on the latter executing a bond to be responsible for the good behaviour of the culprit, and whipping by way of school discipline

The question of the treatment of "young adult" prisoners has in recent years received much attention Under the Prisons Act, prisoners below the age of 18 must be kept separate from older prisoners, but the recognition of the principle that an ordinary jail is not a fitting place for adolescents (other than youthful habituals) who are over 15, and therefore ineligible for admission to the reformatory school, has led Local Governments to consider schemes for going beyond this by treating young adults on the lines followed at Borstal, and considerable progress has been made in this direction In 1905, a special class for selected juveniles and young adults was established at the Dhariwar jail in Bombay, in 1908 a special juvenile jail was opened at Alipore in Bengal, in 1909 the Meiktila jail in Burma and the Tanjore jail in Madras were set aside for adolescents, and a new jail for juvenile and "juvenile adult" convicts was opened at Bareilly in the United Provinces, and in 1910 it was decided to concentrate adolescents in the Punjab at the Lahore District jail, which is now worked on Borstal lines Other measures had previously been taken in some cases, a special reformatory system for "juvenile adults" had, for example, been in force in two central jails in the Punjab since the early years of the decade, and "Borstal enclosures" had been established in some jails in Bengal But the public is slow to appreciate that it has a duty towards prisoners, and but little progress has been made in the formation of Prisoners' Aid Societies except by the Salvation Army

Reformatory Schools—These schools have been administered since 1899 by the Education department, and the authorities are directed to improve the industrial education of the inmates, to help the boys to obtain employment on leaving school, and as far as possible to keep a watch on their careers

Transportation—Transportation is an old punishment of the British Indian criminal law, and a number of places were formerly appointed for the reception of Indian transported convicts The only penal settlement at the present time is Port Blair in the Andaman Islands Under existing rules convicts sentenced to transportation for life, or for a term of years of which six have still to run, may be transported to the Andamans, subject to their being physically fit, and to some other conditions in the case of women The sanctioned scheme contemplates five stages in the life of a male transported convict, the first six months being passed in a cellular jail, the next eighteen months in association in a jail similar to those of the Indian mainland, and the following three years as a convict of the third class kept to hard gang

labour by day and confined in barracks by night Having thus completed five years, a convict may be promoted to the second class, in which he is eligible for employment in the various branches of the Government services or in the capacity of servants to a private resident After five years so spent, a well-behaved convict enters the first class, in which he labours under more favourable conditions, or is granted a ticket enabling him to support himself, with a plot of land He may now send for his family or marry a female convict The three later stages of this discipline have been in force for many years, and the first for some time, the cellular jail having been finished in 1905, but the associated jail for the second stage has not yet been built Females are kept at intramural work under strict jail discipline for three years, for the next two years they are subjected to a lighter discipline, and at the end of five years they may support themselves or marry Promotion from class to class depends on good conduct The convicts are employed in jail service, in the erection and repair of jail buildings, in the commissariat, medical, marine, and forest departments, in tea-gardens and at other agricultural work, and in various jail manufactures Ordinary male convicts sentenced to transportation for life are released, if they have behaved well, after twenty years, and persons convicted of dacoity and other organised crime after twenty-five *Thags* and professional prisoners are never released Well-behaved female convicts are released after fifteen years The release is sometimes absolute and sometimes, especially in the case of dacoits, subject to conditions, *e g*, in regard to residence In some cases released convicts prefer to remain in the settlement as free persons The settlement is administered by a superintendent, aided by a staff of European assistants and Indian subordinates The convict population of Port Blair amounted in 1912 to 11,235, consisting of 10,633 males and 602 females, of whom 1,566 and 272 respectively, mostly occupied as cultivators, were "self-supporters" The total population of the settlement was 15,613

The variations of the jail population in British India during five years are shown in the following table —

	1912	1911	1910	1909	1908
Jail Population of all classes on 1st January	91,241	102,429	103,363	103,784	101,336
Admissions during the year	487 472	463,282	473 241	489 051	520,377
Aggregate	578,713	565 711	577 604	592,835	621 713
Discharged during the year from all causes	477,464	474 464	475,183	489 481	517,930
Jail population on 31st December	101 249	91 247	102,421	103,354	103,783
Convict population on 1st January	79,420	91,505	92,605	91,819	89,457
Admissions during the year	158 762	152, 896	154,973	160,391	173,175
Aggregate	238,182	244,001	247 578	252,210	262,632
Released during the year	144,674	151,935	154,769	157,076	168,599
Casualties, &c	3,461	3,360	3,406	3,528	3,629
Convict population on 31st December	88,914	79,668	91,271	91,606	90,404

Nature of Sentences —Over one-half of the total number of convicts received in jails during the year came from the classes engaged in agriculture or cognate pursuits About 127,500 were illiterate The percentage of previously convicted prisoners fell 16 3 to 14 5, while there was a decrease of 43 in the number of youthful offenders The following statistics show, in round figures, the nature and length of the sentences imposed during the year —Not exceeding one month 43,500, above one month and not exceeding six months, 61,500, above six months and not exceeding one year, 27,500, above one year and not exceeding five years, 20,500 The remainder were major sentences, *viz* '—2,333 for terms above five and not exceeding ten years, 235 for terms exceeding ten years, 1,768 to transportation beyond seas, and 757 to death. Consonantly with the decrease in the average daily strength, the number of offences committed by convicts fell, and there was a decrease of about 4,000 in serious offences dealt with by major punishments

Executive and Judicial Functions.

Throughout the history of political agitation in India, few matters have received more consistent attention than the question of the separation of the Judicial and the Executive functions It has been one of the principal planks in the political platform of the National Congress since its inception in 1885, and has received the support of men of every shade of political opinion, from the most violent Extremist to the most conciliatory Moderate

The question arises from the fact that the Indian Administration is based on the Oriental view that all power should be concentrated in the hands of a single official Thus the District Magistrate is the chief revenue authority in the District, he controls local boards and municipalities, and directs the District Police, and, in fine, almost every department within the District is to a large extent under his influence Sessions trials and Civil Justice fall within the province of the District Judge, but there remains under the District Magistrate's orders a body of subordinate Magistrates who dispose of simple criminal cases, and commit graver ones to the Sessions

The opponents of the existing system are apt to rely largely on *ad captandum* phrases, like "the maintenance of judicial independence," and "a violation of the first principles of equity," rather than to specify exactly what points they really consider objectionable It appears, however, that there are two main items in the District Magistrate's position to which exception is taken one is that he is executive head of the District with direct control of the police, has the power of trying cases, the other is that the subordinate Magistrates, who try the great majority of cases, are directly under him, receive his orders, and rely on his good opinion for their promotion

As regards the first point, the number of cases actually tried by the District Magistrate is exceedingly small Sir Charles Elliott defending the existing system in 1896, said — "There are many Districts in Bengal in which he does not try 12 cases a year" Since 1896 miscellaneous work has increased so much that even this small number has been greatly reduced In fact, in Bombay to-day the majority of District Magistrates probably go through the year without trying a single case, and the difference would hardly be noticeable if the District Magistrate altogether lost his powers to try cases The power is, however, sufficiently useful on occasions to outweigh the fear of harm arising from any abuse of that power on the rare occasions when it is used

The more important item of the District Magistrate's power, that of control over his subordinates Magistrates, is attacked on the ground that he interferes with their "judicial independence." It is here assumed that control and interference are one and the same thing. If the District Magistrate said to his subordinate, "I consider this man guilty, and I expect you to convict him," there would be very real cause for complaint But interference of this type does not occur, and is not alleged. It has been said that inspection is to the District Officer the very breath of his nostrils, and it is very largely to his continual inquisitiveness into the work of his subordinates, that the relatively high standard of justice attained by the subordinate magistracy in India is due The points towards which his inquiries are most frequently directed are matters like want of sense of proportion in sentences, delays and irregularities in procedure subservience to the interests of a local bar prolixity in judgments and so forth If control of the Magistracy were exercised only by the District Judge, who is practically tied to his bench, this supervision would be impossible, and the only check on the subordinate Magistrates would be occasional strictures passed by the Judge in appeal or on revision.

The opponents of the existing system would substitute for the present Magistracy trained lawyers, whose sole work would be that of stipendiary magistrates There is no reason to suppose that the trained lawyer would be any less liable to the faults mentioned above. Nor is the Magistrate of to-day altogether untrained The criminal law of India is to a very large extent independent of customary and case law, and is based on comparatively simple codes Every official Magistrate is examined in these codes, and with a few years' experience, he is often a match in argument for all but the best of the local *vakils* It is not, therefore, apparent that any gain would result from this change, while the increased charge to the public revenues would be enormous

In 1899, the movement against the existing system culminated in a "memorial on the proposed separation of the Judicial and Executive duties in India," addressed to the Secretary of State, and signed by ten Indian gentlemen—mostly high judicial authorities. This memorial sets forth eight objections to the existing system, and it may perhaps be instructive to examine these seriatim, and to indicate with respect to each point the grounds on which an apology for the present system may be based —

(1) "That the combination of judicial with executive duties in the same officer violates the first principles of equity"

If the same officer actually brought an offender to justice, and then tried him personally, the above theoretical objection might have considerable weight In practice, however, as has been shown above, this does not occur; and the combination of functions in the District Officer is governed in such a way by criminal codes that the interests of accused persons are effectually safeguarded

(2) "That while a judicial authority ought to be thoroughly impartial, and approach the consideration of any case without previous knowledge of the facts, an Executive Officer does not adequately discharge his duties, unless his ears are open to all reports and information which he can in any degree employ for the benefit of the District"

In reply to this it may be repeated that the District Magistrate, in fact, tries very few cases at all and it may be noted, moreover, that the law very largely restricts the possibility of a magistrate trying a case of which he has any previous knowledge Further, it is surely to the public advantage that the police should be controlled by the District Magistrate, whose sole aim is or should be justice,

rather than by a police officer whose professional zeal might weigh hardly on the innocent suspect, and whose *esprit de corps* might shield a corrupt or unscrupulous subordinate from justice

(3) "That Executive Officers in India, being responsible for a large amount of miscellaneous business, have not time satisfactorily to dispose of judicial work in addition"

By this it is presumably meant that the Executive Officer is at present overworked

This is quite possible, but the remedy would appear to lie rather in an increase of staff than in a re-distribution of functions, which in itself could not remedy the defect

(4) "That, being keenly interested in carrying out particular measures, they are apt to be brought more or less into conflict with individuals, and therefore that it is inexpedient that they should also be invested with judicial powers."

It is implied here that the District Officer may use his judicial powers to enforce the executive measures in which he is interested It is not unknown for a District Magistrate to issue orders to subordinates enjoining severe sentences in particular classes of cases and this may have reference to a particular executive policy (*e g*, such orders might be issued with regard to smuggling cases in a District where the illicit traffic in cocaine was rife) But it by no means follows that any injustice will result from such a line of action Moreover, if this kind of "interference" by the District Magistrate were stopped, the only alternative left to Government, in cases where they wished specially to repress a particular type of crime, would be to amend the criminal codes by raising the minimum penalty for the offence, thereby depriving Magistrates of all discretion in the matter

(5) "That under the existing system Collector-Magistrates do, in fact, neglect judicial for executive work"

It is not at first sight obvious how this can be urged as an objection to the fact that they do both types of work It is true, as already stated, that the District Magistrate, tries very few original cases, but it by no means follows that what judicial work he does, is done negligently

(6) "That appeals from revenue assessments are apt to be futile when they are heard by Revenue Officers"

It is insinuated that all revenue matters should be decided by the operation of the weighty and complicated machinery of the Civil Courts The idea of such a system in India, where three-quarters of the population are dependent on revenue-paying land, conjures up such a nightmare of confusion, that the imagination positively reels The cost would be colossal. Nor is the objection really relevant The Revenue Officer when hearing appeals from executive acts of his subordinates, is still an Executive and not a Judicial Officer, and what is here aimed at is a revision of the scheme of matters, which the law allows to be dealt with executively, rather than a separation of the two functions.

(7) "That great inconvenience, expense and sufferings are imposed upon suitors required to follow the camp of a Judicial Officer, who, in the discharge of his executive duties, is making a tour of his District."

This is perhaps one of the least convincing objections advanced against the existing system In the first place a Magistrate in headquarters is likely to be at least as far from the homes of suitors, as he is in camp. The careful Magistrate, moreover, will arrange the hearing of cases at places which suit the convenience of parties as far as possible, and considerable trouble and expense are often saved to parties in this way If all judicial work were done by Magistrates who had no other work, the number of Magistrates would be much reduced, and it is obvious that three resident Magistrates in a District must be much less accessible than a dozen or more who are continually moving about among the agricultural population The only people who really are inconvenienced by the touring of a Magistrate are the pleaders

(8) "That the existing system not only involves all whom it concerns in hardships and inconvenience, but also by associating the judicial tribunal with the work of the Police and of detectives, and by diminishing the safeguards afforded by the rules of evidence, produces actual miscarriages of justice and creates, though justice be done, opportunities of suspicion, distrust and discontent which are greatly to be deplored"

It is difficult to answer so general and indefinite an objection as this, except by flat denial.

It may, however, be said that if miscarriages of justice, due to this cause, were at all frequent they could never long remain hid, and much more would be heard of them than is actually the case In 1896, Mr Manomohan Ghose, a Bengali lawyer of repute, drew up a memorandum containing an account of 20 cases, which had come to his notice in the course of a long experience at the bar, and in which he alleged that injustice had resulted from the union in one officer of the judicial and executive functions These instances were discussed by Sir Charles Elliott, formerly Lieutenant-Governor of Bengal, in an article in the *Asiatic Quarterly Review* for October 1896, and his analysis robs this evidence of nearly the whole of its weight.

These then are the main objections which have been raised against the existing system It may well be asked why, if these objections are groundless, has there been such unanimity in the opinions expressed by reformers. There are perhaps two reasons which are mainly responsible Firstly, it is beyond question that the proposed separation would everywhere weaken the Collector's position, and thereby that of the British Raj, and secondly, those who desire the separation belong almost without exception to the class from which lawyers are most largely recruited. The separation would not merely provide innumerable stipendiary billets, holders of which would have to be recruited from among the lawyers, but an immense increase of litigation would also result.

There is no doubt that over the greater part of India, the common people place a very real confidence in the Magistracy, and this confidence is largely based on the wise and effective control exercised by District Magistrates over their subordinates. Nor is there any doubt that the common people would view with the most intense alarm any proposal which would render the magistracy independent of this control.

The Laws of 1914.

BY

RATANLAL AND DHIRAJLAL

(*Editors of the Bombay Law Reporter*)

The Legislative Session which met at Delhi in the early part of this year had not much arduous work to do The Bills brought up before it were for the most part of a non-controversial character

The Civil Procedure Code Amendment Act.—This Act enables the High Court in the Presidency Towns to extend such provisions of the Civil Procedure Code of 1908 to the Presidency Courts of Small Causes, as are not inconsistent with the express provisions of the Presidency Small Cause Courts Act (XV of 1882), and by adding a subclause to s 67 of the Code, removes any doubt which may exist as to the validity of the rules already made by the High Court under s 9 of the Presidency Small Cause Courts Act

The Destructive Inspects and Pests Act —This, the second Act, is the outcome of the representations made by the Bombay Chamber of Commerce to the Government of India It enables Government to prohibit or regulate the import into British India of any article likely to cause infection to any crop

The Indian Copyright Act —The third Act of the year largely concerns authors and publishers Before its enactment, the law on the subject was contained in Act XX of 1847, which, besides being archaic, was wholly unadapted to the modern conditions of life Even in England, the statute law on the subject had fallen behind legislation on the Continent An International Conference, therefore, met in 1908, for bringing the domestic laws of all countries concerned into harmony with one another so as to obtain international uniformity of treatment To carry out the resolutions of this conference, an Imperial Copyright Conference was convened in 1910 containing representations of the self-governing dominions and of the India Office, Colonial Office, etc As a result of their deliberations, the English Copyright Act of 1911 was passed which came into operation there on the 1st July 1912 The provisions of that Act were extended to India on the 31st October 1912, by a proclamation issued in the *Gazette of India* The object of the present Act is to re-enact the English Copyright Act in this country, with certain modifications which will be noticed hereafter The English Act is set out in a Schedule to the Act Among the momentous changes effected by the English Act, may be mentioned (1) the abolition of the formality of registration of Copyright, (2) the extension of the term of copyright from forty-two years to one of life and fifty years subject to certain conditions The Act enlarges the import of the term 'copyright' It means 'the right to produce or reproduce the work or any substantial part thereof in any material form whatsoever, to perform, or in the case of a lecture to deliver, the work or any substantial part thereof in public, if the work is unpublished, to publish the work or any unsubstantial part thereof' The term also includes the right (1) to produce translation of the work (2) in the case of a dramatic work, to convert it into a novel or other non-dramatic work, (3) in the case of a novel or other non-dramatic or artistic work, to convert it into a dramatic work, by way of performance in public or otherwise, and (4) in the case of a literary, dramatic or musical work, to make any record, perforated roll, cinematograph film, etc Section 3 extends the term of the Copyright to the life of the author and fifty years after his death But after the expiry of twenty-five years, any person can reproduce the work, after giving notice of his intention to reprint to the owner of the Copyright and on giving to him a royalty at the rate of ten per cent on the price at which the re-published work is sold In the case of joint authors, the term subsists during the life of the author who dies first and for fifty years after his death or during the life of the author who dies last whichever period is the longer, (s 16) Posthumous works are protected for a term of fifty years from the date of their publication (s 17), and a similar provision has been made for Government publications (s 18) A term of fifty years duration is established for "records, perforated rolls, and other contrivances by means of which sounds may be mechanically reproduced" (s 19) Copyright in photographs subsists for fifty years from the making of the original negative (s 21) The Act does not protect an address of a political nature delivered at a public meeting it can be immediately published in a newspaper (s 20) Nor does it apply to designs capable of being registered under the Patents and Designs Act, 1907 (s 22) No copyright protection is afforded to works by foreign authors whose country does not give adequate protection to the work of British authors (s 23) As remarked above, the Legislature, in introducing the English Act here, has made certain alterations The right of translation of a work can be reserved only for ten years from the first publication of the work, but the author will be at liberty to publish within the period, his own translation, which will be similarly protected (s 4) The term "musical work" is specially defined to mean "any combination of melody and harmony, or either of them, which has been reduced to writing" (s 5) This definition has been borrowed from the English Copyright Act, 1902

In this country, it is impossible in most cases to identify the original composer or author The majority of Indian melodies have not been written in staff notation except through the medium of the phonograph The definition is, therefore, enacted to prevent fictitious claims

of ownership in musical works Breaches of the provisions of the Act are made punishable with fine A fine extending to Rs 20 for every copy but not exceeding five hundred rupees is prescribed for the sale, or importation of any infringing copy of a work (s 7) Possession of plates for infringing copyright in any work is penalised by a fine of Rs 500 (s 8) The punishment for second or subsequent conviction can extend to simple imprisonment for one month, or a fine which may extend to Rs 1,000 or both (s 8) Offences under the Act can be tried only by a Presidency Magistrate or a Magistrate of the First Class (s 9) The High Court or the Court of the District Judge alone is empowered to hear a suit or other civil proceeding regarding infringement of copyright (s 13)

The Decentralization Act —The genesis of this Act lies in the recommendations of the Royal Commission on Decentralization At first a bill was introduced into the Imperial Legislative Council on the 23rd September 1911 providing, with certain safeguards, for the delegation by notification to a lower authority of powers and duties vested by law in a higher authority The bill was eventually abandoned, for it was criticised as giving a blank cheque to the executive to alter legislative enactments without the usual legislative procedure" The present Act, therefore, indicates in its Schedules the precise delegations of powers which are effected in particular Acts

The Negotiable Instruments (Amendments) Act.—This amending Act purports to validate endorsements on negotiable instruments, particularly Government Promissory Notes, in such a way as to make them payable to two or more payees jointly or in the alternative, to one or some of several payees

The Provincial Small Cause Courts (Amendment) Act —This Act makes two additions to the class of suits exempted from the cognizance of Provincial Courts of Small Causes, namely (1) suits for compensation for any offence under Chap XVII of the Indian Penal Code or for the recovery of any property taken in the commission of such offence, and (2) suits for compensation for trespass or damage committed in the illegal or improper execution of any legal process or search The reason for the exclusion is that suits in a Court of Small Causes are triable by a summary procedure which allows no right of appeal upon the facts and requires no full record of the evidence This position of affairs was unsatisfactory as it deprived the defendant of the possibility of clearing his character by an appeal from an adverse decree

The Indian Telegraph (Amendment) Act.—The introduction of radio telegraphy into India has made necessary certain amendments in the Indian Telegraph Act Following the analogy of the Indian Post Office Act (VI of 1898) the provisions of the Act are now made applicable also to all servants of the King residing in Native States whether British subjects or not (s 2) Section 3 amends the definition of 'telegraph' by substituting the words "making transmitting or receiving" for the words "transmitting or making". For, it is now possible to construct wireless telegraphic apparatus capable merely of *receiving* telegrams Section 4 adds a specific provision for regulating the establishment and working of wireless telegraphs on ships within Indian territorial waters and of telegraphs other than wireless telegraphs within any part of British India A telegraphic line or wire has oftentimes to pass through property belonging to private owners Such owners are now (s 19A) required to give notice before they can exercise legal right as is likely to damage telegraph or interfere with telegraphic communication Violation of this provision is made punishable with a fine which may extend to Rs 1,000 (s 25A) Similarly, if any person establishes, maintains or works unauthorized telegraphs, he can be punished with a fine which may extend to Rs 1,000, and if the telegraph is a wireless telegraph, with imprisonment which may extend to three years, or with fine or with both The amendment which most concerns trade is the addition of s 29A It enacts "If any person without due authority, (*a*) makes or issues any document of a nature reasonably calculated to cause it to be believed that the document has been issued by, or under the authority of, the Director-General of Telegraphs, or (*b*) makes on any document any mark in imitation or, or similar to, or purporting to be, any stamp or mark of any Telegraph Office under the Director-General of Telegraphs, or a mark of a nature reasonably calculated to cause it to be believed that the document so marked has been issued by, or under the authority of, the Director-General of Telegraphs, he shall be punished with fine which may extend to fifty rupees" This is meant to put a stop to the method of advertisement, resorted to of late by some trading firms in this country, by distributing advertisements to the public by means of imitation inland telegraph forms, and covers with impressions of name and date stamps similar to those used on actual telegrams sent out from Government Telegraph Offices

The Indian Motor Vehicles Act.—The introduction and development of the use of Motor vehicles have been signalized by the enactment of six different Provincial Acts on the subject, *viz*, Bengal Act III of 1908, Bombay Act II of 1904, Burma Act II of 1906 Madras Act I of 1907, Punjab Act II of 1907, and United Provinces Act II of 1911 These Acts though exhibiting no important differences in principle, are not identical in form Still, it is a distinct advantage to have one uniform Act applying to the whole of India There is nothing new in the Act Its general provisions enact that no person under eighteen years of age shall drive a motor vehicle in any public place (s 3), and that the driver should stop the vehicle for regulating traffic and in case of accidents (s 4) A person driving a motor vehicle recklessly or negligently in a public place can be punished with fine which may extend to Rs 500 (s 5) The penalty for contravening any of the provisions of the Act or any rule made thereunder, is a fine of Rs 100 on a first conviction—which extends to Rs 200 on a subsequent conviction (s 16) The offences under the Act are triable by Magistrates not lower in grade than second class (s 17)

The Local Authorities Loans Act —This is a consolidating measure, which condenses eight foregoing Acts on the subject The present

Act makes it clear that it is competent to the Port Officers to borrow under the Act The powers which the Government of India hitherto had of sanctioning and regulating the issue of loans by local authorities have been made over to the local Governments

The Repealing and Amending Acts — Two Acts (X and XVII) have been promulgated this year making formal amendments in certain enactments and repealing certain obsolete enactments This periodical filtration is necessary to remove what has become unnecessary in Legislative Acts.

The Indian Companies (Amendment) Act —Every Company with limited liability should have at least two Directors (s 83A), and until the first Directors have been appointed, the subscribers of the memorandum shall be deemed to be the Directors of the Company (s 83B) It is further provided that every interested Director shall disclose his interest in contracts to other Directors (s 91A), and he will be incompetent to vote at meetings held to consider such contracts (s 91B) The shareholders of a Company have to be informed about the contract for the appointment of the Manager of the Company in which contract any Director has interest (s 91C) In the case of contracts by agents of a Company in which the Company is undisclosed principal, the terms of the contract must be communicated to the Company (s 91D)

The Sea Customs (Amendment) Act --The main change made by this Act is that where any consignment is shipped without or in anticipation of a shipping bill, the rate of duty and tariff valuation shall be the rate and valuation at the time when shipment of the goods commences It will remove the delay and inconvenience to which shippers were hitherto subject Section 19 of the Act has been amended to give the Government of India power to prohibit the importation or exportation of any specified description of goods either generally or from or to any country, beyond the limits of British India

The Indian Life Assurance Companies (Amendment) Act.—The Controller of Currency is authorized to perform all work in connection with Government Securities, previously entrusted to the Comptroller-General, under the Act

The Indian Post Office and Telegraph (Amendment) Act —The amalgamation of the Offices of Director-General of Telegraphs and of Director-General of Post Office in India has given rise to certain formal amendments in the Indian Post Office Act of 1898.

The Indian Army (Amendment) Act — Section 114 of the Indian Army Act of 1911 was found defective in that while providing for the drawing by the Commanding Officer of the pay and allowances due to a deserter, it made no provision for the disposal of the sum so drawn The balance of the deserter's effects will, it is now enacted, be forfeited to His Majesty, on the expiration of three years from the date of desertion, unless the man has in the meantime, surrendered or been apprehended

The Indian Aircrafts (Amendment) Act — The term "airships" has given place to the more comprehensive term 'aircraft' in the Act When the Act of 1911 was passed, the possibility of the entry of aircraft into British India by flight over-land or over-sea was not contemplated It is considered necessary, on military grounds to prohibit the passage by flight of any aircraft into India, except upon conditions which may cover directions to enter or land at a particular point and to observe and display specified signals or marks (s 7) In case of disobedience to comply with specified signals in a specified manner, "any person appointed in this behalf by the Governor-General in Council may fire at or into such aircraft and use any and every other means necessary to compel compliance."

Wireless Telegraphy.

The annual report of the Indian Telegraph Department for 1912-13 states that new wireless telegraph stations were opened during the year at Karachi and Butcher Island, Bombay, with a working range of 600 miles, for the exchange of ships at sea, and the temporary station at Bombay was closed In addition to the erection by the department of the four large Marconi stations at Karachi, Nagpur, Lahore and Bombay, an important event of interest in India has been the large increase which has taken place in the number of ships fitted for wireless telegraphy Most of the passenger steamers plying regularly in Indian waters are now fitted with wireless apparatus The increased demands made by ships on the coast stations have been met by opening a new station at Karachi, and by arranging that Calcutta, Diamond Island, Mergui and Victoria Point shall operate by night as well as by day.

Licences to Officers. —The Government of India have decided that the granting of licences to military officers in respect of wireless telegraph apparatus used for experimental purposes shall be regulated by the following general principles: (1) When an officer carries on experiments in his official capacity at the expense of Government no licence is required, but only executive *permission*, which may be given so far as the Telegraph Department is concerned by the Director-General, Posts and Telegraphs

(2) When an officer carries on experiments as a private individual at his own expense he must obtain a licence If the approval of the military authorities is required to what he proposes to do he should obtain such approval before the Director-General, Posts and Telegraphs, is approached The licence will then be submitted by the Director-General, Posts and Telegraphs, for the sanction of the Government of India

(3) With reference to the above, attention is drawn to the necessity for applying for licences to own and use wireless telegraphy apparatus or installations, experimental or otherwise Applications for such licences will be submitted through the Chief of the General Staff and will contain particulars regarding the apparatus showing (*a*) system it is proposed to employ, (*b*) maximum range of signalling with applicants own receiving apparatus,(*c*) power (current and voltage) (*d*) source of

Imperial Legislative Council.

The first meeting of the Imperial Legislative Council for the session 1914-15 was held at the Council Chamber in the Imperial Secretariat at Delhi on Tuesday, 6th January, 1914 There was the usual long list of **interrogatories**, amongst the most important of the questions asked being an inquiry by the Hon'ble Sir Gangadhar Chitnavis whether the Government propose, in view of the Bank failures, to undertake legislation dealing with the banks as whole The reply of the Member for Commerce and Industry was that the Local Governments and Administrations had been consulted on his point and, on the receipt of their replies, the question whether legislation should be undertaken would be decided Sir Gangadhar Chitnavis raised the perennial question whether the Government of India proposed to move the Imperial Government for the payment to India from the Imperial Exchequer of Compensation for the loss of Indian opium revenue, the reply of the Finance Member stated that no such application was under consideration another point on which exceptional interest has been excited was that of indentured emigration to certain British Colonies as well as Foreign Settlements in the East The Member for Commerce informed the Council that the whole question of emigration under indenture would come up for the consideration of the Government of India when the report of Messrs McNeill and Chiman Lall, who had been specially deputed to investigate this question, was received.

The Indian Telegraph Amendment Bill of 1913 was introduced and referred to a Select Committee The Commerce Member, in introducing this proposal, mentioned that the rapid and important development of radio telegraphy had necessitated some amendment of the law in order to provide for its adequate control

The Negotiable Instruments Amendment Bill was introduced by the Finance Member, Sir William Meyer, and referred to a Select Committee. The object of the Bill was merely to place beyond doubt the legality of what are known as "endorsements in the alternative" that is to say endorsements on a negotiable instrument made in such a way as to render the latter payable to two or more payees generally, or in the alternative to one or some of several payees. **The Indian Copyright Bill** was also referred to a Select Committee together with the Provincial Small Causes Courts Amendment Bill

There was a debate of some importance on **Educational questions** on the motion of the Hon'ble Mr Surendranath Banerjee, of Calcutta, who asked for the publication of correspondence relating to the affiliation of the Ananda Mohan College up to the B A Standard, and also for official papers leading to the orders of the Government regarding the desirability of introducing school final examinations in Provinces where they have not been introduced Although a local question in itself, the request for papers relating to the Ananda Mohan College touched upon a question of general importance, namely whether Government or the Universities are to be the controlling authority for educational institutions Mr Surendranath Banerjee, whilst expressing the gratitude of his countrymen for the impetus which the cause of education had received during Lord Hardinge's administration, said that the Ananda Mohan College was a second grade college at the headquarter station of the Mymensing District which was one of the biggest, one of the richest, and one of the most populous districts in East Bengal, its population comprising 1½ millions with an area of 6,332 square miles The University recommended the affiliation of the college up to the B A Standard in Arts, but the Government of India declined to grant the affiliation The question of the School Final is one of equally perennial interest in Indian educational discussions Until a comparatively recent period the Matriculation Examination, designed as a College entrance examination, was practically the only test of school work and a considerable body of critics has protested against the whole secondary educational system being forced into one groove in order to provide a course of instruction not complete in itself but preparatory to the college course The School final examination, conduced either under the auspices of Government or of a special committee, received a great impetus when the University of Madras abolished the Matriculation and substituted the School Final in its stead Mr Surendranath Banerjee's contention was that, whatever reason may be raised in favour of the extension of this system to Bengal from its success in Madras, it was negatived by the experience of Bengal itself. Finally Mr Surendranath Banerjee protested against the order placing the recognition of schools for the purpose of presenting candidates for the Matriculation in the hands of the Local Governments He argued that it would be exceedingly risky to introduce an experiment of this kind in a province like Bengal where the vast majority of the high schools are controlled by the people

In the debate which followed the elected members expressed a good deal of sympathy with Mr Banerjee's ideas on the subject of keeping the recognition of schools in the hands of the Universities rather than transferring it to the Local Governments The reply of the Education Member, Sir Harcourt Butler, was in effect that the Government of India would gladly reconsider their decision not to recognise the affiliation of the Ananda Mohan College when improvements which had been promised were effected He traced the long history which lay behind the School Final Examination pointing out that within the last quinquennium new systems had been framed in Madras and the United Provinces which laid stress on the record of the pupils' progress maintained in the high classes of schools The Madras system, while it included examination, did not make the grant of a certificate conditional on the attainment of any prescribed standard in examination. The grant of a certificate under the United Provinces system depended on the attainment of a certain proficiency based on written and oral examinations. The certificates under both the Madras and the United Provinces system were recognised by the local Universities as equivalent to Matriculation; but the Madras certificate

was, while the United Provinces was not, the sole qualification for Government service of certain grades The Government of India have brought no pressure to bear in the matter as regards any details of either the Madras or the United Provinces systems Turning to the recognition of schools the Education Member maintained that every modern system of educational organisation was based on a large and growing measure of State control It was generally agreed, he said, by thoughtful people now that the control of education was a duty which the State owed to the parents and the rising generation Government must satisfy themselves of the character of secondary schools before reckoning them eligible to receive grants-in-aid or to send pupils to compete for Government scholarships The motion was defeated

When the Council resumed on January the 9th the Honourable Mr Banerjee introduced the resolution on the subject of the **Press Act** of 1910 This Act was passed when the seditious agitation which had its aftermath in anarchical crime was at its height, it supplemented the provision of the criminal law which provided for prosecution in the case of sedition by provisions which empowered Government in certain circumstances to take and to eschcat security for the good conduct of newspapers Mr. Banerjee maintained that when the Act of 1910 was passed there was a general desire expressed by non-official Indian members that it should be a temporary measure and should not find a place amongst the permanent statutes of the land His argument was that this Act gave very large powers to the police, and that the judgment of the Calcutta High Court in what was known as the "Comrade" case showed that the protection supposed to be accorded to the right of appeal to the High Court against the order of the executive was to a large extent illusory In the course of this judgment Sir Lawrence Jenkins stated that the provisions of Section 4 of the Act were very comprehensive and its language was as wide as human ingenuity could make it He further argued that there had been a sensible improvement in the situation and that he was therefore justified in demanding the repeal or at any rate a substantial modification of the Act, he further urged upon the Council so to amend the Act as to remove a just cause for complaint to carry out its declared intention and to redeem the pledged word of the Government There was manifest during the discussion a considerable difference of opinion, whilst the large majority of the non-official elected members supported Mr Banerjee, Malik Umar Hayat Khan declared himself the greatest enemy of the seditious press and the Hon'ble Sir Gangadhar Chitnavis declined to agree with Mr Banerjee that the time had come when the Act should be repealed The official view as expressed by the Home Member, Sir Reginald Craddock, was that when the Act was thoroughly examined by a Select Committee in 1910 there was not a single reference made, neither in any of the minutes of dissent to the provision of Section 12 nor did a single member move in the Council to amend that section The Home Member also maintained that the action to be taken under the Press Act was always intended to be the action of the executive Government but power was rightly reserved to no authority lower than the local Government itself As a matter of fact there were at that time 1647 newspapers and periodicals in India Since the Act was brought into force security was deposited by presses under section 3 in 147 cases only and from publishers under section 8 in 100 cases Under section 4, that is to say, when security which was given by the printer or the keeper of a press was forfeited, there had been only five cases altogether Under Section 6 there had been no cases, that is, where the offending press having had its security forfeited and having given further security offended for a second time Under Section 9, that is the one under which security is forfeited, there had been two cases There had been altogether five applications to the High Courts in respect of orders of forfeiture or any other orders from which the law allowed an appeal to the High Court none of which had been successful The resolution was negatived by 40 votes to 17 votes

When the Council resumed on January 13 Sir Reginald Craddock moved that the **Indian Criminal Law and Procedure Amendment Bill** be referred to a Select Committee The Hon'ble Mr Chakravarti Vijiaragha-Acharia criticised the details of the Bill at length and proposed *inter alia* that the age of consent should be raised to 18 He said that he regarded the Bill as a brave attempt, the first of the kind, on the part of Government in the matter of social legislation in response to the rising national consciousness Sir Reginald Craddock in replying explained that certain proposals had been dropped because Government had been warned on all sides that it was undesirable to interfere with the age of consent or to attempt a differentiation in respect of the age of consent between husbands and strangers The motion was put and agreed to A resolution was moved by the Honble Raja Kushal Pal Singh recommending that in all future settlements of land revenue any increase of assets due to the construction otherwise than at the expense of the State, of wells, tanks or other artificial sources of irrigation be permanently exempted from assessment to revenue He said that in Bombay and Madras such **permanent exemptions from taxation** of improvements had justified themselves by the effective encouragement given to the sinking of wells. After quoting a number of opinions in support of his views he expressed the belief that if the resolution were to be accepted masonry wells and other irrigation works would be multiplied in such large numbers that famines would become things of the past The resolution was supported by the Hon'ble Sir Gangadhar Chitnavis and other speakers Sir Edward Maclagan, after pointing out that the reasons why the Government must oppose this resolution were fully explained in a Government Resolution of 1906, went on to say that he had never heard a land holder say that he was not going to make a well merely because he was afraid of the land revenue being enhanced after a number of years At a later stage of the debate Sir Robert Carlyle said that, if the proposal were accepted, the loss of revenue involved would be very large The assessments on the profits due to a well in the United Province and in the Punjab would, on an average, come to something like Rs 20 a year, and as other

were already about 750,000 wells in these two provinces, the annual loss in this part of India alone would be about a crore and a half of rupees Even if the exemptions were confined to works constructed after the period, the loss involved would be very great if the construction of wells went on as rapidly in future as of late years Nor was the Indian policy opposed to the usual practice in most civilised countries, the Indian Government on the other hand had been the first to treat liberally those who had made improvements at their own expense The resolution was negatived by 33 votes to 17 votes

On January 14, the Hon'ble Mr Rama Rayaningar moved that the reports of the **Army in India Committee** presided over by Field Marshal Lord Nicholson be laid on the table He said that non-official public opinion about the recommendations of the Committee, if they were productive of good, must be expressed and recorded before final orders were passed by the Secretary of State The Resolution was withdrawn after Major General Birdwood had explained that it had already been announced in the house of Commons that the report should not be published

The Hon'ble Mr Rama Rayaningar then moved "that this Council recommends to the Governor General in Council that Local Governments be consulted as to the desirability of advisory boards composed of non-official gentlemen nominated by the Revenue Heads of the Districts being formed to assist officials in the work of assessment under the Income Tax Act" He said there was no reason why the **Administration of the Income Tax Act** should not be improved and placed upon a popular basis Practically all the provincial reports showed that there was general dissatisfaction at the assessment In the greater part of the United Provinces the experiment of consulting non-official assessors had been tried with conspicuous success The Hon'ble Mr Donald, who followed, gave some account of the system which prevails in Bengal and in Bihar and Orissa He said he though that the constitution of a formal advisory board would intensify rather than diminish the unpopularity of the tax The Hon'ble Sir Ibrahim Rahimtoola said that Government might very well be left to organise efficient means of collecting taxes As for the proposed advisory boards being conducive to the public interest, he thought that far from being in any way useful or acceptable to the public, the appointment by nomination of any non-official element for the purpose of helping officers in the matter of determining assessments and investigating appeals would be very strongly resisted The present procedure was not perfect but might be continued, because the idea of non-officials helping to determine the amount of income-tax paid by business men was open to serious objection Sir William Meyer, after pointing out the enormous difficulties and complexities of income-tax assessment and the objections to the scheme put forward, said that he would nevertheless be prepared to accept the motion as worded Income-tax was levied under an Imperial enactment, its assessment and collection were left entirely to the local government The resolution merely recommended the Government of India to consult local governments as to the desirability of establishing non-official boards The Government of India were not bound, and they did not intend, to propose any definite action The resolution was not of a mandatory character, but was mere an attempt to feel the pulse of the local governments and through them of local opinion on the matter proposed The resolution was therefore accepted on behalf of the Government of India, and was put and adopted

On January 16 the Hon'ble Rai Sri Ram Bahadur moved that "the provisions of Chapter VI of the Civil Service Regulations, relating to **acting allowances** be also extended to the members of the Provincial Civil Service, Judicial and Executive holding substantive appointments and officiating in another appointment or in a higher grade as laid down in Article 105 (*a*) of the said Civil Service Regulations" The object of the Resolution was that the rule by which an officer with a substantive appointment officiating in another appointment of a higher grade obtains acting allowances besides his own pay, be extended to the members of the Provincial Civil Services both in the Executive and Judicial lines He said that it was this class of public servants that did the great bulk of the work and to whose collaboration with the head of the district was, to a large extent, due the smooth running of the administrative machinery After various speeches in support of the motion Sir Reginald Craddock said he fully agreed with the excellent work done by provincial officers and he proceeded to explain how the privilege enjoyed by the Indian Civil Service had come into being He instanced the Punjab and Central Provinces grading, but said that while the Royal Commission was considering the question with many others he could not recommend the Government to adopt the motion It practically amounted to increasing the pay of the Provincial services and he was not at all sure the proposed method was the best way of doing so The motion was put to the Council and lost by 40 votes to 14

The question of an **Improved Mail Service** was raised at the same meeting by the Hon'ble Sir Fazulbhoy Currimbhoy, who approached the subject by moving a resolution that a committee of Council be appointed to inquire into and report on the question of improving the mail service between Great Britain and India He said that the broad fact was that Indian commercial opinion was practically unanimous in demanding a quicker mail service. Whatever might be the merits of the demand it acquired weight from certain undeniable circumstances He quoted figures showing the recent increase in the seaborne trade of India and the consequent increase in the number of letters and post-cards and said that it was impossible to suppose that this increase did not necessitate a change in the mail service. and this change must come sooner or later There was next the question of the expenditure which this change would necessitate. All these points required to be discussed fully as well as the bi-weekly service and the rival claims of Bombay and Karachi The points were so various and so difficult that it was most desirable that they should form the subject

of consideration by a committee of the Council on which all interest were represented

The Hon Malik Umar Hyat Khan and the Hons Chitnavis, Abott and Huda supported the resolution while the Hon Sita Nath Roy supported it with the proviso that England should bear the cost

The Hon'ble Mr Clark in reply said that the extended P & O Contract, if notice had been given, was due to expire on January 31, 1916 The whole contract was made by the British Postmaster General but the Government of India proposed when they had received full information, to make to the Secretary of State such recommendations and suggestions for the improvement of the service as might seem to them desirable in relation to their cost for transmission to the Postmaster General With this object they had been inviting opinions on the subject from local governments and administrations The Government had ascertained what India wanted and would shortly learn what forms of tender the Postmaster General proposed to issue with a view to ascertaining what would be the cost of accelerating the existing service, or a bi-weekly service, or both The Government of India would then be able to consider whether and how far the advantages to be gained would justify them in incurring additional expenditure He therefore submitted that there was little room for the deliberations of the Committee of the Council on this matter The Hon Sir Ibrahim Rahimtoola said the great point at present was to secure co-operation between non-officials and officials and he thought deliberation by consultation was better than deliberation by correspondence He hoped when the appropriate time arrived the Government would invite the members of the Council to meet and consider the question

The Hon Mr Clark, in reply, was unable to give any assurance in this matter

Finally Sir Fazulbhoy Currimbhoy withdrew his resolution, saying he would raise the matter again later on

When the Council met again, on February 3, a number of questions were asked including one relating to the mission of Mr Lionel Abrahams to India, to which the Hon'ble Mr Clark replied that Mr Abrahams had been deputed to India to discuss informally with the Government of India some pending questions relating to railways, in order that in this way the ultimate settlement of those questions by means of formal correspondence between the Government of India and the Secretary of State might be facilitated.

The Hon'ble Mr. Clark introduced the Indian Companies Amendment Bill for reference to a Select Committee A brief debate followed on the **Destructive Insects and Pests Bill** in the course of which the Hon'ble Mr Kenrick said that in introducing legislation to prevent the introduction into India of destructive insects and pests they were merely falling into the line of practice of nearly every civilised country which placed any value on agriculture. Had legislation been enforced it might have been possible to keep out of India the green scale and the green bug of coffee, which had practically ruined the industry in Ceylon and was doing increasingly great damage in the coffee plantations of Southern India

The Hon'ble Maharaja Manindra Chandra Nandi moved a resolution for the publication of the **Decentralisation Commission's** papers The report of that Commission had been signed in February 1909 since then its recommendations had been the subject of correspondence between Provincial Governments and the Government of India, and between the Government of India and the Secretary of State It was to be inferred from a recent speech by the Viceroy that a final decision on the recommendations of the Commission in respect of Municipalities was shortly to be expected After speeches in support of the resolution Sir Harcourt Butler announced that it was not usual to publish such correspondence, but it was the intention of the Government, when any correspondence on the sections of the Commission's report which concerned self-Government was complete, to publish a resolution dealing with the whole question of local self-government This announcement caused disappointment to the Hon'ble Mr. Surendranath Banerjee He thought the publication of the papers would lead to a public discussion which would be of value o Government He considered the attitude of the Government was not what it ought to be in regard to the repeated appeals for the publication of the papers To that complaint Sir Harcourt Butler replied that he did not think any Government in the world would accept the proposition that the Executive Government was bound at any time to lay papers before those who are interested in them. The public had been most fully consulted in this matter of the Decentralisation Commission's Report and members of the Council had an opportunity of offering their views on that report

On February 4, after the Hon'ble Mr Wheeler had presented the report of the Select Committee on the Bill to consolidate and amend the law relating to motor vehicles in British India, the Hon'ble Sir Fazulbhoy Currimbhoy moved a resolution for the formation of **Conciliation Boards** The terms of the resolution were that "a Committee consisting of Hindu and Mahomedan members of this Council be appointed for the preparation of a draft scheme for the formation of Conciliation Boards at every important centre on the model of Municipal Boards, composed of Honorary Members duly elected by the Hindu and Mahomedan residents of the locality with statutory powers —

(1) to arbitrate in all cases of differences between the two communities relating to the time, place and manner of the observance of their respective religious and social ceremonies;

(2) to take necessary action for the prevention of violence and riots connected with such observance, and

(3) to adjudicate upon the nature of premises proposed to be acquired by public bodies or companies and claimed by either Hindus or Mahomedans as places of worship."

A cordial Hindu-Mahomedan *entente* was, he said, an essential condition of Indian national progress but there had been some amount of ill-feeling between the two communities at some places. The situation promised to be-

come still more difficult unless the evils were promptly checked. He quoted examples of conciliation boards being tried with good results in the West in settlement of industrial disputes He did not see why the experiment should not be tried in India for the settlement of communal differences relating to the observance of ceremonies. The local conditions were more favourable in India than in other countries From time immemorial Indian people had been accustomed to settle their differences amongst themselves The Local Conciliation Boards which he proposed would inspire confidence and become popular and, like the Panchayat, would have to be permanent and armed with statutory powers The Maharaja of Cossimbazaar, Sir Gangadhar Chitnavis, and various other speakers associated themselves with the resolution The Hon'ble Major Blakeway said that the resolution, if it were to receive the support of the Council, would accentuate the existence of a line of cleavage and not only reflect unfavourably on the educational uplifting and enlightenment of the two communities to which it related, but also decry to some extent the efforts for an amicable understanding The Hon'ble Mr Surendranath Banerjee said he thought that it was a significant sign of the times that a prominent leader of the Mahomedan community should have introduced such a resolution It was an invaluable index of the growth of friendliness and solidarity of feeling between the Hindus and Mahomedans The Hon'ble Sir Reginald Craddock thought that in framing legislation designed to put an end to disputes between the two communities a preamble might easily be agreed upon, but when it came to a substantive measure the path was found to be bristling with obstacles and dangers He examined Sir Fazulbhoy's proposals in detail and said that the machinery suggested would give to what are clearly Conciliation Boards powers which would in one case be executive and in another judicial The resolution was withdrawn, after Sir Reginald Craddock had said Government would consider the desirability of having Advisory Boards in places where religious disputes had taken place

When the session was resumed on February 24, the report of the Select Committee on the Bill to modify the **Indian Copyright Act of 1911** was presented and the Bill as amended was agreed to The report of the Select Committee on the **Bill to Decentralise** and to facilitate the administration of certain enactments was presented The Decentralisation Commission recommended that the work of decentralisation should be effected by a delegation bill, this was opposed in Council on the ground that a measure of that kind would give to Local Governments and to the Government of India powers practically to legislate by means of notification, and in deference to that opinion the Bill was withdrawn. Its place was taken by this specific measure, and the Bill as amended was passed. The Hon'ble Mr. Rayaningar then moved a resolution asking for the appointment of a joint commission of officials and non-officials to investigate the whole subject of **Jail administration** and to suggest improvements in the light of western experience. He pointed out that the dietary, clothing, housing and punishment, and treatment of the prisoner generally, and his employment, education and reclamation, were subjects of paramount interest to the reformer regarding which there were irreconcileable differences of opinion among jail authorities The Home Member agreed there was a good *prima facie* case for inquiry, and the Hon'ble Mr Surendranath Banerjee whilst recognising that the treatment of prisoners in Indian jails represented a conspicuous display of humanity and kindness, asked that there might be differentiation between the diet of respectable prisoners and those who came from the lower classes, and also that the suitability of the **Andamans** as a penal settlement should be re-considered **The Home Member** accepted the resolution on behalf of the Government He contended that in India Government had been steadily working towards more humanitarian treatment The jail was often the healthiest place in the whole town, severer punishments had been reduced to a minimum, reformatory schools for young criminals had been established, and the imprisonment of youthful offenders had been discouraged, yet the atmosphere of a central jail was not such as to inspire men with a desire for better things. He had studied the system in force at the penal station in the **Andamans** and he was struck by the fact that the system was still too rigid and made no sufficient attempt to differentiate between crimes committed in the heat of passion, and cold, calculated crimes implying a vicious and degenerate nature. Later in the year the Secretary of State approved of the appointment of a Commission, and it was duly constituted

The Hon'ble Mr Vijiaraghavachariar moved a resolution recommending the appointment of a Commission for the purpose of investigating the causes of a **strike on the Madras and Southern Mahratta Railway** and to include in their recommendations the advantages and disadvantages of **Government management** of Indian State railways This resolution was inspired by a prolonged strike on the Madras and Southern Mahratta Railway, which temporarily spread to the Great Indian Peninsula Railway and the Bombay, Baroda Railway also by a desire, which is strong amongst many Indians, that the State should gradually take over the actual working of all State lines, instead of leasing them to Companies The Chairman of the Railway Board, Sir T Wynne, contended that there was **no need of a Commission** merely to ascertain the causes of the strike The Government of India and the Railway Board were in the closest touch with the railway authorities during the strike, and the commercial community of Madras fully supported the Railway in resisting the strike. The Member for Commerce and Industry, the Hon'ble Mr. Clark, pointed to the disproportion between the two parts of the Resolution—the cause of a particular strike, and the great and controversial question of **State versus Company management**. There was not, he said, any reason in favour of a wholesale change in the system of management. The Hon'ble Sir Ibrahim Rahimtoola observed that one of the great contracts with a company working a State line would expire in 1919, and it was not too early to commence inquiries as to the general

policy which should be pursued when that contract lapsed The resolution was divided into two parts—that relating to a Commission on the strike was rejected and that relating into an inquiry into the respective merits of State versus Company management was also rejected by 34 to 19

An old controversy was revived when the Hon'ble Mr Surendranath Banerjee moved that a Committee of officials and non-officials be appointed to consider the advisability of revising the present system of **Provincial Settlements** between the Government of India and Local Governments He said that the Government of India were committed, in the despatch recommending the transference of the capital to Delhi to a larger measure of provincial autonomy, and if there was to be provincial autonomy, then very large powers of control over provincial finance and fiscal independence must be given to the provincial governments The debate was carried into the sitting of February 25, but before it was reached, the report of the Select Committee on the Bill further to amend the **Indian Telegraph Act of 1885** was presented and the Bill was passed When the debate on **Provincial Settlements** was resumed, the Government of India, through the Finance Member, Sir William Meyer, returned an emphatic *non-possumus* He maintained that the fundamental basis of the system cannot, in present circumstances, be further liberalised; and in so far as the object of the Resolution was to obtain a sudden and large addition to Provincial resources at the expense of the Imperial Government, that is to say at the expense of the Indian taxpayer, the Government of India could not hold out any hope of it being attained The policy of the Government of India in respect of Provincial Settlements had been one of constantly increasing liberality, the Provincial Governments were at present in a position which their predecessors of a generation ago would have looked upon as too good to be hoped for, they were permanently assured of far larger resources than their predecessors proposed, and in the case of famine, that great disturber of provincial financial equilibrium, the Government of India had given them large assistance The last stage in this process of adjustment with the Provincial Governments was only reached three years ago, after very careful inquiry by a Royal Commission, and the question could not now be re-opened The Resolution was rejected

The Hon'ble Sir Gangadhar Chitnavis moved a resolution asking for the appointment of a Committee to investigate the **causes of the bank failures** which so severely shook the Indian community during the closing months of 1913 The burden of his argument was that the ordinary liquidation proceedings were inadequate, they were so slow that they involved detrimental delay Also that Indian capital was proverbially shy It had shown a tendency to come out as indicated by the increase in the deposits with all the leading banks, and the rise of the swadeshi banks, and this current of confidence should be restored by full inquiry into the recent failures Strict control of banks was required, and such a Committee would decide the form of control which should be established The resolution produced a considerable diversity of opinion Many unofficial members supported it, but it was opposed by those with the closest knowledge of the conditions in which the great swadeshi banks failed The Hon'ble Sir Fazulbhoy Currimbhoy said that a committee would be costly machinery for the ascertaining of facts already known The liquidation proceedings had disclosed the whole inner situation It was a matter of common knowledge that the transactions of some of these banks were marked by gross fraud No legislation could cope with the ingenuity of swindlers, they must be left to the operation of the criminal law The Hon'ble Sir Ibrahim Rahimtoola took the same view, saying that the reason for the failure of these banks was well-known—speculation The remedy was State assistance and the education of depositors in financial matters The Commercial Member, the Hon'ble Mr Clark, said there was a fatal objection to the resolution, such an inquiry as it proposed must cut right across the judicial proceedings now in progress When the judicial proceedings were complete and the opinions of the Local Governments had been ascertained, Government would see whether they could proceed to take action, or whether they should institute some form of inquiry The resolution was withdrawn

Another well-worn subject was discussed when the Hon'ble Rai Sri Ram Bahadur moved a resolution recommending that the Government of the United Provinces and Oudh, and such other provinces as the Government of India may consider proper, be invited to express their opinion on the advisability of extending the principle of levying a portion of the **local rates and cesses** on persons residing in rural areas who are not agriculturists, but carry on other professions or trades The main object of the resolution, he explained was to draw the attention of the Government of India to the fact that the classes connected with the land alone have to pay taxes which are spent on objects whose benefits are enjoyed equally by the rest of the village population, and that there are persons amongst the latter classes who, though capable of contributing towards these expenses, have remained exempt Government, through the Finance Member, admitted that it was not very fair that the whole burden of local administration should practically rest on the agricultural classes At the same time, if the agricultural class do pay the bulk of the local taxes, they also form the bulk of the population Further, Government have gradually removed certain burdens which rested on the agricultural classes, notably the famine cess and the patwari cess It was contended that acceptance of the resolution would involve a complicated re-adjustment of taxation it was withdrawn

The question of permanent versus fixed term land revenue settlements was fought out in another form when the Hon'ble Raja Kushal Pal Singh introduced a resolution recommending the Government to consider whether they consider it desirable and practicable to extend the **period between the settlements** of land revenue from 20 or 30 to 50 years, in such parts of the country as have become ripe for permanent

settlement The mover frankly confessed that a permanent settlement of the land revenue would be in the highest degree beneficial to the people, and would add to their wealth, prosperity and staying power, but he refrained from asking so much But if the duration of settlements was extended, the expense and harassment incidental to the present mode of assessment operations, and recurring every 20 or 30 years, would be materially lightened and the accumulation and investment of Capital directly encouraged Short term settlements cut away all **incentives to improvements,** whilst long term settlements promoted enterprise in the landed class The resolution met with considerable support from the unofficial members of the Council, but it was resisted by the Government The Revenue Member, the Hon'ble Sir Robert Carlyle, said that Government were not prepared to make any movement in the direction of converting temporary into permanent settlements, and he looked on the resolution as a movement in that direction He failed to see that there was any substantial gain to be obtained by increasing the period of settlement On the other hand there were several disadvantages The Government could not on financial grounds accept the resolution During the last 50 years the income from the land revenue had increased at the rate of almost Rs 20 lakhs a year They could not forego this increased income for 20 years However much the revenues from other sources might increase, there was no reason to believe that Government would be able to forgo all additional contributions from the growing profits of the owners and cultivators of the land When the Council divided on the resolution, there voted for it 18 and against 35

The provincial settlements came before the Council in another form when the Hon'ble Rai Sri Ram Bahadur moved that the **divided heads of revenue** be amended in the United Provinces by a sum equivalent to one-eighth of their land revenue, either by raising the provincial share of the land revenue from three-eighths to one-half, or by making up the share in other ways The main argument advanced in support of the resolution was that the provincial settlement in the United Provinces was inadequate, and that all other provinces received a larger share of their land revenue than the United Provinces The broad ground of the Finance Department was a refusal on this, as on other grounds, to re-open the complicated question of **provincial settlement** which had been decided only three years earlier But whilst taking his stand on this ground, Sir William Meyer denied that the settlement involved any injustice to the United Provinces In essentials they were treated as well as any other part of India The resolution was rejected

The Budget was introduced on March 2 But before it was laid on the table, His Excellency the Viceroy expressed deep regret at the news of the death of Lord Minto, and sympathy with Lady Minto—an expression with which the Hon'ble Sir Gangadhar Chitnavis, on behalf of the Council, associated himself His Excellency also expressed warm appreciation of the services of the retiring Commander-in-Chief, Sir O'Moore Creagh, whose service of 47 years was drawing to a close Sir William Meyer then introduced the **Budget.** This is dealt with fully in the section **Indian finance** (*q v*), and it is sufficient here to say that the year closed with a surplus of £1,328,000 The estimate for the new year provided for a revenue of £85,033 millions, an expenditure of £86,962 millions leaving an Imperial surplus of £1,280,000 The apparent discrepancy between the deficit shown in the comparisons between revenue and expenditure, and a true Imperial surplus, arises from the fact that the provincial governments have large unspent balances, on which they expected to draw in the year. The actual discussion on the Budget came at a later date The next business before the Council was the discussion of a resolution by the Hon'ble Sir Fazalbhoy Currimbhoy recommending that a Committee should be appointed to inquire into the whole question of the Mahomedan **pilgrimage to Mecca** The mover recognised, however, that the action proposed by the Government of India and the Government of Bombay should be allowed time in which to mature and so withdrew his resolution But the pilgrimage question came up in another form, when the Hon'ble Sir Ibrahim Rahimtoola moved that the port of Calcutta should be opened to pilgrim traffic He supported the motion on the ground that **Calcutta** was a pilgrim port until the outbreak of plague rendered it necessary to close it Between 27 and 40 per cent of the pilgrims went from Bengal, and the consequence of concentrating all the traffic in Bombay was seriously to overcrowd the accommodation for pilgrims in that city and to lead to such a congestion of traffic that steamer fares had rapidly risen The resolution was supported by the majority of the unofficial and all the Mahomedan members of Council, but it was opposed by Government The Hon'ble Sir Harcourt Butler, explaining the ground of this objection, said that the Government of Bengal had consulted several leading Mahomedans who agreed that no useful purpose would be served by opening the port of Calcutta to pilgrim traffic The requirements of the Turkish Government made it necessary that certain sanitary measures should be observed before pilgrims embarked and it was clearly impossible that these should be provided in every port in India Even when Calcutta was open as a pilgrim port it was little used, for during the six years prior to 1895 the average number of pilgrims leaving from it was only 414 No-one who could slip across India by rail would desire to make the long journey round the coast by sea, and there was not a shred of evidence to show that anyone in Bengal wanted Calcutta opened to the traffic The resolution was rejected by 33 votes to 18.

The Hon'ble Maharaja Ranajit Sinha of Nashipur moved that the Local Governments be consulted as to the desirability of amending the **Court Fees Act** so as to provide that a moiety of the Court fees paid in civil suits be refunded if such suits are decided *ex parte* He said he was convinced that if this course was adopted the number of litigations would be decreased Out of the total number of 2,025,446 cases disposed of in 1912,323,704 were decided without trial. So out of the remaining number namely, 1,701,742 cases 349,818 were deci-

ded on compromise and confession and 685,743 were decreed *ex parte* If the parties in *ex parte* decrees were to pay only half the pleaders 'fees and if a moiety of the Court fees were remitted he was sure the number of litigations would be considerably decreased The Home Member sympathised with the resolution in so far as it proposed that the Local Governments should be consulted, and the resolution was withdrawn

The Council re-assembled on March 7, when the Hon'ble Maharaja Ranajit Sinha of Nashipur moved that the Bengal Government receive a non-recurring grant of five lakhs of rupees for education and sanitation He argued that the death-rate in Bengal was high and increasing, and that a determined effort must be made to combat the **ravages of malaria.** On this resolution the Hon'ble Sir Ibrahim Rahimtoola asked a very pertinent question It was what contribution local residents in Bengal made to the cost of the sanitary administration Bengal was considered to be the richest province in India, yet the incidence of municipal taxation in Calcutta was far lower than in Bombay The resolution was opposed by the Government on the two-fold ground that the mover had not indicated where the money was to come from, and also because the grants already made to the Bengal Government exceeded their spending capacity The resolution was rejected A similar request was made on behalf of the United Provinces by the Hon'ble Rai Sri Ram Bahadur, with the difference that he asked for twelve lakhs It was opposed on the same grounds as the previous one, and was withdrawn The same topic was brought up in another form by the Hon'ble Pandit Madan Mohan Malaviya, who asked for a recurring grant of eight lakhs for the United Provinces for expenditure on sanitation and medical relief The resolution was opposed by Government on the ground that the United Provinces had been liberally treated in the way of special grants, and had an unspent provincial balance of 112 lakhs, and it was rejected The Hon'ble Rai Sri Ram Bahadur asked for the increase of the **famine insurance grant** to the United Provinces from 4½ lakhs to 12½ lakhs, on the ground that the Province had suffered from famine to an exceptional degree The Finance Member promised to give attention to the matter and the resolution was withdrawn

These provincial requests for changes in the Budget having been settled, the Hon'ble Pandit Madan Mohan Malaviya moved a general resolution that the grant for education and sanitation be increased by £640,000, and that the unallotted surplus of £1,280,000, be reduced by that amount The main ground on which he advocated this amendment of the budget was that the surplus was excessive in the conditions of India whilst the demands for education and sanitation exceeded the provision made in the budget. The Finance Member maintained that the surplus was no more than was necessary in the conditions of India It was desirable to maintain the irrigation and railway programmes, and the borrowing powers of the country were limited and could not be suddenly expanded. Moreover, in the conditions of India, where a failure of the rains might cause a dislocation of the finances, the estimated balance was not excessive The resolution was rejected

The Hon'ble Pandit Madan Mohan Malaviya then moved that the provision of 12 millions for capital **expenditure on railways** be reduced by two millions and that a corresponding reduction be made in the charges for interests. This was in reality an offshoot from the previous resolution, the mover implying that if a 12 million railway budget was maintained large surpluses would be budgetted for in order to meet it The resolution produced a lively difference of opinion For instance, the Hon'ble Sir Ibrahim Rahimtoola, whilst agreeing with the necessity for railway construction, held that it should be provided entirely by borrowings The Hon'ble Raja Kushal Pal Singh, answering the question what the tillers of the soil thought about the expenditure on railways, bore testimony to the value of railways as an agency for mitigating the severity and intensity of famine The Resolution was rejected

When the Council re-assembled on the 9th of March the discussion of the Budget was continued The first resolution was moved by the Hon'ble Pundit Madan Mohan Malaviya who recommended that the recurring grant for **Education** in the **United Provinces** be increased by 22 lakhs of rupees His argument was that the grants made to the United Provinces in the past were inadequate and illiberal and there was much leeway to be made up The Provinces felt that they were being kept out, in large measure, from the progress and improvements in various directions made in other provinces The Hon'ble Mr. Sharp, speaking for Government, refused to allow that there had been any disparity in the distribution of the Imperial Government's grants to the province for education and sanitation and the resolution was rejected.

The second stage of the discussion on the financial statement was reached when the Hon'ble Sir Robert Carlyle introduced the heads of the financial statement which related to the work of the Revenue Department A feature of the statement was the increased attention which is being paid to the development of the commercial side of the **Indian forests** The Hon'ble Mr Pundit then moved a resolution urging that £2,000 be earmarked for and applied to the grant to the Indian students of ten additional state **technical scholarships** of £150 each tenable abroad He said the Indian students who for a long time had moved in one educational groove, the Arts course, are now taking largely to science, to technical education and various other commercial pursuits. It was necessary to give the requisite impetus to these students by providing larger number of scholarships and making their opportunities more extensive than they are at present. In the discussion it was pointed out that there was considerable difficulty in getting the right class of student for the existing scholarships and in finding satisfactory employment for those who returned. The Government of India were consulting the Local Governments on this point and it was impossible to accept any resolution until these replies had been received and the whole matter had been considered. The resolution was then withdrawn.

The Hon'ble Maharajah Ranajit Sinha of Nashipur asked for a non-recurring grant of one lakh of rupees or such sums as the Government might think proper to be made to Delhi Province for the improvement of the sanitation of **Delhi City** The resolution was opposed on the ground that Delhi had already been liberally treated and it was withdrawn In the second stage of the financial statement the Hon'ble Mr Clark introduced the heads relating to the Commerce and Industry Department All these Departments are dealt with under their separate heads and the only topic was the question of the re-organisation of the **Railway Board.** In future, instead of the Board consisting of three members all having railway experience, one member is to be selected for financial and administrative or other commercial experience, while railway experience is to remain as before a necessary qualification for the other members Anyone of these three members is to be eligible for the office of President The Hon'ble Sir Reginald Craddock also introduced Budget heads dealing with the Home Department On this the Hon'ble Mr Pundit moved that one and a half lakhs of rupees be applied for the employment of **women medical practitioners** on the scale of salaries corresponding to that of civil assistant surgeons with a view to according greater medical relief to women The main object in moving this part of the resolution was that the activities of the Countess of Dufferin's fund should be increased and supplemented in order to bring skilled medical assistance within the reach of a larger number of Indian women The Director-General of the Indian Medical Service pointed out that it was necessary to increase the facilities for training Indian women in medicine and it would be wise to wait until the Medical College for women at Delhi founded by Lady Hardinge was at work The resolution was withdrawn

The report of the Select Committee on the Repealing and Amendment Bill was adopted and the Bill as amended was passed. There was a lively discussion upon the **Indian Companies Amendment Bill** This was concentrated round one clause in the Bill, namely, whether the interests of shareholders should be further protected by the enactment of a clause providing that a majority of directors of public companies should be independent of the firm of managing agents The Hon'ble Sir Ibrahim Rahimtoola moved an amendment to this effect and made great play with the alteration in the standpoint of the Member for Commerce in deference to the pressure of the Calcutta Chamber of Commerce He was very strongly opposed by the Hon'ble Sir Fazulbhoy Currimbhoy, also of Bombay, and the amendment was lost by 44 votes to 7 and the Bill as amended was passed During this discussion His Excellency the Viceroy made an important statement on the subject of the **Indians in Africa** He referred to the work of the Commission appointed by South African Government and speaking of its recommendations said: "In these recommendations I find a very complete and satisfactory attempt to arrive at a final solution of the difficulties that have arisen in South Africa, and I should like to take this opportunity of expressing the warm appreciation of the Government of India of the broad and statesmanlike manner in which these difficult questions have been approached and dealt with by the Commission. I believe the presence and active co-operation of Sir Benjamin Robertson, to whom we are indebted for his firm and conciliatory attitude, has very materially contributed to the formulation of these proposals, and I feel confident that if as I sincerely trust will be the case, they are adopted by the Union Government and combined with sympathetic administration of the existing laws, they should undoubtedly lead to a lasting settlement"

The Indian **Criminal Law** Amendment Bill introduced by the Hon'ble Sir Reginald Craddock is designed to deal with a particular class of contempts of courts which is either totally unprovided for in India or else is not provided for in a clear and satisfactory manner

There was another lively discussion on the Indian Criminal Law and Procedure Amendment Bill The Home Member took the unusual course of moving that the Bill as amended by the Select Committee be republished The reason for this was that there had been much controversy regarding the rescue provisions of the Bill, many Indians fearing that it would lead to conversions to Christianity The protagonist of those who desire that the rescue clauses should be omitted from the Bill was the Hon'ble Mr Vijiaraghavacharlar The motion that the bill be republished was put and agreed to.

A series of resolutions was moved by the Hon'ble Mr Surendranath Bannerjee to develop **local government** in India on the lines of the recommendations of the Decentralisation Commission The first of these urged that, subject to the maintenance of prescribed minimum balances, municipalities should have a free hand in respect to their budgets, that municipal councils should as a rule elect their own chairmen, that District Boards should contain an elective majority chosen by the non-official members of the sub-district boards, and that village panchayets should be formed where practicable The principle underlying all these changes was the increase in the elected membership of the local bodies, and in supporting the resolution, the mover claimed that it only asked for the development of the principle to which the Government of India was committed The discussion was carried into the sitting of March 19, when the Hon'ble Mr Porter claimed that the Government had already advanced a considerable degree on the road outlined by the Decentralisation Commission They were prepared to make considerable relaxations in the control of the finances of local bodies, the substitution of non-official for official chairmen had been carried out as far as practicable, in most provinces an elective majority on district boards had been established, and the formation of panchayets was under consideration The resolution was therefore withdrawn Another phase of this question was brought up when Mr Bannerjee moved that Presidents of district and sub-district boards should be elected; that **advisory councils** should be formed to help the Magistrate-Collector in the discharge of his executive duties; and that a Local Government Board be formed in each province for exercising control over rural boards and municipalities The gist of this resolution

lay in the proposal to establish Advisory Council in the Districts—a proposition which had been previously debated in the Council on the motion of Mr Gokhale It produced a trenchant reply from the Hon'ble Mr Arthur of Bombay, who thus defined the duties of the district officer "The Collector is responsible for the peace of a district of perhaps 5,000 square miles and for the well-being of a population of a million or more living in a few towns and 1,400 or 1,500 villages, he is responsible for the collection of revenue and the control of a large revenue staff, he supervises the work of a number of Subordinate Magistrates, he is the head of the Police and the forest department, he is President of the District Board, he is District Registrar, he is political agent for any Native States attached to the District, he supervises the work of Municipalities, in consultation with the Executive Engineer he makes out a scheme of public works, he is responsible for famine administration and for measures to deal with cholera and plague epidemic" The recital of these duties, Mr Arthur contended, showed the inapplicability of a system of advisory councils The Government opinion was expressed by the Home Member, when he said that the proposal was impracticable, that it was radically defective, that it had no part in the present system of administration, and that it cannot possibly have any part in any future system of administration under which greater powers of local self-government are given to the people of this country The first part of the resolution was withdrawn and the other two parts were rejected

The Hon'ble Rai Sita Nath Ray Bahadur proposed the amendment of the **Transfer of Property** Act so as to secure to mortgages effected by the deposit of title deeds priority over registered mortgages executed on dates subsequent to such deposits The resolution was withdrawn The Council then adjourned to March 21, when the Hon'ble Sir Reginald Craddock introduced a Bill to amend the **Code of Criminal Procedure** On March 24 there was the omnibus debate on the Budget In the days of the unreformed Council this was the full dress discussion of the Budget But since the power of moving resolutions on specific heads was conceded, the debate has receded in importance It was marked by a notable review by the Viceroy of Indian polity, and especially of **foreign affairs.** Touching on affairs in **Persia**, which have been watched with the greatest interest in India, he said —"I told you in September last of the disinterested attitude of His Majesty's Government towards Persia, and that we had recently lent the Persian Government a considerable sum of money for the creation of a force of gendarmerie under Swedish officers with a view to the suppression of anarchy in Southern Persia and the restoration of order and security on the trade routes, where British and Indian trade had suffered serious loss during the past few years I am glad to say that our hopes have so far not been disappointed The regiment of gendarmerie, which was raised at Shiraz, has been employed during the winter in patrolling the roads and has dealt successfully with the robber bands who infested it It is true that quite recently these gendarmerie have been confronted once more with a troublesome situation at Kazerum, but I am glad to learn that on the arrival of reinforcements the tribal rising dispersed, and that order has once more been restored Evidence of the successful activity of the gendarmerie is shown in the improved returns of British and Indian trade in Southern Persia Another force of gendarmerie has been dealing with the situation on the trade route between Bunder Abbas and Kerman, and, although they have had some serious engagements with the Perso-Baluchi tribes in that neighbourhood there is every reason for confidence in their ability to restore order in the immediate future The action in South Persia of the Swedish officers and the Persian gendarmerie appears to have been eminently successful, and to be worthy of unstinted praise I may point out that the only alternative would have been the despatch of a British expedition to Southern Persia for the restoration of order in those provinces—a policy to which, with the entanglements and expenditure it would entail, the Government of India have always been firmly opposed. and I would only ask those, who have been somewhat lavish in their criticism of the attitude of the British Government in Persia, now to recognise what we in India owe to Sir Edward Grey for his policy of disinterested support, and abstention from interference in the internal affairs of Persia" His Excellency also pointed out that the conclusion of the agreement with the French Government by which they recognised the new **Arms Traffic Regulations** drawn up by the late Sultan of Muscat would mean the effective prevention of the arms traffic Relations with Afghanistan continued to be most friendly and cordial and there had been only one complaint to present to the Afghan Government and that was with regard to the depredations on British territory by gangs resident in Afghan limits, particularly from the coast His Excellency also made an important pronouncement of policy on the question of the cost of the **new Delhi** saying "I will now endeavour to give as succinctly as possible the figures of the estimate as amended by the Public Works Department I may mention that as a result of their careful scrutiny the charges under certain headings have been reduced, while others have been increased, but the net result has been a material reduction of the total estimate as sent up by the Delhi Committee

The figures are as follows under their various headings —

	Rs
A —Salaries and allowances	70,18,700
B —Travelling allowances of officers and establishment	6,30,000
C —Supplies, services and contingencies	3,78,600
D —Works Expenditure—	
(1) Buildings	3,59,87,200
(2) Communications	29,91,800
(3) Parks and Public improvements . .	27,34,500
(4) Electric light and power .	43,40,700
(5) Irrigation .	27,49,000
(6) Water supply, sewerage, drainage, etc . .	73,77,900

	Rs
(7) Purchase of tools and plant .	35,50,600
(8) Survey campaigns and general preliminary expenditure	42,82,100
(9) Maintenance during construction ..	20,09,000
E—Acquisition of land taken up . . .	36,48,200
F—Other miscellaneous expenditure	6,000
Deduct—Anticipated recovery from tools and plants	10,00,000

These figures when added up, make an aggregate total of Rs 7,67,04,300 or £5,113,620 but as we are anxious to face our liabilities for starting the new city to the fullest extent possible, we consider it necessary to make a special provision for contingencies and unforeseen expenditure in excess of the usual provision that has been made of 5 per cent on the works outlay by adding a sum of one and a half crores or £1,000,000 We have accordingly a very large reserve to meet future possibilities which we are not able to foresee at present I should add that the expenditure of this additional crore and a half on unforeseen contingencies will be strictly controlled by the Government of India, and no part of it spent unless absolutely necessary."

The Council then adjourned *sine die*

The Autumn Session of the Council was very brief, but was one of exceptional importance because it commenced after the declaration of the war The first sitting was held on September the 8th when there was read to the Council **His Majesty's address** to the Princes and peoples of India in relation to the war "Amongst the many incidents that have marked the unanimous uprising of the population of my Empire in defence of its unity and integrity," it said, "nothing has moved me more than the passionate devotion to my Throne expressed both by my Indian and English subjects and by the Feudatory Princes and Ruling Chiefs of India and their prodigious offers of their lives and their resources in the cause of the realm Their one-voiced demand to be foremost in the conflict has touched my heart and has inspired to the highest issues the love and devotion which, as I well know, have ever linked my Indian subjects and myself" Referring to the attitude of India to this crisis His Excellency said, "It has been a source of profound satisfaction to me that the attitude of the British Government has been so thoroughly appreciated in India and has met with such warm support I have no hesitation in saying that the valuable offers of military assistance that I have received from the Ruling Chiefs of India and the countless offers of personal service and of material help made to me by both rich and poor in the provinces of British India, have touched me deeply and have given me one more proof, which I never needed, of what I have long known and never for an instant doubted, *viz*, the deep loyalty and attachment of the Indian people to the King Emperor and the Throne and their readiness to make any sacrifices on their part to further and strengthen the interests of the Empire" The other important point in his speech was a reference to the question of Indian Emigration to the Dominions which had been brought to a head by the voice of the **Komagata Maru** whose passengers were not allowed to land at Vancouver The Viceroy pointed out that the Dominions had been empowered with authority to regulate the management of their internal affairs as seemed best to them It was beyond question that the control of emigration was primarily an internal question for each self-governing unit must know best what materials it desired to form its future citizens The Government of India had long and consistently contended for the principle of free migration between all parts of the Empire This had however placed them in a position of isolation He proposed therefore that only by negotiations with the Colonies on a basis of **complete reciprocity** could a solution be reached

The Hon'ble Sir G M Chitnavis in a notable speech and resolution asked the Viceroy to assure His Majesty of Indian loyalty and to allow India to pay some part of the **cost of the war** He defined the loyalty of India as being based on gratitude for the past, contentment in the present and confidence for the future History and experience had taught Indians the solemn truth that the maintenance of the enlightened British rule was an essential condition of the moral and material progress of their country and of the fruition of their political aims and aspirations Yet there was a higher and nobler reason for their firm and unstinted support of the British Empire The official papers made it clear that all who died on the side of Britain died martyrs to the cause of humanity, peace and civilisation The resolution was endorsed by the whole Council and the Viceroy accepted it in so far as the actual pay of the troops from India sent to the front will be borne by the Indian revenues.

The second and last meeting of the autumn session was held on the 16th of September when the Council considered the Sea Customs Bill, the Life Assurance Companies Bill, and the Indian Telegraph and Post Office Bill which were passed without discussion. The Indian Army Bill was also passed as well as the Indian Airships Act and the Repealing and Amendment Bill

This closed the autumn session The next session of the Council will be held in January 1915.

Bombay Legislative Council.

The Council met at Bombay on December 16, 1913, when His Excellency the Governor, in opening the proceedings, spoke on the procedure of the Council He said he did not think it advisable to extend the time limit of speeches on the budget, but that matters of individual interest could be better brought forward by means of resolutions He expressed the wish that the debates should be more lively and real, and announced that with that object in view Government had decided that in the future as to Resolutions every member, elected or nominated, should be free to speak and vote as his judgment and conscience bade him do

The most important business before the Council was the first reading of a Bill further to amend the **Karachi Port Trust Act, 1886** The Hon Mr C H A Hill moved the first reading and said there was no longer any reason to distinguish, as was done in the original Karachi Port Trust Bill, very greatly between the regulations for its governance and those obtaining in Bombay the Bill removed restrictions which did not obtain in Bombay and thereby assimilated Karachi to Bombay Clause 3 of the Bill proposed to reduce the representation on the Port Trust of the Karachi Municipality from two members to one, because the Municipality had lately failed to return, (as was the intention of the legislature that they should do), an Indian member conversant with commerce, but the second member, a representative of Indian trade and commerce, was to be nominated by Government Sir Ibrahim Rahimtoola urged that either the two seats should be left to the Municipality, on condition that both members elected by them should belong to the commercial community, or that the procedure laid down for the Bombay Port Trust should be adopted He was followed by Sir Pherozeshah Mehta who said that the Municipality was more capable of returning a fit member to the Port Trust than the Government themselves, and on that and other accounts he appealed that the Municipality should not be partially disfranchised The Bill elicited an amount of discussion that had not been expected by the mover, who in his reply said he hoped there would in a short time be mercantile bodies in Karachi competent, by their constitution and the composition of their membership, to elect and send up members and as soon as that was the case Government would respond at once H E the Governor pointed out that the Bill had been supported by every member from Sind, including the President of the Municipality, and he hoped that the Bill might be passed into law that afternoon Some opposition being raised to this, after the Bill had been read a first time, further discussion of it was postponed The points raised on the Bill at this meeting of the Council were again brought forward at the March 1914 meeting on a proposal to send the Bill to a Select Committee, but, after H E the Governor had appealed to the better sense of the members in regard to that suggestion the Bill was passed

A Bill to amend the **Bombay Irrigation Act,** was read a first time and referred to a Select Committee It is designed in the interests of the agricultural community to improve the unsatisfactory conditions under which second class works are managed An interesting point of procedure was raised in the course of a later discussion of this Bill, when on a division it was found that there was an equality of votes, and it was found impossible at the moment to decide whether the President was entitled to give a casting vote After an adjournment it was announced that the President had the prerogative and he used it by voting against the amendment but a proviso designed to give effect to the wishes of the minority was inserted in the Bill

The Financial Statement presented in March 1914, showed that the revenue had exceeded the estimates and expenditure had been less than was anticipated, with the result that there was a surplus of Rs 182 lakhs The estimated revenue for 1914-15 is Rs 758 lakhs and the estimated expenditure is Rs 823 lakhs (For further details, *vide* Bombay Presidency Finance)

At the December 1913 session a **Town Planning Bill** was introduced by the Hon Mr C H A Hill, but discussion of it was postponed until March It is the first attempt of its kind in India at legalising & organising town planning in respect of new areas for residential purposes, and the general principle of it met with approval It is to be applied primarily to the island of Salsette, which since 1896, the year of the first outbreak of plague in Bombay, has been colonised from Bombay without due regard to order or sanitary convenience but it may be extended to other areas on the application of the local authorities

A most instructive debate took place on a Bill to amend the **District Municipal Act,** which proposes *inter alia* that Municipal Commissioners should be appointed for Municipal Districts with a population of 150,000, *e g*, for Ahmedabad and possibly for Karachi Discussion centered round four points —(1) appointment of Municipal Commissioners for towns of increasing importance in the districts (2) residential qualifications for candidates for councillorships (3) eligibility of dismissed servants to get themselves elected in the Municipal Council and (4) a new section which deals with the question as to when a Councillor should be taken to have resigned his seat on a municipality The Bill was read a first time and referred to a Select Committee, and passed the third reading at the July session, which lasted for six days and so constituted a record

Two other Bills occupied the attention of the Council, one being a Bill to amend the **Bombay Land Revenue Code** of 1879, and the other a Bill to amend the Bombay Port Trust Act Both were read the third time The former is a short Bill containing three clauses of which the second aims at effecting a small amendment in Section 84 of the Bombay Land Revenue Code and provides that an annual tenancy shall require for its terminating a notice given in writing by landlords The third clause intends to provide that the relief given by the Government, through the system of remissions and suspensions, shall reach the actual cultivator when that cultivator is a tenant holding under a superior holder. The object is to

secure that when the superior holder is benefited by the suspension of a remission of revenue granted by the Government he shall pass on the benefit to the tenant who holds under him

The **Port Trust Amendment Act** was introduced because it was considered desirable to increase the number of Trustees by the inclusion in the Board of a military officer intimately acquainted with the defences of the port and competent to explain the military requirements and other arrangements necessary in time of war Clause 2 of the Bill repeals Section 31 of the Act of 1879, which is now inoperative This section refers to the sale of property of the Port Trust, the proceeds of which were, when the Port Trust was formed, to be devoted to the redemption of debt Now the provision of a sinking fund has made this provision superfluous An amendment to the Bill, subsequently withdrawn, proposed that three nominated seats should be given up to elected members and that representatives of the Indian community should occupy five elected seats

Among the resolutions was one, in the name of the Hon Mr Belvi, appealing to Government not to force the **kulkarnis,** or village accountants, to commute their right of service This drew from H E the Governor a strong rebuke to the mover who had suggested that the kulkarnis were intimidated by the mamlatdars. "We must," said His Excellency, 'do away with a system that has led to dishonesty It is an undesirable system which we are bound to do away with in the interests of the Government service The Government's position is, therefore, perfectly strong We desire efficient government and fairness to kulkarnis, and we wish to secure general efficiency throughout"

The final Session of the Council was held in Bombay on December 8 and 9 On the first day a resolution was moved by the Hon Moulvie Rafiuddin Ahmed expressing the unswerving loyalty of the Council to the **Empire in the war,** and many notable speeches were made, emphasising the increased conviction of all in the justice of the cause which had forced the Empire into the war, and the hope that it would be prosecuted to a completely successful issue The resolution was unanimously adopted The **Town Planning Bill** was read a third time and passed, with an expression of the hope that as it was a new measure to India it would be administered with extreme care and forbearance A Bill to provide for the **Survey of Bombay City** was read a first time and referred to a Select Committee, after a breezy protest against the clause which seemed to imply an inquiry into title A Bill to provide for the levying of dues on vessels in order to provide for the better lighting of the coast of Sind was also read a first time with the approval of the commercial interests of Karachi

Madras Legislative Council.

Legislation of considerable importance was considered and undertaken during the year 1914 by the Madras Legislative Council The Tirupathi Devastanam **Schools Bill,** which was introduced in February by a Non-official Member and which may be brought up for deliberation during the later Sessions, is of purely local interest as it affects two English Schools at Tirupathi and Vellore and a Sanskrit College at the former place These were hitherto maintained by the Mahant of Tirupathi out of the funds of the famous temple on the Tirupathi Hill, but the Madras High Court regarded with doubt the legality of this expenditure, and therefore this Bill was introduced to legalise the use of temple funds for the maintenance of these schools It is said that the direct objects of the temple would not suffer any detriment by this measure, as the income of the temples is much over its expenditure and as there is a surplus of nearly Rs 60 lakhs to the credit of the Devastanam

Estates Act.—A few grave defects came to light in the Madras Estates Land Act during the six years that it has been in force since 1908, and on the representation of several landholders in the Presidency, the Madras Government introduced into the Council a measure designed to remedy those defects, and simplify procedure in courts The Estates Land Act has excited so much interest in the public mind that, besides the Government Bill referred to above, four private Bills were brought forward by non-official Members to improve certain provisions in the Act, and all these Bills are now awaiting consideration with the Government measure

The Hindu Transfer and Bequests Bill was introduced and passed into law whereby legislative sanction is accorded to a well-known principle of Hindu Law which enables transfers and bequests to be made in favour of unborn persons A contentious measure that roused much opposition from various quarters was the Madras **Medical Practitioners Registration** Bill introduced by the Hon'ble Dr Nair It provided for the registration of Medical Practitioners in the Presidency under the control of a Council, so that the standard of medical education in the Province should be kept up to the mark Though it was modelled on the British Act and closely followed the Bombay enactment, with only such variations as were rendered necessary by the local conditions peculiar to the Madras Presidency, it encountered much opposition from several other Non-official Members, who objected to the constitution of the proposed Medical Council, on the ground that it might become officialised and might act in a manner calculated to prejudice private enterprise and free competition The Bill had, however, the support of the Government and it was passed into law without suffering any substantial alteration The Madras **Decentralization Bill** was a minor measure introduced to carry out some of the recommendations of the Decentralization Commission, whereby some powers, scarcely of much importance, are delegated to subordinate authorities It is based on the lines of the Bill introduced into the Imperial Legislative Council and much interest does not centre round it The most important attempt at

legislation made during the year under review is represented by the proposal to have an **Irrigation Law** for Madras The Bill that has been introduced into the Council for this purpose is intended to give statutory recognition to the position of the State regarding irrigation in the Presidency, namely, that all rivers and natural streams as well as springs in unoccupied or Government land belong to Government, which has a right to levy a reasonable tax for the use of water from such sources The governmental control of irrigation being for the public good, the need for legislation on this subject has been insistent If the present Bill is passed into law, the Local Government will have entire control of all irrigation works for public purposes, and the application of water will be completely regulated by itself Power is also conferred on the Government to assume control even of irrigation or drainage work not constructed or maintained by the Government, which however has to pay compensation for any substantial damage resulting from such assumption of control All private interference will cease, except in so far as private rights can be acquired by grant or prescription Civil Courts will have no jurisdiction to entertain suits or applications for the issue of any injunction to restrain the exercise of statutory powers conferred upon Government and its officers. The Bill also contains detailed provisions for the construction of water-courses and the repair of irrigation works and the irrigation channels and water-courses so constructed will be treated as State property subject to communal or private rights of user This Bill is fraught with immense consequences for the future of irrigation in the Madras Presidency, and it is certain to arouse considerable interest all over the Presidency from ryots as well as landholders Two non-official Members have given notice asking for leave to introduce two Bills that will have far-reaching consequences if they are passed into law by the Legislative Council One of them is intended to validate **Post-puberty Marriages** among Hindus and the other will make better provision for partition being effected among the members of **Joint Hindu Families** by introducing simpler means than at present, whereby a person can unequivocally declare his intention to become separate from the rest

Besides the above-mentioned legislative provisions, the Council has had to deal with subjects too numerous to mention brought up before it either by way of interpellations or by way of resolutions The **resolutions** covered a large number of subjects and many of them dealt with questions of supreme public interest The postponement and the reconsideration of the proposed revision of settlements in two Districts of the Presidency, the making of better provision for the accommodation of Indian Officers in the General Hospital at Madras, the formation of a Committee for the expansion of Elementary Education in the Presidency, the constitution of a Committee to consider the problem of the arrears that have accumulated in the Madras High Court—these were some of the noteworthy subjects that the Council had to consider on Resolutions moved by Members, mostly Non-official A few of the resolutions have been accepted by the Government Some of them on the other hand were withdrawn on the assurance given by the Government that the matter would receive their attention, while some others have been negatived on the opposition of the Government

The expectations formed when the Morley-Minto reforms were carried out of the new Legislative Councils have been amply justified by the nature and level of the debates that took place in the expanded Legislative Council Criticism of Government action is generally sober and well-informed, and the work of the Council attracts larger public attention; for there is a desire among the members that constitute it to help and to co-operate, rather than to retard and censure

Bengal Legislative Council.

The opening of the 1913-14 Sessions of the Bengal Legislative Council was distinguished by a speech in which Lord Carmichael deprecated a tendency to divide the Council on the lines of **Government and Opposition.** "Government and opposition" he said, "cannot exist in our assembly in the same sense as they exist in England, at any rate if those who are not members of Government are to work effectively for their country You non-official members beat us—the Executive Government—once, not long ago I was not sorry when you did it, for it showed you what you could do. You may beat us again and it may be well that this happens sometimes but power carries with it responsibility and I trust that you will resist all temptations to beat us merely for the sake of beating us"

The two chief legislative measures which occupied the Council were the **Bengal Medical Bill and the Calcutta Municipal Loans Bill.** Both led to prolonged discussions in the Council. The Bengal Medical Bill was introduced by Mr Stephenson in December 1913, when he explained that its object was to establish a register of qualified medical practitioners which would enable the public to judge between practitioners who had authorised degrees and those who had not In 1882, when the question of medical registration was raised by the Bombay Government, the Bengal Government refused to take action But since then a number of unrecognised medical schools had sprung up which conferred degrees, and in 1908 the Faculty of Medicine of the Calcutta University and other bodies had urged upon Government the need of legislation. The Bengal Bill was based upon the Bombay Medical Registration Act It would set up a register of qualified practitioners and establish a Medical Council and Registrar to compile the register and maintain it The Council would consist of nine members, four of whom would be ex-officio and five elected The Bill would not interfere with the practice of medicine by any person whatever. Its only penalty clause

was one for the punishment of anyone falsely pretending to be a registered practitioner, and the only privilege which it conferred was that any medical certificate required by a Bengal Act could be given only by a registered practitioner.

The Bill was opposed on the ground that it would not protect the public against unqualified practitioners, that it placed homeopaths in an invidious position, that it ignored the merits of the **Kaviraji profession** and that it would discourage students from entering proprietary medical schools and thus the amount of medical relief available in the Province To these objections the reply was given that the Bill in no wise interfered with any person practising medicine but merely gave the public a means of ascertaining what medical men possessed proper qualifications in Western medicine At a later stage amendments were moved regarding the composition of the Medical Council and providing an appeal to the High Court from the decisions of the Council All were rejected, the only substantial change made in the Bill being that an appeal to the Local Government from the decision of a bare majority of the Council was inserted The Bill was passed

The Calcutta Municipal Loans Bill, which had been introduced early in 1913, was taken up again, Mr Stephenson moving on January 13 that the Report of the Select Committee be considered The object of the Bill was to rectify the procedure of the Calcutta Corporation in the repayment of loans The Government thought it necessary to substitute for the elaborate methods which the Corporation had borrowed from English practice the simplest form of sinking fund which would ensure without complications that when a debt has to be paid off the money shall be there to meet it It was at first understood that the intention of Government was to limit the period of loans to thirty years, but this restriction was ultimately disavowed.

Strong opposition was offered to the Bill on the score that it was at variance with the principles of loan management recognised in England and that the practical effect would be greatly to increase the cost of Municipal borrowing Amendments were moved providing that the period of repayment of a loan should be the life of the work to which the loan was applied and efforts were also made to maintain the Corporation practice of a common sinking fund in preference to the new proposal of a separate sinking fund for each loan The Government however declined to accept any amendment which would define the period of a loan, except that the maximum term was fixed at sixty years, and, on the plea that experience had shown the necessity of absolute simplicity, adhered to the terms of their Bill, which was ultimately carried

Among the other measures passed were the Bengal Municipal (**Sanitary Officers**) Bill which renders it necessary for every municipality with a population of over 10,000 to appoint a sanitary inspector at a prescribed salary.

In reviewing the provincial financial position Sir William Duke explained that the unprecedentedly large **balance of Rs. 304 lakhs**, though partly due to an increase of ordinary income, was mainly the result of inability to spend the large special grants received from the Imperial Government in recent years Dealing with the principal heads of revenue, Land Revenue, Stamps and Excise which between them yielded two-thirds of the total income, he said that, while land revenue was a very slowly expanding head, stamps showed a satisfactory and steady increase Excise was the most important single source of income since it was entirely provincial In spite of an increased duty on country spirit, the returns had exceeded the estimate by fourteen lakhs The total revenue under the present settlement would, it was hoped, give an expansion of 10 or 11 lakhs a year At the same time ordinary expenditure was steadily increasing and it was no easy matter to make the increase keep pace with the slow expansion of revenue The first object of Government would be to place the equipment of all Departments on a satisfactory basis before attempting any extension of activities

A Resolution was proposed by the Hon Mr Surendranath Roy urging that the proposals to abolish the **Engineering College at Sibpur** should be dropped or that, if its present site is considered unsuitable, it should be removed to Calcutta or be made a branch of the proposed Technological Institute in Calcutta The resolution was specially directed against the removal of the Civil Engineering Department to Dacca, and was supported by many of the non-official members The motion was withdrawn upon an assurance being obtained by Mr S P Sinha from the Government that the question would not be decided until the report of the Public Services Commission was issued

Mr Surendranath Banerjee moved a resolution recommending the appointment of a mixed commission of official and non-official members of the Council to inquire into the prevalence of **dacoity in the Presidency** The reply of Sir William Duke to the proposal was of an important character He stated that political dacoity had little to do with the prevalence of dacoity in the province. In the five years 1908-1912, the number of cases of dacoity reported in Bengal was 1,511 Of these only 54 were political. The proportion of political to ordinary crime was thus 3½ per cent The average number of professional dacoities a year was 300 This number, though serious, compared favourably with the case of Madras, where 417 dacoities were reported in 1911 and 464 in 1912, and with the position in the United Provinces where the number was 554 in 1911 and 511 in 1912 Sir William Duke added that the matter had not been neglected In Eastern Bengal, where the police were weak, 50 new investigating centres had been established A new force of river police had been constituted In some districts defence parties had been organised to assist the villagers in opposing a united front to the dacoits Hundreds of Government guns had been distributed to selected villagers, though with disappointing results, and rewards had been offered for the capture of dacoits Dacoity being emphatically a crime which required expert knowledge for its detection, the proposed commission would serve no useful purpose. The motion was withdrawn.

United Provinces Legislative Council.

The questions discussed by the United Provinces Council during the session commencing in November 1913 and ending in November 1914 ranged over a wide area In the discussion on the **Town Areas Bill** Mr Raza Ali considered that Punchayets had not sufficient powers and should have the handling of town funds He also proposed that the principle of separate electorates should be recognised on Punchayets Government agreed to the insertion of a Clause that provision, if any, be made for the special representation of any classes, and the Bill was passed A question which excited some interest was the resolution of Raja Kushal Pal Singh recommending amendment of the Council regulations so as to allow at least four seats to representatives of the landed interest He thought it was a grave anomaly that land-holders should be represented by only two members, one in Agra and the other in Oudh, and he claimed that the regulations in other parts of India had been more liberally framed The Council was equally divided on the matter and it was therefore announced that it was unlikely that the Government would undertake any new alteration

The Hon'ble Lala Sukhbir Singh moved a resolution asking Government to stop the rapidly increasing **Burma dry meat trade** In the course of the discussion official members said it had been proved that the cattle which were slaughtered for Burma were really worthless cattle which would otherwise have been a dead loss to agriculturists The Lieutenant Governor said he could not accept the resolution on economic grounds In the face of what had been said the mover withdrew his resolution, specially as Government announced that it intended to make rules for the better supervision of slaughter houses

The Budget debate was of unusual interest as indicating the views of non-official members. Lala Sukhbir Singh said that the work of Police chaukidars was unsatisfactory They were illiterate, and he suggested the establishment of night schools for their education The Kour Sahib of Benares ventured the opinion that technical education was bound to be a failure as there was no demand for it He thought that co-operative societies should be encouraged and argued that the peasantry of the Provinces were not receiving the attention they merited Village sanitation was also a matter requiring attention The late Hon'ble Ganga Pershad Varma expressed gratitude for the advance in self-Government which had been made by the appointment of unofficial chairmen to several second class municipalities of the province He inferred that the Bombay system was intended to be introduced in the United Provinces and that an Executive Officer would be appointed to carry on the executive work of the municipality allowing the non-official chairman to conduct the proceedings of meetings Babu Brijnand Pershad insisted that the revenue from excise indicated an increase in the consumption of liquor Mr Aweedy rebutted this assertion by stating that while revenue was increasing, it was due to enhanced rates and was out of all proportion to consumption. In Cawnpore there had been no rise in consumption during the last decade, Mr Douglas Straight was glad that expenditure on the police had not met with any serious attack The strength of the force, considering the persistence of dacoity, was at a dangerous minimum, and he foreshadowed several reforms, including the increase of mounted police

The outbreak of the **war in Europe** enabled the Council to express the whole hearted support of the people of these provinces to the Government in the present crisis The Hon'ble Syed Raza Ali moved the following resolution "The Council places on record its deep sense of unflinching loyalty and devotion to the person and throne of His Majesty the King-Emperor, and respectfully begs to assure His Majesty, through H E the Governor-General, of the readiness of the people of these provinces to render all such service to the British Government as lies in their power in the righteous war in which England is engaged at present This Council further expresses its firm resolve to co-operate with the Government in carrying out all measures which may be found necessary to secure the safety or welfare of the public" The Hon'ble member expressed gratitude at the initiative of the Viceroy in sending Indian soldiers to the front He pointed out the various ways in which the people could help Government, by organizing ambulance corps and field hospitals, by finding money to be spent on the actual conduct of the war and by raising subscriptions to relieve the sufferings of the wounded soldiers and to afford help to the dependants of those soldiers who have been killed in the war Mr Syed Raza Ali also protested in the strongest terms against the absurd, fantastical and hopelessly ridiculous notions about the war which pass as news among the Indian masses Much of this might have been expected but not the strong suspicion of mischief which has been brought to light "I believe" said the Hon'ble Syed Raza Ali, "that it has already reached your Honour's ears that big German airships have been seen flying over every village, town or city in these provinces Now, by actual experience, I know that some foolish persons or mischief-mongers have been flying at night big paper kites, illuminated with red and green lights in Moradabad It may be that these people actually bear no ill-will towards anybody It may be that their real object is to make capital out of the panic that might be caused, but here again this is a matter in which we can, I am sure, do more than the Government in allaying the panic and communicating the true news to the ignorant masses" The Hon'ble member continued "Then, again, as has been pointed out, more or less in every city there has been a rush on the Post Office Saving Banks I need hardly go into the genesis of that panic but there is no doubt that money invested with Government is more safe than it would be anywhere else As I pointed out at a meeting, if we have money in Government banks it must in any case be restored to us or our children Whereas by keeping the money with himself a man runs the risk, in case of disorder, of being robbed of his cash and himself being killed." At the meeting on 16th

November, 1914, Sir James Meston addressed the Council as follows "It will be within your recollection that on the 14th of September this Council passed two resolutions, one relating to the message of condolence with His Excellency the Viceroy on the death of Lady Hardinge and the other expressing loyalty to the person and throne of the King-Emperor As requested by the Council, I duly submitted both resolutions to the Viceroy and I am commanded to read the following The Viceroy will be grateful if the Lieutenant Governor will convey to the Council His Excellency's grateful thanks for their sympathy in his great sorrow and his warm appreciation of the loyal terms of the resolutions passed in connection with the war His Excellency feels certain they are the truly voiced sentiment of the Province"

It was announced that the sanction of the Secretary of State had been received to the appointment of a permanent **Director of Industries** and that the Local Government would appoint a suitable officer as soon as possible. At the meeting three Bills were passed, viz, the United Provinces Excise Amendment Bill, 1914, the United Provinces District Courts Amendment Bill, 1914, and the United Provinces Steam Boilers and Prime Movers Bill, 1913

Punjab Legislative Council.

At the meeting of the Punjab Legislative Council held in March 1914, the Hon'ble Mr Mant, in presenting the revised financial statement, showed that although suspensions of fixed land revenue had been necessitated by the scarcity of rain in some parts of the Province, in the central parts, at any rate, the year had been good for the agriculturists There had recently been a revival in the demand to purchase proprietary rights in the Chenab and Jhelum Colonies The **Budget** anticipated a deficit of nearly 26½ lakhs of rupees, which was covered by unexpended balances of Imperial grants the normal revenue was now sufficient to meet the present standard of expenditure The year was expected to close with a balance of 144 lakhs, of which only 11½ lakhs were earmarked for special purposes Besides this the Punjab Government were now beginning to dispose of waste lands commanded by the new canals which should eventually bring in to the Provincial Exchequer five crores of rupees In making his statement he briefly referred to the agreement concluded between the Punjab Government and a London Syndicate for the manufacture of **cement** in the Punjab He repeated a repudiation that Sir Louis Dane was financially interested in the undertaking and said that the Province would benefit by the introduction of a new local industry and by the supply of cheap cement to the general public

In the debate which followed the Hon'ble Mr Rai Bahadur Ram Saran Das suggested that where strained feelings existed between Mahomedans and Hindus Conciliation Boards should be constituted upon the plan proposed in the United Provinces He also suggested that Government should make grants to different religious bodies as had been done by Akbar for the restoration or maintenance of religious edifices and institutions The Hon'ble Rai Bahadur Bakshi Sohan Lal drew attention to what he described as the universal desire that the status of the chief court should be raised to that of the **High Court** He also asked for a pronouncement on the question of creating an executive council for the Punjab The Hon'ble Mr Muhammad Shafi asked that more permanent income should be earmarked for sanitation and education He thought Local Government should take measures to obtain from the Government of India authority to invest a greater part of its balances year after year in order to enable it to devote the income derived thereby to those two wants The Hon'ble Nawab Sir Bahram Khan pleaded the cause of Dehra Ghazi Khan which he described as ruined by the strong hand of the Providence He said that roads, watersupply and sanitation were the chief needs of the town The Hon'ble Sir P C Chatterji pressed the advisability of having a number of **public libraries** throughout the Province His Honour Sir Michael O'Dwyer in a lengthy speech reviewed the debate He showed what had been done at Dehra Ghazi Khan and dealt briefly with criminal administration He considered that public opinion was beginning to wake up to the need of supporting the cause of law and order with the result that efforts to cope with crime were becoming more successful He thought that Conciliation Boards would not form the best means of reducing friction between the Hindu and Mahomedan communities It would be better that the local authorities should approach Government with a view to advising means for an amicable settlement He was surprised to hear the suggestion that an **executive council** should be created The Punjab had progressed and prospered under the system to which it was habituated of regarding the Lieutenant-Governor as the sole head of, and in the last degree responsible for, the administration of the Province Other Provinces in which executive councils had been established had a larger population and therefore there was in them a greater need for relieving the head of the Province by giving him colleagues His Honour concluded his speech by referring to the attempts of anarchists and extremists to gain a footing in the Punjab

The Hon'ble Khan Bahadur Mian Muhammad Shafi moved a resolution on the problem of **beggary** in which he said that, according to the latest census returns, every forty-second person one met in the fertile land of five rivers was a beggar who, instead of leading the healthy life of a self-respecting citizen, was a veritable nuisance to the circle in which he moved The resolution was that "This Council recommends to the Government that it may be pleased to appoint a committee consisting of officials and non-officials to consider and formulate proposals for the purpose of preventing professional beggary, and in particular of stopping boys and girls from being turned into or sent out as beggars and mendicants by their parents, preceptors or other persons who may for the time being have the care of such minors" A

number of speakers followed. The Hon'ble Mr Kettlewell explained the inability of Government to accept it in the form in which it was framed, and His Honour the President stated that it would be best to await the result of the Committee which had been appointed in the United Provinces to inquire into the subject of beggary The resolution was accordingly withdrawn

The Hon'ble Mr James Currie moved a resolution to the effect that Government should reconsider the matter of the agreement entered into for the supply of Portland and other **cements** and take steps to remove the danger threatening private enterprise committed to existing cement and lime works He was supported by Mr Muhammad Shafi He said he was not in favour of granting a monopoly to anyone unless the circumstances were so exceptional as to justify the necessity of such a procedure After the Hon'ble Mr Mant had given his assurance that Government would take steps to ensure that the Company in question would not become the tool of any combine the resolution was withdrawn

At the September meeting of the Council, the Hon'ble Mr Barron introduced a bill to amend the Punjab Courts Act, 1914, which supplies a legal omission in regard to the period of limitation for second appeals to the chief court A **resolution with regard to the war** was introduced by His Honour the President conveying to the King an expression of devotion and loyalty of the Punjab He was supported by the Hon'ble Sardar Daljit Singh, the Hon'ble Khan Bahadur Mian Muhammad Shafi, the Hon'ble Sir P C Chatterji and other speakers His Honour said that he had been particularly struck by the readiness of the Punjab to make any sacrifice, whether in men or in money, and by the fact that this war had established a common bond helping to bring about a better mutual understanding between all classes.

The Public Trustee.

The Public Trustee of England is a Government Official created by Statute (Public Trustee Act, 1906), whereby the State acts as an executor or as a trustee under Wills, and as a trustee under Settlements, whether these instruments are new or old, and in other offices of an analogous character

The office has been a great success, in the seven years that it has been open the value of the trusts in course of administration have amounted, in round figures, to £50,000,000, while the estimated value of Wills lodged in the Department which have yet to mature is put at some £59,000,000, showing a total value of business of all kinds negotiated at £110,000,000

Fees chargeable.—The office is now entirely self-supporting and is no charge upon the tax-payer A provision of the Statute declares that the Office is to make no profit but to charge only such fees as may provide the working expenses and constitute a reserve fund against the liabilities assumed by the State for breach of trust In accordance with this mutual principle the fees have already been reduced from their original scale, and the cash surplus of fees over expenses, regarded as the nucleus of a reserve fund for all contingencies, is now £14,585

The main fees are of two kinds—a fee on capital and a fee on income The fees on capital are taken in two instalments—an instalment of half taken at the beginning, and another instalment of half taken at the end of a trust—each instalment being calculated at the following rates —

On the first £1,000, fifteen shillings per cent.

On the excess of £1,000 to £20,000, five shillings per cent.

On the excess of £20,000 to £50,000, two shillings and six pence per cent.

On the excess of £50 000, one shilling and three pences per cent. The **Fee on income** is one per cent. if, as is usual the income be paid direct from its source to the person entitled, on any income in excess of £2,000 a year the fee is only ½ per cent Where the income is paid through the Department then the fee is two per cent up to £500 a year, and one per cent on any excess of £500 a year, and ½ per cent on income in excess of £2,000 a year The fee on investment is ½ per cent the Public Trustee, out of this fee, paying the brokerage. There is power to vary these fees to meet the peculiar circumstances of special cases, but owing to the low range of the fees, and their mutual character the power of reduction is but seldom exercised, except perhaps in the case of large trusts

The Department has been organised upon lines followed by commercial organisations Forms are avoided wherever possible, the methods of the Office prescribing prompt attention to all matters within the day.

The particulars of any trust in which it is desired that the Public Trustee should act may be brought to his notice by letter or by personal interview, and upon his assent being obtained, his appointment should be effected in the ordinary way as in the case of private trustees In the case of a Will about to be made, his appointment can be secured by the simple provision "I appoint the Public Trustee of England as the executor and trustee of this my Will"

One of the forms of trusteeship which would appeal to English people residing in India is a scheme known as a "**Declaration of Trust**" An official pamphlet explains that the Public Trustee's services have been requested by people who, either because of professional or business preoccupation, or from want of experience in dealing with money matters, or from the disadvantages which might attach to Governmental, professional or business disabilities abroad, are not well placed to select and supervise their investments. It would appear that the services of the Department in this matter were first requisitioned by officers taking up appointments in India; and, follow-

ing out their request for individual assistance, this scheme of trust came to be devised, and has been found to commend itself to the circumstances of a very large circle of persons similarly disadvantaged A Declaration of Trust is **an inexpensive form of trusteeship** by virtue of which the owner practically retains full control over his capital The property is made over to the Public Trustee either in the form of money to be invested or specific securities transferred into his name, and thereupon the Public Trustee executes a short "declaration" setting out that he holds the money invested or the securities in trust for the transferor The result of this is that income, as it accrues, is paid to the owner or to any beneficiary as he may direct A wide field of investment is permissible, as the trust provides that the funds may be invested as the owner may from time to time direct As the pamphlet sets out interest at the rate of at least 4 per cent is to be looked for under the scheme from investments of a non-speculative character It should be understood that this form of trusteeship is not analogus to a bank deposit, where the return of the capital at par, given the solvency of the bank, is expected. Investments are selected with the greatest care in consultation with the owner, but it must be understood that the Public Trustee does not accept responsibility for any fluctuation of any of the investments chosen The fees payable for this scheme of trusteeship, so far as the capital fees are concerned, are half those payable in the case of an ordinary Settlement The other fees are the same as the ordinary fees

The appointment of the Public Trustee secures certain definite advantages inasmuch as he is by Act of Parliament a Corporation Sole and thus it is said the Public Trustee never dies, so that the expense of appointment of other Trustees is permanently avoided His integrity is guaranteed by the State, while the measure of his success would indicate that he is necessarily experienced and skilled in his duties

Close personal attention is given by the Public Trustee and his senior officers to the details of every trust, and as regards the work of investment, a large organisation has been set up to give the best consideration not only to the selection of investments but to the duty of keeping them under frequent observation

An Advisory Committee of men of recognised authority has, in the past year, been appointed by the Lord Chancellor to assist the Public Trustee by a quarterly review of the investments made In the last Annual Report the Public Trustee speaks of having secured a return of £3-19-4 per cent upon his trustee investments and a return of £4-10-1 per cent upon his non-trustee investments

The success of the Department would seem to show that there is a widespread public need in England for such an Office, and the energy and efficiency with which the Department has been constituted and conducted has been a great factor in commending it to the public The State Guarantee is also doubtless a factor of great importance A statutory rule provides that strict secrecy shall be observed in respect of all trusts administered in the Department

The administration is subject to an **audit** by the Controller and Auditor-General (the Government Auditor), while the internal organisation has been built up upon the principle of a check and counter-check upon the administration

An important section of the Statute gives the Public Trustee power to direct an audit and investigation of the condition and accounts of any trust

Officials in India will doubtless tend to make an increasing use of the Department. As a Government Office, its stability will commend itself to them as a medium to safeguard their interests under Wills or Settlements which can be entirely relied upon, and free from the risks and expense attendant upon any other forms of trusteeship

Further information upon details and copies of the official pamphlet, reports and rules, etc, can be obtained of the official agents to the Department, *viz* —Messrs King, Hamilton & Co, Calcutta and in Bombay, Messrs King, King & Co, whose head office is Messrs Henry S King & Co, 65, Cornhill, London, E. C

PROVING OF WILLS.

In British India if a person has been appointed executor of the will of a deceased person, it is always advisable to prove the will as early as possible If the will is in a vernacular it has to be officially translated into English A petition is then prepared praying for the grant of probate of the will All the property left by the deceased has to be disclosed in a schedule to be annexed to the petition The values of immoveable properties are usually assessed at 16½ years purchase on the nett Municipal assessment For estate under Rs 10,000 the probate duty payable is 2 %, between Rs 10,000 and Rs 50,000 the duty payable is 2½% Over 50,000 rupees the duty payable is 3%. In determining the amount of the value of the estate for the purposes of probate duty the following items are allowed to be deducted —

1. Debts left by the deceased including mortgage encumbrances.
2. The amount of funeral expenses
3. Property held by the deceased in trust and not beneficially or with general power to confer a beneficial interest

The particulars of all these items have to be stated in a separate schedule It is the practice of the High Court to send a copy of these schedules to the Revenue authorities and if the properties particularly immoveable properties have not been properly valued, the Revenue department require the petition to be amended accordingly In certain case the Court then requires citations to be published and served on such persons as the Court thinks are interested in the question of the grant of probate If no objection is lodged by any person so interested within 14 days after the publication or service of citation and if the will is shown to have been properly executed and the petitioner entitled to probate, probate is ordered to be granted

Freemasonry.

In an Institution so universal as Freemasonry the growth of that body in any particular part of the world is usually similar in all respects to the development in other parts When Freemasonry was first established in Bombay and became strong enough to have its own Provincial Grand Lodge, the Grand Master of English Freemasons appointed James Todd, a Lieutenant of Police, as the first Provincial Grand Master in 1764 This office he held until 1798 when the Provincial Grand Lodge seems to have gone into abeyance A revival apparently set in in 1833 and Lodge Orion in the West was founded at Poona This was followed in 1844 by Lodge St Andrews at Kamptee and in 1848 by Lodge St George in Bombay In 1861 the Provincial Grand Lodge was revived and George Taylor was appointed P G M

In 1870 a fresh warrant was issued by which the Provincial Grand Lodge of Bombay was altered to District Grand Lodge with James Gibbs as D G M The next D G M was Edward Tyrrell Leith who took charge in 1879 and he was followed in 1887 by H R H the Duke of Connaught The remainder of the District Grand Masters were H E Lord Sandhurst 1895-1899, H E Lord Northcote 1900-1902 Hon Sir Lawrence Jenkins 1903-1907 and G Owen W Dunn 1908-1911 The present D G M being W Alban Haig-Brown who was appointed in 1912

Under the skilful management of these illustrious men the District has grown until now there are under the District Grand Lodge of Bombay 39 Lodges with a total membership of over 2,000

At the same time the Royal Arch and Mark degrees have also prospered and there are 16 Chapters with a total membership of over 600 and 11 Mark Lodges totalling over 300 One of the principal objects of Masonry being charity, it is interesting to know that from January 1882 to December 1912 the Lodges and Chapters subscribed over Rs 62,700 to the Bombay Masonic Association and individual brethren over Rs 22,800 Of these amounts practically Rs 53,000 has been spent on schooling, etc, of children of deceased or indigent masons and it is hoped that sufficient funds will be forthcoming to form a fund, the interest on which will be sufficient to clothe, feed and school more of such unfortunate children than hitherto has been possible

The Lodges in the District also have to pay every year a small fee for each member to the Board of Benevolence and these contributions have enabled that Board to disburse to widows, distressed masons and to famine relief funds, etc, a sum of nearly Rs 48,000

DISTRICT GRAND LODGE E C.

List of Principal Officers, 1914.

CALCUTTA

R W District Grand Master, Right Hon Baron Carmichael of Skirling, G C I F, K C M G

Deputy District Grand Master, Hon Sir James Meston, K C I E

District Senior Grand Warden, Sir R N Mookerjee, K C I E

District Junior Grand Warden, Darcy Lindsay

District Grand Secretary, J A Dolton

BOMBAY

R W District Grand Master, W A Haig-Brown, J P

Deputy District Grand Master, C B Robinson, J P

District Senior Warden, A B Napier

District Junior Grand Warden, Dr G B Prabhakar

District Grand Secretary, J F Pennock, V D

MADRAS

R W District Grand Master, Hon Mr Ll E Buckley

Deputy District Grand Master, C J Higgs

District Senior Grand Warden, S V Ramaswami Iyengar

District Junior Grand Warden A L Honnay

District Grand Secretary, J H B Brougham

LAHORE

R W District Grand Master, Sir H P Burt, K C I E

Deputy District Grand Master, Col Pease, C I E

District Senior Grand Warden, Lt-Col R Heard

District Junior Grand Warden, R T Clarke, I C S

District Grand Secretary, D Johnstone

RANGOON

R W District Grand Master, The Hon Mr Justice E W Ormond

Deputy District Grand Master,

District Senior Grand Warden, W Kendall

District Junior Grand Warden, G H Evans

District Grand Secretary, A Blake

GRAND LODGE OF ALL SCOTTISH FREEMASONRY IN INDIA

Installation—November (St Andrew's Day)

COMMUNICATION—4th Saturday, in January, April, July, and October

PLACE OF MEETING—Freemason's Hall, Ravelin Street, Bombay

Grand Master, The Hon'ble Mr Justice F C O Beaman, I C S

Grand Master Depute, H P Gibbs

Substitute Grand Master, Pestonjee M Kanga

Honorary Substitute Grand Master, T Srinivasacharya

Grand Superintendent of Northern India, The Hon'ble Col Sir A H McMahon

Grand Superintendent of Central India, Lt-Col. F W P Macdonald

Grand Superintendent of Southern India, C H. Richards

Grand Superintendent of Eastern India, W. R. Gourlay, I C S

Senior Grand Warden, L H Savile

Do do do Mohini M Chatterjee.

Junior Grand Warden, Framji R Surveyor.

Do do do. Moulvi Syed Ahmed,

G. Secretary—ARTHUR W. WISE,

11, Hummum Street Bombay.

BENGAL MASONIC ASSOCIATION

for

Educating Children of Indigent Freemasons.
Registered under Act XXI of 1860
Instituted in 1869

President—The Right Hon'ble Baron Carmichael of Skirling, G C I E, K C M G, *District Grand Master*

This Association is supported by capitation assessments from the Lodges in the District of Bengal and by voluntary contributions

1 A donation of Rs 500 made in one or more payments of not less than Rs 50 each constitutes the donor a *Vice President* for *Life* with the privilege of five votes

2 A donation of Rs 100 constitutes the donor a *Governor* for *Life*, with the privilege of one vote and one vote for each additional donation of Rs 100

3 A subscription of Rs 16 per annum entitles the subscriber to one vote for the year and an extra vote for every additional Rs 16

4 The conditions of the above are the same, whether the donor or subscriber be an individual or a Lodge, Chapter, or any other society

5 A general meeting of subscribers is held twice in the year, at Freemasons' Hall, Calcutta, 19, Park Street

6 The general conduct of the affairs of the Association is entrusted to a Committee composed of the President, Treasurer, and Secretary, and of five Members to be elected at the February Half-yearly General Meeting

7 The funds of the Association are devoted solely to the board and education of children

8 Children are admitted into the Association at the age of seven years and continue therein till they have attained the age of seventeen years

This rule applies equally to children of both sexes without any distinction of religious denominations

9 Elections take place at each General Meeting of Subscribers according to the number of vacancies and capabilities of the fund

10 No child is eligible to be placed on the List of Candidates unless his father has been a Registered Mason for five years and Subscribing Member of some Lodge for at least three years of that period.

Subscriptions and donations are received by the District Grand Secretary and by the Secretary of the Association (Herbert E Kent, Freemasons' Hall, 19 Park Street)

W. J Bradshaw, *Honorary Treasurer.*

Herbert E Kent, *Secretary*

BENGAL MASONIC FUND OF BENEVOLENCE

GRAND COMMITTEE
President

The Right Honourable Baron Carmichael of Skirling, G C I E, K C M G, *District Grand Master*

The Hon'ble Sir James Meston, K C I E, *Deputy District Grand Master*

C D Stewart, P D G W

S A Fairweather, *Deputy Grand Treasurer*

J A Dolton, *Deputy Grand Secretary*

H E Kent, *Deputy A Grand Secretary*

SCOTTISH MASONIC FUND OF BENEVOLENCE

For the purpose of affording temporary relief to indigent Freemasons and their families

Grand Secretary—Arthur W Wise,

11, Hamam Street, Fort, Bombay

THE SCOTTISH MASONIC BENEVOLENT ASSOCIATION IN INDIA

(*a*) For the purpose of granting Annuities to old and destitute Freemasons and their widows

(*b*) Granting allowances towards the maintenance and education of the children of deceased or indigent Freemasons

C D Furdonjee, *Honorary Secretary and Treasurer*

J C Mistre, *Honorary Assistant Secretary*, 11, Hamam Street, Fort, Bombay

THE SIND MASONIC BENEVOLENT ASSOCIATION

Registered under Act XXI of 1860
(Established 1873)

Patron

Right Wor Bro H E the Right Hon'ble Lord Lamington, G C M G, G C I E, *Late Grand Master of A S F, India, and Governor of Bombay*

J. Humphrey, *President*

Secretary—Framroze E Punthakey, Victoria Street, Predy Quarter, Karachi.

Indian Architecture.

I. ANCIENT.

The architecture of India has proceeded on lines of its own, and its monuments are unique among those of the nations of the world An ancient civilization, a natural bent on the part of the people towards religious fervour of the contemplative rather than of the fanatical sort, combined with the richness of the country in the sterner building materials—these are a few of the factors that contributed to making it what it was, while a stirring history gave it both variety and glamour Indian architecture is a subject which at the best has been studied only imperfectly, and a really comprehensive treatise on it has yet to be written The subject is a vast and varied one, and it may be such a treatise never will be written in the form of one work at any rate The spirit of Indian art is so foreign to the European of art culture that it is only one European in a hundred who can entirely understand it, while art criticism and analysis is a branch of study that the modern Indian has not as yet ventured upon to any appreciable extent Hitherto the one, and with a few exceptions the only recognized authority on the subject has been Fergusson, whose compendious work is that which will find most ready acceptance by the general reader But Fergusson attempted the nearly impossible task of covering the ground in one volume of moderate dimensions, and it is sometimes held that he was a man of too purely European a culture, albeit wide and eclectic, to admit of sufficient depth of insight in this particular direction Fergusson's classification by races and religions is, however, the one that has been generally accepted hitherto He asserts that there is no stone architecture in India of an earlier date than two and a half centuries before the Christian era, and that "India owes the introduction of the use of stone for architectural purposes, as she does that of Buddhism as a state religion, to the great Asoka, who reigned B C 272 to 236"

Buddhist Work.

Fergusson's first architectural period is then the Buddhist, of which the great tope at Sanchi with its famous Northern gateway is perhaps the most noted example Then we have the Gandharan topes and monasteries Perhaps the examples of Buddhist architecture of greatest interest and most ready access to the general student are to be found in the Chaitya halls or rock-cut caves of Karli, Ajunta, Nasik, Ellora and Kanheri A point with relation to the Gandhara work may be alluded to in passing This is the strong European tendency, variously recognized as Roman, Byzantine but most frequently as Greek, to be observed in the details The foliage seen in the capitals of columns bears strong resemblance to the Greek acanthus, while the sculptures have a distinct trace of Greek influence, particularly in the treatment of drapery From this it has been a fairly common assumption amongst some authorities that Indian art owed much of its best to European influence, an assumption that is strenuously combated by others.

The architecture of the Jains comes next in order Of this rich and beautiful style the most noted examples are perhaps the Dilwara temples near Mount Abu, and the unique "Tower of Victory" at Chitoore

Other Hindu Styles.

The Dravidian style is the generic title usually applied to the characteristic work of the Madras Presidency and the South of India It is seen in many rock-cut temples as at Ellora, where the remarkable "Kylas" is an instance of a temple cut out of the solid rock, complete, not only with respect to its interior (as in the case of mere caves) but also as to its exterior It is, as it were, a life-size model of a complete building or group of buildings, several hundred feet in length, not built, but sculptured in solid stone, an undertaking of vast and, to our modern ideas, unprofitable industry The Pagoda of Tanjore, the temples at Seringham, Chidambaram, Vellore, Vijayanagar, &c, and the palaces at Madura and Tanjore are among the best known examples of the style

The writer finds some difficulty in following Fergusson's two next divisions of classification, the "Chalukyan" of South-central India, and the "Northern or Indo-Aryan style" The differences and the similarities are apparently so intermixed and confusing that he is fain to fall back on the broad generic title of "Hindu"—however unscientific he may thereby stand confessed Amongst a vast number of Hindu temples the following may be mentioned as particularly worthy of study,—those at Mukteswara and Bhuvaneswar in Orissa, at Khajuraho, Bindrabun, Udaipur, Benares, Gwalior, &c The palace of the Hindu Raja Man Singh at Gwalior is one of the most beautiful architectural examples in India So also are the palaces of Amber, Datiya, Urcha, Dig and Udaipur

Indo-Saracenic.

Among all the periods and styles in India the characteristics of none are more easily recognizable than those of what is generally called the "Indo-Saracenic" which developed after the Mahomedan conquest Under the new influences now brought to bear on it the architecture of India took on a fresh lease of activity and underwent remarkable modifications The dome, not entirely an unknown feature hitherto, became a special object of development, while the arch, at no time a favourite constructional form of the Hindu builders, was now forced on their attention by the predilections of the ruling class The minaret also became a distinctive feature The requirements of the new religion,—the mosque with its wide spaces to meet the needs of organized congregational acts of worship—gave opportunities for broad and spacious treatments that had hitherto been to some extent denied The Moslem hatred of idolatry set a tabu on the use of sculptured representations of animate objects in the adornment of the buildings, and led to the development

of other decorative forms. Great ingenuity came to be displayed in the use of pattern and of geometrical and foliated ornament This Moslem trait further turned the attention of the builders to a greater extent than before to proportion and mass as means of giving beauty, mere richness of sculptured surface and the aesthetic and symbolic interest of detail being no longer to be depended on to the same degree

The art was thus the gainer by the new conditions It gained in power and variety much as "Classic" architecture gained under the Romans But it equally lost something too The Indo-Saracenic is apt to appear cold and hard The writer was impressed by this on his first view of the Gwalior palace already mentioned Though a Hindu building that palace has yet much of what might be called the more sophisticated quality of the Indo-Saracenic work as well as some similarity of detail. It has, being Hindu, a certain amount of sculptured ornament of animated forms, and the general effect of roundness, richness and interest thereby imparted seemed eloquent in suggestion as to what is lacking in so many of the Mahometan buildings

Foreign Influence

There would appear to be a conflict between archæologists as to the extent of the effect on Indian art produced by foreign influence under the Mahometans The extreme view on the one hand is to regard all the best of the art as having been due to foreign importation The Gandharan sculptures with their Greek tendency, the development of new forms and modes of treatment to which allusion has been made, the similarities to be found between the Mahometan buildings of India and those of North Africa and Europe, the introduction of the minaret and, above all, the historical evidences that exist of the presence in India of Europeans during Mogul times, are cited in support of the theory On the other hand those of the opposite school hold the foregoing view to be due to the prevailing European preconception that all light and leading must come by way of Europe, and the best things in art by way of Greece To them the Gandharan sculpture, instead of being the best, is the worst in India even because of its Greek tincture They find in the truly indigenous work beauties and significances not to be seen in the Graeco-Bactrian sculptures, and point to those of Borobudur in Java, the work of Buddhist colonists from India, wonderfully preserved by reason of an immunity from destructive influences given by the insular position, as shewing the best examples of the art extant It is probable that a just estimate of the merits of the controversy, with respect to sculpture at any rate, cannot be formed till time has obliterated some of the differences of taste that exist between East and West

To the adherents of the newer school the undisputed similarities between Indo-Mahometan and Hindu buildings outweigh those between Indian and Western Mahometan work, especially in the light of the dis-similarities between the latter They admit the changes produced by the advent of Islam, but contend that the art, though modified yet remained in its essence what it had always been, indigenous Indian The minaret, the dome, the arch, they contended, though developed under the Moslem influence, were yet, so far as their detailed treatment and craftsmanship are concerned, rendered in a manner distinctively Indian Fergusson is usually regarded as the leader of the former school, while the latter and comparatively recent school has at present found an eager champion in Mr E B Havell, whose works, on the subject are recommended for study side by side with those of the former writer Mr Havell practically discards Fergusson's racial method of classification into styles in favour of a chronological review of what he regards to a greater extent than did his famous precursor as being one continuous homogeneous Indian mode of architectural expression, though subject to variations from the influences brought to bear upon it and from the varied purposes to which it was applied

Agra and Delhi.

Agra and Delhi may be regarded as the principal centres of the Indo-Saracenic style—the former for the renowned Taj Mahal, for Akbar's deserted capital of Fatehpur Sikri, his tomb at Secundra, the Moti Musjid and palace buildings at the Agra fort At Delhi we have the great Jumma Musjid, the Fort, the tombs of Humayon, Sufdar Jung, &c., and the unique Qutb Minar Two other great centres may be mentioned, because in each there appeared certain strongly marked individualities that differentiated the varieties of the style there found from the variety seen at Delhi and Agra, as well as that of one from that of the other These are Ahmedabad in Gujarat and Bijapur on the Dekhan, both in the Bombay Presidency At Ahmedabad with its neighbours Sukhej and Champanir there seems to be less of a departure from the older Hindu forms, a tendency to adhere to the lintel and bracket rather than to have recourse to the arch, while the dome, though constantly employed, was there never developed to its full extent as elsewhere, or carried to its logical structural conclusion The Ahmedabad work is probably most famous for the extraordinary beauty of its stone "jali"—or pierced lattice-work, as in the palm tree windows of the Sidi Sayyid Musjid.

Bijapur.

The characteristics of the Bijapur variety of the style are equally striking They are perhaps more distinctively Mahometan than those of the Ahmedabad buildings in that here the dome is developed to a remarkable degree, indeed the tomb of Mahmud—the well-known "Gol Gumbaz"—is cited as shewing the greatest space of floor in any building in the world roofed by a single dome, not even excepting the Pantheon The lintel also was here practically discarded in favour of the arch. The Bijapur style shews a bold masculine quality and a largeness of structural conception that is unequalled elsewhere in India, though in richness and delicacy it does not attempt to rival the work of the further North. In this we recognize among other influences

that of the prevailing material, the hard uncompromising Dekhan basalt. In a similar manner the characteristics of the Ahmedabad work with its greater richness of ornamentation are bound up with the nature of the Gujarat freestone, while at Delhi and Agra the freer choice of materials available—the local red and white sandstones, combined with access to marble and other more costly materials—was no doubt largely responsible for the many easily recognizable characteristics of the architecture of these centres

II. MODERN.

The modern architectural work of India divides itself sharply into two classes. There is first that of the indigenous Indian "master-builder" to be found chiefly in the Native States, particularly those in Rajputana. Second there is that of British India, or of all those parts of the peninsula wherever Western ideas and methods have most strongly spread their influence, chiefly, in the case of architecture, through the medium of the Department of Public Works. The work of that department has been much animadverted upon as being all that building should not be, but, considering it has been produced by men to whom it was admittedly not the *metier*, and who were necessarily contending with lack of expert training on the one hand and with departmental methods on the other, it must be conceded that it can shew many notable buildings. Of recent years there has been a tendency on the part of professional architects to turn their attention to India, and a few of these have even been drafted into the service of Government as the result of a policy initiated in Lord Curzon's Viceroyalty. In time, therefore, and with the growth of the influence of these men, such of the reproach against the building of the British in India as was just and was not merely thoughtlessly maintained as a corollary to the popular jape against everything official, may gradually be removed. If this is so as to Government work progress should be even more assured in the freer atmosphere outside of official life. Already in certain of the greater cities, where the trained modern architect has established himself, in private practice, there are signs that his influence is beginning to be felt. He still complains, however, that the general public of India needs much educating up to a recognition of his value, both in a pecuniary sense and otherwise. It is also to be observed that the survival of a relic of the popular idea of the time before his advent, to the effect that though an architect might occasionally "design" a building it was always an engineer who built it, is still indicated by the architect in some cases deeming it advisable to style himself "architect and engineer."

To the work of the indigenous "master-builder" public attention has recently been drawn with some prominence, and the suggestion is being pressed that efforts should be directed towards devising means for the preservation of what is pointed out to be a remarkable survival—one of the few in the world—of "living art," but which is threatened with extinction by reason of the spread of Western ideas. The matter has assumed the form of a controversy centring round the question of that much discussed project the building of the Government of India's new capital at Delhi. It is urged that this project should be utilized to give an impetus to Indian rather than to Western art. Those who plead for the preservation of the art appear for the most part to be adherents of the "indigenous Indian" school of archæologists already mentioned. They have mustered a considerable following not only amongst the artistic public of England and India but even within the Government services. The controversy is, however, too strictly one of the moment, and too purely technical, for its merits to be judged by the general reader or discussed here. Its claim on our attention lies in the fact that it affords an added interest for the tourist, who may see good examples of the "master-builder's" work in nearly every native town and bazaar in India. The town of Lashkar in Gwalior State may be cited as peculiarly rich in instances of picturesque modern Indian street architecture, while at Jaipur, Udaipur, Benares, &c., this class of work may be studied in many different forms both civil and religious, and the extent to which the alleged "unbroken tradition from the past" exists may be gauged by the traveller who is architect enough for the purpose

Archæology.

The archæological treasures of India are as varied as they are numerous. Those of the pre-Muhammadan period may roughly be divided into (1) architectural and sculptural monuments and (2) inscriptions. No building or sculpture in India with any pretentions to be considered an example of architecture or art can be ascribed to a time earlier than that of Asoka (circa 250 B.C.). In the pre-Asoka architecture of India, as in that of Burma or China at the present day, wood was solely or almost solely employed. Even at the close of the 4th century, B.C., Megasthenes, the Greek Ambassador at the court of Chandragupta, grandfather of Asoka, describes Pataliputra, the capital of the Indian monarch, as "surrounded by a wooden wall pierced with loop-holes for the discharge of arrows." If the capital itself was thus defended, we can easily infer that the architecture of the period was wooden. And long long after stone was introduced the lithic styles continued to be influenced by, or copied from, the wooden.

Monumental Pillars.—The first class of works that we have to notice are the monumental pillars, known as *lats*. The oldest are the monolithic columns of Asoka, nearly thirty in number, of which ten bear his inscriptions. Of these the Lauriya-Nandangarh column in the Champaran District, Tirhut, is practically unmjured. The capital of each column, like the shaft, was monolithic, and comprised three members, *viz*, a Persepolitan bell, abacus, and crowning sculpture in the round. By far the best capital of Asoka's time was that exhumed at Sarnath near Benares. The four lions standing back to back on the abacus are carved with extraordinary precision and accuracy. Of the post-Asokan period one pillar (B.C. 150) stands to the north-east of Besnagar in the Gwalior State, another in front of the cave of Karli (A.D. 70), and a third at Eran in Central Provinces belonging to the 5th Century, A.D. All these are of stone, but there is one of iron also. It is near the Qutb Minar at Delhi, and an inscription on it speaks of its having been erected by a king called Chandra, identified with Chandragupta II. (A.D. 375-413) of the Gupta dynasty. It is wonderful "to find the Hindus at that age forging a bar of iron larger than any that have been forged even in Europe to a very late date, and not frequently even now." Pillars of later style are found all over the country, especially in the Madras Presidency. No less than twenty exist in the South Kanara District. A particularly elegant example faces a Jaina temple at Mudabidri, not far from Managalore.

Topes.—*Stupas*, known as *dagabas* in Ceylon and commonly called Topes in North India, were constructed either for the safe custody of relics hidden in a chamber often near the base or to mark the scene of notable events in Buddhist or Jaina legends. Though we know that the ancient Jainas built *stupas*, no specimen of Jaina *stupas* is now extant. Of those belonging to the Buddhists, the great Tope of Sanchi in Bhopal, is the most intact and entire of its class. It consists of a low circular drum supporting a hemispherical dome of less diameter. Round the drum is an open passage for circumambulation, and the whole is enclosed by a massive stone railing with lofty gates facing the cardinal points. The gates are essentially wooden in character, and are carved, inside and out, with elaborate sculptures. The *stupa* itself probably belonged to the time of Asoka, but as Dr. Marshall's recent explorations have conclusively shown, the railing and the gateways were at least 150 and 200 years later, respectively. Other famous Buddhist *stupas* that have been found are those of Bharhut between Allahabad and Jubbulpore, Amravati in the Madras Presidency, and Piprahwa on the Nepalese frontier. The tope proper at Bharhut has entirely disappeared, having been utilised for building villages, and what remained of the rail has been removed to the Calcutta Museum. The bas-reliefs on this rail which contain short inscriptions and thus enable one to identify the scenes sculptured with the *Jatakas* or Birth Stories of Buddha give it a unique value. The *stupa* at Amravati also no longer exists, and portions of its rail, which is unsurpassed in point of elaboration and artistic merit, are now in the British and Madras Museums. The *stupa* at Piprahwa was opened by Mr. W. C. Peppe in 1898, and a steatite or soap-stone reliquary with an inscription on it was unearthed. The inscription, according to many scholars, speaks of the relics being of Buddha and enshrined by his kinsmen, the Sakyas. And we have thus here one of the *stupas* that were erected over the ashes of Buddha immediately after his demise.

Caves.—Of the rock excavations which are one of the wonders of India, nine-tenths belong to Western India. The most important groups of caves are situated in Bhaja, Bedsa, Karli, Kanheri, Junnar, and Nasik in the Bombay Presidency, Ellora and Ajanta in Nizam's Dominions, Barabar 16 miles north of Gaya, and Udayagiri and Khandagiri 20 miles from Cuttack in Orissa. The caves belong to the three principal sects into which ancient India was divided, *viz*, the Buddhists, Hindus and Jainas. The earliest caves so far discovered are those of Barabar which were excavated by Asoka and his grandson Dasaratha, and dedicated to Ajivikas, a naked sect founded by Makkhali Gosala. This refutes the theory that cave architecture was of Buddhist origin. The next earliest caves are those of Bhaja, Pitalkhora and cave No. 9 at Ajanta and No. 19 at Nasik. They have been assigned to 200 B.C. by Fergusson and Dr. Burgess. But there is good reason to suppose from Dr. Marshall's recent researches and from epigraphic considerations that they are considerably more modern. The Buddhist caves are of two types—the *chaityas* or chapel caves and *viharas* or monasteries for the residence of monks. The first are with vaulted roofs and horse-shoe shaped windows over the entrance and have interiors consisting of a nave and side aisles with a small *stupa* at the inner circular end. They are thus remarkably similar to Christian basilicas. The second class consist of a hall surrounded by a number of cells. In the later *viharas* there was a sanctum in the centre of the back wall containing a large image of Buddha. Hardly a *chaitya* is found without one or more *viharas* adjoining it. Of the Hindu cave tem

ples that at Elephanta near Bombay is perhaps the most frequented It is dedicated to Siva and is not earlier than the 7th century A D But by far the most renowned cave-temple of the Hindus is that known as Kailasa at Ellora It is on the model of a complete structural temple but carved out of solid rock It also is dedicated to Siva and was excavated by the Rashtrakuta king, Krishna I, (A. D 768), who may still be seen in the paintings in the ceilings of the upper porch of the main shrine Of the Jaina caves the earliest are at Khandgiri and Udayagiri, those of the mediæval type, in Indra Sabha at Ellora, and those of the latest period, at Ankai in Nasik The ceilings of many of these caves were once adorned with fresco paintings Perhaps, the best preserved among these are those at Ajanta, which were executed at various periods between 350-650 A D and have elicited high praise as works of art Copies were first made by Major Gill, but most of them perished by fire at the Crystal Palace in 1866 The lost ones were again copied by John Griffiths of the Arts School, Bombay, half of whose work was similarly destroyed by a fire at South Kensington They were last copied by Mrs Herringham in 1911.

Gandhara Monuments —On the north-west frontier of India, anciently known as Gandhara, are found a class of remains, ruined monasteries and buried *stupas*, among which we notice for the first time representations of Buddha and the Buddhist pantheon The free use of Corinthian capitals, friezes of nude Erotes bearing a long garland, winged Atlantes without number, and a host of individual motifs clearly establish the influence of Hellenistic art The mound at Peshawar, locally known as Shah-ji-ke-Dheri, which was explored in 1909, brought to light several interesting sculptures of this school together with a reliquary casket, the most remarkable bronze object of the Gandhara period. The inscription on the casket left no doubt as to the mound being the *stupa* raised over the bones of Buddha by the Indo-Scythian king Kanishka They were presented by Lord Minto's Government to the Buddhists of Burma and are now enshrined at Mandalay To about the same age belong the *stupas* at Manikyala in the Punjab opened by Ranjit Singh's French Generals, Ventura and Court, in 1830 Some of them contained coins of Kanishka

Structural Temples.—Of this class we have one of the earliest examples at Sanchi, and another at Tigowa in the Central Provinces In South India we have two more examples, *viz*, Lad Khan and Durga temples at Aihole in Bijapur. All these belong to the early Gupta period and cannot be later than 500 A D The only common characteristic is flat roofs without spires of any kind In other respects they are entirely different and already here we mark the beginning of the two styles, Indo-Aryan and Dravidian, whose differences become more and more pronounced from the 7th century onwards In the Indo-Aryan style, the most prominent lines tend to the perpendicular, and in the Dravidian to the horizontal The salient feature of the former again is the curvilinear steeple, and of the latter, the pyramidal tower. The most notable examples of the first kind are to be found among the temples of Bhubaneswar in Orissa, Khajarah in Bundelkhand, Osia in Jodhpur, and Dilwara on Mount Abu. One of the best known groups in the Dravidian style is that of the Mamallapuram Raths, o 'seven Pagodas', on the seashore to the south of Madras They are each hewn out of a block of granite, and are rather models of temples than *raths* They are the earliest examples o typical Dravidian architecture, and belong to the 7th century To the same age has to be assigned the temple of Kailasanath at Conjeeveram, and to the following century some of the temples at Aihole and Pattadkal of the Bijapur District, Bombay Presidency, and the monolithic temple of Kailasa at Ellora, referred to above Of the later Dravidian style the great temple at Tanjore and the Srirangam temple of Trichinopoly are the best examples

Intermediate between these two main styles comes the architecture of the Deccan, called Chalukyan by Fergusson In this style the plan becomes polygonal and star-shaped instead of quadrangular, and the high-storeyed spire is converted into a low pyramid in which the horizontal treatment of the Dravidian is combined with the perpendicular of the Indo-Aryan Some fine examples of this type exist, at Dambal, Rattihali, Tilliwalli and Hangal in Dharwar, Bombay Presidency, and at Ittagi and Warangal in Nizam's Dominions But it is in Mysore among the temples at Hallebid, Belur, and Somnathpur that the style is found in its full perfection

Inscriptions —We now come to inscriptions, of which numbers have been brought to light in India They have been engraved on varieties of materials, but principally on stone and copper The earliest of these are found incised in two distinct kinds of alphabet, known as Brahmi and Kharoshthi The Brahmi was read from left to right, and from it have been evolved all the modern vernacular scripts of India The Kharoshthi was written from right to left, and was a modified form of an ancient Aramaic alphabet introduced into the Punjab during the period of the Persian domination in the 5th century, B C It was prevalent up to the 4th century, A D, and was supplanted by the Brahmi The earliest dateable inscriptions are the celebrated edicts of Asoka One group of these has been engraved on rocks, and another on pillars They have been found from Shahbazgarhi 40 miles north-east of Peshawar to Nigliva in the Nepal Tarai, from Girnar in Kathiawar to Dhauli in Orissa, from Kalsi in the Lower Himalayas to Siddapur in Mysore, showing by the way the vast extent of territory held by him The reference in his Rock Edicts to the five contemporary Greek Princes, Antiochus II of Syria, Ptolemy Philadelphus, and so forth is exceedingly interesting, and fixes B C 269 as the date of his coronation. His Rummindei pillar inscription, again, discovered in Nepal Tarai, now settles, beyond all doubt, the birth-place of Buddha which was for long disputed Another noteworthy record is the inscription of the Besnagar pillar. The pillar had been known for a long time, but Dr. Marshall was the first to notice the inscription on it. It records the erection of this column, which was a Garuda pillar, in honour of the god Vasudeva by one Heliodoros, son of Dion, who is described as an envoy of king Antialkidas of Taxila

Heliodorous is herein called a *Bhagavata*, which shows that though a Greek he had become a Hindu and presumably a Vaishnava Another inscription worth noticing and especially in this connection is that of Cave No 10 at Nasik The donor of this cave, Ushavadata, who calls himself a Saka and was thus an Indo-Scythian, is therein spoken of as having granted three hundred thousand kine and sixteen villages to gods and Brahmans and as having annually fed one hundred thousand Brahmans Here is another instance of a foreigner having embraced Hinduism Thus for the political, social, economical and religious history of India at the different periods the inscriptions are invaluable records, and are the only light but for which we are 'forlorn and blind'

Saracenic Architecture—This begins in India with the 13th century after the permanent occupation of the Muhammadans Their first mosques were constructed of the materials of Hindu and Jaina temples, and sometimes with comparatively slight alterations The mosque called *Adhai-din-ka-jhompra* at Ajmer and that near the Qutb Minar are instances of this kind The Muhammadan architecture of India varied at different periods and under the various dynasties, imperial and local The early Pathan architecture of Delhi was massive and at the same time was characterised by elaborate richness of ornamentation. The Qutb Minar and tombs of Altamsh and Ala-ud-din Khilji are typical examples Of the Sharqi style we have three mosques in Jaunpur with several tombs At Mandu in the Dhar State, a third form of Saracenic architecture sprung up, and we have here the Jami Masjid, Hoshang's tomb, Jahaz Mahall and Hindola Mahall as the most notable instances of the secular and ecclesiastical styles of the Malwa Pathans The Muhammadans of Bengal again developed their own style, and Pandua, Malda, and Gaur teem with the ruins of the buildings of this type, the important of which are the Adina Masjid of Sikandar Shah, the Elakhi mosque, Kadam Rasul Masjid, and so forth The Bahmani dynasty of Gulbarga and Bidar were also great builders, and adorned their capitals with important buildings The most striking of these is the great mosque of Gulbarga, which differs from all mosques in India in having the whole central area covered over so that what in others would be an open court is here roofed by sixty-three small domes "Of the various forms which the Saracenic architecture assumed," says Fergusson, "that of Ahmedabad may probably be considered to be the most elegant" It is notable for its carved stone work, and the work of the perforated stone windows in Sidi Sayyid's mosque, the carved niches of the minars of many other mosques, the sculptured *Mihrabs* and domed and panelled roofs is so exquisite that it will rival anything of the sort executed elsewhere at any period No other style is so essentially Hindu In complete contrast with this was the form of architecture employed by the Adil Shahi dynasty of Bijapur. There is here relatively little trace of Hindu forms or details The principal buildings now left at Bijapur are the Jami Masjid, Gagan Mahall, Mihtar Mahall, Ibrahim Rauza and mosque and the Gol Gumbaz Like their predecessors, the Pathans of Delhi, the Moghuls were a great building race Their style first began to evolve itself during the reign of Akbar in a combination of Hindu and Muhammadan features Noteworthy among the emperor's buildings are the tomb of Humayun, and the palaces at Fatehpur Sikri and Agra. Of Jahangir's time his mosque at Lahore and the tomb of Itimad-ud-daula are the most typical structures "The force and originality of the style gave way under Shah Jahan to a delicate elegance and refinement of detail" And it was during his reign that the most splendid o the Moghul tombs, the Taj Mahal at Agra, the tomb of his wife Mumtaz Mahall, was constructed The Moti Masjid in Agra Fort is another surpassingly pure and elegant monument of his time

Archæological Department—As the archæological monuments of India must attract the attention of all intelligent visitors, they would naturally feel desirous to know something of the Archæological Department The work of this Department is primarily two-fold, conservation, and research and exploration. None but spasmodic efforts appear to have been made by Government in these directions till 1870 when they established the Archæological Survey of India and entrusted it to General (afterwards Sir) Alexander Cunningham, who was also the first Director-General of Archæology The next advance was the initiation of the local Surveys in Bombay and Madras three years after The work of these Surveys, however, was restricted to antiquarian research and description of monuments, and the task of conserving old buildings was left to the fitful efforts of the local Governments often without expert guidance or control It was only in 1878 that the Government of India under Lord Lytton awoke to this deplorable condition, and sanctioned a sum of 3¾ lakhs to the repair of monuments in United Provinces, and soon after appointed a conservator, Major Cole, who did useful work for three years Then a reaction set in, and his post and that of the Director-General were abolished The first systematic step towards recognising official responsibility in conservation matters was taken by Lord Curzon's Government who established the seven Archæological Circles that now obtain, placed them on a permanent footing, and united them together under the control of a Director-General, provision being also made for subsidising local Governments out of imperial funds, when necessary. The Ancient Monuments Preservation Act was passed for the protection of historic monuments and relics especially in private possession and also for State control over the excavation of ancient sites and traffic in antiquities Under the direction of Dr J H Marshall, C I E, Director-General of Archæology, a comprehensive and systematic campaign of repair has been prosecuted, and the result of it is manifest in the present altered conditions of old buildings One has only to see for example the Moghul buildings at Agra, Delhi, Lahore and Ajmer, in order to be convinced how the work of careful reconstruction and repair has converted these decayed and desecrated monuments with their modern excrescences into edifices of unrivalled loveliness Another noteworthy feature of this work has been the rescue of many of these buildings from profane and sacrilegious uses. It is well-

known that the superb Pearl Mosque of Jahangir in the Lahore Fort contained a Government treasury, and the Sleeping Hall of Shah Jahan served as a Church for the British troops At Bijapur two mosques have been recovered, one of which was used as Dak Bungalow and the other as Post Office The local Kutcherry has now been expelled from the lovely musjid of Sidi Sayyid at Ahmedabad The Cave temples at Trichinopoly are no longer godowns Nor has research work been in any way neglected under the new order of things A unique feature of it for the first time introduced under the guidance and advice of Dr Marshall has been the scientific excavation of buried sites, such as Sarnath where Buddha preached his first sermon, Kasia or Kusinara where he died, Saheth-Maheth the ancient Srasvasti, Taxila or Takshasila, the seat of the ancient Hindu University, and so forth.

Indian Art.

Within the last few years there has been a most interesting and promising, though somewhat narrowly confined, revival in Indian Art For this, it is to be feared, scant credit is due to British educational policy in India, though the impetus has come mainly from a few British and other European enthusiasts who have reminded cultured India of the value of its ancient artistic heritage and indicated the possibilities of revival Each year between 6,000 and 7,000 students pass the various examinations of the four Schools of Arts maintained by the State, but until very recently those institutions have been in some respects seriously mistaken in ideal and method Viewing their work over half a century it may be said broadly that they have paid very inadequate attention to the traditions of Indian Art, and that in consciously or unconsciously encouraging Western influences, which the Indian student could not thoroughly assimilate, they have not even been particular to choose good examples of Western art Nor have the Schools of Arts been altogether free from the taint of commercialism, indeed, for some years one of them was in effect something between an industrial workshop and an emporium for selling Indian curiosities nicely designed to meet the taste of tourists In justice to the Schools it should be added that they have seldom been able to attract into them members of the hereditary craftsmen class The material they have had to work with has been unpromising Further, even for students who might attain to conspicuous skill, there have been few openings in afterlife. All this is now changing, but the improvement began only some fifteen years ago, and it is mainly due to agencies more or less independent of the schools

A Notable Revival.

The revival which has already produced one notable artist, Mr Abanindranath Tagore, is the direct outcome of the study of the work of the best periods of Indian art In order to comprehend it, it is therefore necessary to glance back over the history of art in India With sculpture we are here not particularly concerned, for there is no perceptible revival in it at present, but it may be said in passing that its golden age in India was the period which produced the sculptures of Ellora and Elephanta, that in its finest examples this art was genuinely Indian, for the Gandhara sculptures, which show strong Greek influence, are inferior enough to make the contention that India owed much to Greece absurd, and that perhaps the finest "Indian" sculpture is to be found in Java, where at Borobudur, in the eighth and ninth centuries A D the descendants of Indian emigrants wrought a long series of mighty masterpieces As regards paintings, we begin with those at Ajanta, produced at intervals between the first century before Christ and perhaps the seventh century of the Christian era A typical example, in which a mother and her child supplicating Buddha are presented not only with much technical skill but with tenderness of feeling, may be found reproduced in Griffith's book on Ajanta and in Mr Havell's "Indian Sculpture and Painting." These paintings are true frescoes, differing in method from the Italian in little but the use of mechanical as well as chemical combination of colours

Practically all the work of this time has perished, and of the secular art of the period before the Moguls there is scant vestige With the Moguls for the first time painting becomes frankly secular Whereas a Hindu philosopher had laid it down that it was iniquitous to represent natural objects when the divinities could be made the artist's subjects, the Islamic dislike of idolatry naturally conduced to the development of secular painting These Mogul artists were Persians or others, more or less under the influence of the Persian school. Akbar patronised them liberally, and Abul Fazl, his historiographer, records the triumphs of Mir Sayyid Ali, a Persian, and Daswanth, a Hindu of humble origin, whose life, darkened by insanity, ended by suicide The work of these and their fellows is notable for minute finish, but it is stiff, and in colour often crude

Moghul Painting.

It was in the reign of Jehangir (1605-1628 that Mogul painting reached its highest level, and it is to that period that the Indian painters

of to-day and to-morrow must look for the best models for all work of theirs which is not inspired by Hindu philosophy or religion. The Emperor was himself a consummate connoisseur, capable, it is recorded, of discriminating unerringly between the work of the artists of the same school Sherif Khan, Mansur and Abdul Hassan, the chief artists of his time, were by him highly honoured, the last, in fact, owed his training as well as distinctions and rewards to the Emperor. These and several other painters of the period excelled in portrait-miniatures, of which happily, in consequence of the practice of rolling up paintings like MSS and only occasionally exhibiting them to view, we have many examples in good condition These artists are markedly superior to their predecessors' influency and grace of line and show that they benefited by the closer observation of natural facts inculcated from about 1600 onwards Many of the outline drawings, done with lamp black over a preliminary sketch faintly carried out with a fine brush dipped in Indian red, are of exquisite quality It is noteworthy that, though in some cases landscape is well rendered as a mere background, there are no examples in Indian painting of the classic age of pure landscape Here the Indian painter of to-day has to develop an ideal with hardly any suggestion from predecessors The puritanical and bigoted Aurangzeb was naturally hostile to art, and by the middle of the eighteenth century all the glory had departed from Indian painting, though a measure of skill in traditional methods long survived and for a time was not unappreciated by Englishmen in India By the early years of the nineteenth century, however, Indian painting had virtually ceased to exist At length a painter arose, to be much admired by the worst judges among those Indians whose Western education had made them indifferent to indigenous art without giving them any real interest in European art This man, Ravi Varma, depicted Indian legends as if he were painting figures in amateur tableaux, of Indian art traditions there is not a trace in his work, which is theatrical, sentimental and of poor quality technically There have been others who have more successfully assimilated something of Western ideas of art, but their work is without interest, except in so far as it exhibits a deplorable submissiveness to second-rate Western teaching The movement of to-day which arouses high expectations is that in which Mr. Abanindranath Tagore is the leader This artist, member of a Bengali family, noted for culture and cousin of the poet Rabindranath Tagore, has made a close and most profitable study of the work of the Mogul and other painters of India, but he has seen in the examples of their work not something to be slavishly copied but certain principles which he applies freshly, in his own way He has imagination, a sense of composition, a delicate sense of colour and much, though as yet perhaps not quite secure, command of the technical resources of his art Above all, he is sincere, nowhere is there in his work any deliberate exploitation of the fact that he is an Eastern artist who must at all costs exhibit Nationalism in his painting One of his pictures representing the spirits of the air, is justly famous, and his admirable illustrations to Omar Khayyam, issued by the *Studio*, have found appreciation in England as well as in India Among those more or less associated with this painter, who as Vice-Principal of the Calcutta School of Art, is exercising a strong influence within narrow limits, may be mentioned Mr Surendranath Ganguly and Mr Nanda Lall Bose, the latter of whom has a vein of true poetic feeling and both of whom work in intelligent but not abject obedience of the old tradition of Indian painting If there is no fourth name at present to put besides those mentioned, there is every reason to believe there soon will be several.

Modern Interest.

At the present time there is a marked development of interest among educated Indians in arts indigenous to their country, but it must be recognised that there is little real knowledge and taste in the public to which the Indian artist of to-day has to address himself Work is esteemed rather as proof of Indian capacity than for its strict artistic merits Among those Indians and Europeans who have devoted special attention to the matter, there is an unfortunate tendency to exaggerate the value of old Indian art and thus to encourage the belief that the Indian artist of to-day can find no higher task than the repetition of old and narrow conventions It is perfectly true that we must accept the convention of any art without *a priori* objections, but it by no means follows that one convention is as good as another The question arises what limits a convention sets on those working within it, and it is plain that the conventions of Indian art have compelled the exclusion of a vast amount of the Western painter's best material. On the other hand, it should be recognised that his traditions have made it almost impossible for the Indian artist to fall into the common Western error of taking a mere representation of fact to be the aim of art It is most desirable that the Indian artist of to-day should revive the old traditions, that he should be genuinely Indian, but it is not desirable that he should needlessly cramp himself because certain enthusiasts assure him that the defects and limitations of classic Indian art are positive merits The Indian artist has a vast treasure of religious and philosophical matter to draw upon for such subjects as are most congenial to the Hindu genius, and he has the whole range of Indian life to observe and create over again There is no occasion for an unwise asceticism on the ground that ancient conventions ruled out most of the material.

Manners and Customs.

Next to the complexion of the people, which varies from fair to black, the tourist's attention in India is drawn by their dress and personal decoration In its simplest form a Hindu's dress consists of a piece of cloth round the loins Many an ascetic, who regards dress as a luxury, wears nothing more, and he would dispense with even so much if the police allowed him to The Mahomedan always covers his legs, generally with trousers, sometimes with a piece of cloth tied round the waist and reaching to the ankles Hill men and women, who at one time wore a few leaves before and behind and were totally innocent of clothing, do not appear to-day within the precincts of civilisation and will not meet the tourist's eye Children, either absolutely nude or with a piece of metal hanging from the waist in front, may be seen in the streets in the most advanced cities, and in the homes of the rich The child Krishna, with all the jewels on his person, is nude in his pictures and images

Dress.—The next stage in the evolution of the Hindu dress brings the loincloth nearly down to the feet On the Malabar coast, as in Burma, the ends are left loose in front In the greater part of India, they are tucked up behind—a fashion which is supposed to befit the warrior, or one end is gathered up in folds before and the other tucked up behind The simplest dress for the trunk is a scarf thrown over the left shoulder, or round both the shoulders like a Roman toga Under this garment is often worn a coat or a shirt When an Indian appears in his full indigenous dress, he wears a long robe, reaching at least down to the calves the sleeves may be wide, or long and sometimes puckered from the wrist to the elbow Before Europeans introduced buttons, a coat was fastened by ribbons, and the fashion is not obsolete The Mahomedan prefers to button his coat to the left, the Hindu to the right A shawl is tied round the waist over the long coat, and serves as a belt, in which one may carry money or a weapon, if allowed The greatest variety is shown in the head-dress More than seventy shapes of caps, hats, and turbans, may be seen in the city of Bombay In the Punjab and the United Provinces, in Bengal, in Burma and in Madras other varieties prevail Cones and cylinders, domes and truncated pyramids, high and low, with sides at different angles folded brims, projecting brims long strips of cloth wound round the head or the cap in all possible ways, ingenuity culminating perhaps in the "parrot's beak" of the Maratha turban—all these fashions have been evolved by different communities and in different places, so that a trained eye can tell from the head-covering whether the wearer is a Hindu, Mahomedan or Parsi, and whether he hails from Poona or Dharwar, Ahmedabad or Bhavnagar

Fashion Variations.—Fashions often vary with climate and occupation The Bombay fisherman may wear a short coat and a cap, and may carry a watch in his pocket yet, as he must work for long hours in water, he would not cover his legs, but suspend only a coloured kerchief from his waist in front The Pathan of the cold north-west affects loose, baggy trousers, a tall head-dress befitting his stature and covers his ears with its folds as if to keep off cold The poorer people in Bengal and Madras do not cover their heads, except when they work in the sun or must appear respectable Many well-to-do Indians wear European dress at the present day, or a compromise between the Indian and European costumes, notably the Indian Christians and Parsis Most Parsis however have retained their own head-dress, and many have not borrowed the European collar and cuffs The majority of the people do not use shoes those who can afford them wear sandals, slippers and shoes, and a few cover their feet with stockings and boots after the European fashion in public

Women's Costumes—The usual dress of a woman consists of a long piece of cloth tied round the waist, with folds in front, and one end brought over the shoulder or the head The folds are sometimes drawn in and tucked up behind In the greater part of India women wear a bodice on the Malabar coast many do not, but merely throw a piece of cloth over the breast In some communities petticoats, or drawers, or both are worn Many Mussalman ladies wear gowns and scarfs over them. The vast majority of Mahomedan women are *gosha*, and their dress and persons are hidden by a veil when they appear in public a few converts from Hinduism have not borrowed the custom In Northern India Hindu women have generally adopted the Mussalman practice of seclusion In the Dekhan and in Southern India they have not

As a rule the hair is daily oiled, combed, parted in the middle of the head, plaited and rolled into a chignon, by most women Among high caste Hindu widows sometimes shave their heads in imitation of certain ascetics, or monks and nuns Hindu men do not, as a rule, completely shave their heads, Mahomedans in most cases do The former generally remove the hair from a part of the head in front, over the temples, and near the neck, and grow it in the centre, the quantity grown depending upon the fancy of the individual Nowadays many keep the hair cropped in the European fashion, which is also followed by Parsis and Indian Christians Most Mussalmans grow beards, most Hindus do not, except in Bengal and elsewhere, where the Mahomedan influence was paramount in the past Parsis and Christians follow their individual inclinations Hindu ascetics, known as Sadhus or Bairagis as distinguished from Sanyasis, do not clip their hair, and generally coil the uncombed hair of the head into a crest, in imitation of the god Shiva

Hindu women wear more ornaments than others of the corresponding grade in society. Ornaments bedeck the head, the ears, the nose, the neck, the arms, wrists, fingers, the waist—until motherhood is attained, and by some even later—and the toes Children wear anklets Each community affects its peculiar ornaments, though imitation is not uncommon. Serpents with several heads, and flowers, like the lotus, the rose, and the champaka, are among the most popular objects of representation in gold or silver

Caste Marks.—Caste marks constitute a mode of personal decoration peculiar to Hindus, especially of the higher castes The simplest mark is a round spot on the forehead It represents prosperity or joy, and is omitted in mourning and on fast-days It may be red, yellowish as when it is made with ground sandalwood paste The worshippers of Vishnu draw a vertical line across the spot, and as Lakshmi is the goddess of prosperity, it is said to represent her A more elaborate mark on the forehead has the shape of U or V, generally with the central line, sometimes without it, and represents Vishnu's foot The worshippers of Shiva adopt horizontal lines, made with sandalwood paste or ashes Some Vaishnavas stamp their temples, near the corners of the eyes, with figures of Vishnu's conch and discother parts of the body are also similarly marked The material used is a kind of yellowish clay To smear the arms and the chest with sandalwood paste is a favourite kind of toilet, especially in the hot season Beads of tulsi or sacred Basil, and berries of Rudraksha (*Elæocarpus ganitrus*, strung together are worn round their necks by Vaishnavas and Shaivas respectively The Lingayats, a Shaiva sect, suspend from their necks a metallic casket containing the Linga or phallus of their god Sannyasis, ascetics, besides wearing Rudraksha rosaries round their necks and matted hair, smear their bodies with ashes Religious mendicants suspend from their necks figures of the gods in whose name they beg Strings of cowries may also be seen round their necks Muslim dervishes sometimes carry peacocks' feathers

Hindu women mark their foreheads with a red spot or horizontal line High caste widows are forbidden to exhibit this sign of happiness, as also to deck themselves with flowers or ornaments Flowers are worn in the chignon Hindu women smear their faces, arms, and feet sometimes with a paste of turmeric, so that they may shine like gold The choice of the same colour for different purposes cannot always be explained in the same way The red liquid with which the evil eye is averted may be a substitute for the blood of the animal slaughtered for the purpose in former times In many other cases this colour has no such associations The Muslim dervish affects green, the Sikh Akali is fond of blue, the Sanyasi adopts orange for his robe, and no reason can be assigned with any degree of certainty

Shiva.—India is a land of temples, mosques and shrines, and the Hindu finds at every turn some supernatural power to be appeased Shiva has the largest number of worshippers He has three eyes, one in his forehead, a moon's crescent in his matted hair, and at the top of the coil a woman's face representing the river Ganges His abode is the Mount Kailas in the Himalayas, from which the river takes its source. Round his neck and about his ears and limbs are serpents, and he also wears a necklace of skulls In his hands are several weapons, especially a trident, a bow, and a thunderbolt, and also a drum which he sounds while dancing for he is very fond of this exercise. He sits on a tiger's skin, and his vehicle is a white bull. His wife Parvati and his son Ganesha sit on his thighs An esoteric meaning is attached to every part of his physical personality The three eyes denote an insight into the past, present and future the moon, the serpents, and the skulls denote months, years and cycles, for Shiva is a personification of Time, the great destroyer He is also worshipped as a Linga or phallus which represents creative energy

Ganpat—Ganesh or Ganpati, the controller of all powers of evil subject to Shiva, is worshipped by all sects throughout India Every undertaking is begun with a prayer to him He has the head of an elephant, a large abdomen, serpents about his waist and wrists, several weapons in his hands, and a piece of his tusk in one hand He is said to have broken it off when he wanted to attack the moon for ridiculing him The different parts of his body are also esoterically explained His vehicle is a rat

Parvati—Parvati, the female energy of Shiva, is worshipped under various names and forms She is at the head of all female supernatural powers, many of whom are her own manifestations Some are benign and beautiful, others terrible and ugly Kali, the tutelary deity of Kalighat or Calcutta, is one of her fierce manifestations In this form she is black a tongue smeared with blood projects from her gaping mouth besides her weapons, she carries corpses in her hands, and round her neck are skulls Bombay also takes its name from a goddess, Mumbadevi Gouri, to whom offerings are made in Indian homes at an annual festival, is benign On the other hand the epidemic diseases like the plague and smallpox are caused by certain goddesses or 'mothers'

Vishnu, the second member of the Hindu trinity, is the most popular deity next to Shiva. He is worshipped through his several incarnations as well as his original personality His home is the ocean of milk, where he reclines on the coils of a huge, many-headed serpent At his feet sits Lakshmi, shampooing his legs From his navel issues a lotus, on which is seated Brahma, the third member of the trinity In his hands are the conch, which he blows on the battlefield, and the disc, with which the heads of his enemies are severed Round his neck are garlands of leaves and flowers, and on his breast are shining jewels As Shiva represents destruction, Vishnu represents protection, and his son is the god of love To carry on the work of protection, he incarnates himself from time to time, and more temples are dedicated nowadays to his most popular incarnations, Rama and Krishna, than to his original personality Rama is a human figure, with a bow in one of his hands He is always accompanied by his wife Sita, often by his brother Lakshmana, and at his feet, or standing before him with joined hands, is Hanuman, the monkey chieftain, who assisted him in his expedition against Ravana, the abductor of his wife Krishna is also a human figure, generally represented as playing on a flute, with which he charmed the damsels of his city, esoterically explained to mean his devotees

Brahma is seldom worshipped: only a couple of temples dedicated to him have yet been discovered in all India.

Minor Deities —The minor gods and goddesses and the deified heroes and heroines who fill the Hindu pantheon, and to whom shrines are erected and worship is offered, constitute a legion Many of them enjoy a local reputation, are unknown to sacred literature, and are worshipped chiefly by the lower classes Some of them, though not mentioned in ancient literature, are celebrated in the works of modern saints

The **Jains** in their temples, adore the sacred personages who founded and developed their sect, and venerate some of the deities common to Hinduism But their view of Divinity is different from the Hindu conception, and in the opinion of Hindu theologians they are atheists So also the **Buddhists** of Burma pay almost the same veneration to Prince Siddhartha as if he was a god, and indeed elevate him above the Hindu gods, but from the Hindu standpoint they are also atheists

Images —Besides invisible powers and deified persons, the Hindus venerate certain animals, trees and inanimate objects This veneration must have originated in gratitude, fear, wonder, and belief in spirits as the cause of all good or harm Some of the animals are vehicles of certain gods and goddesses—the eagle of Vishnu the swan of Brahma the peacock of Saraswati Hanuman, the monkey, of Rama one serpent upholds the earth, another makes Vishnu's bed elephants support the ends of the universe, besides one such animal being Indra's vehicle the goddess Durga or Kali rides on a tiger one of Vishnu's incarnations was partly man and partly lion The cow is a useful animal to the Brahman vegetarian her milk is indispensable, and he treats her as his mother So did the Rishi of old, who often subsisted on milk and fruits and roots To the agriculturist cattle are indispensable The snake excites fear Stones, on which the image of a serpent is carved, may be seen under many trees by the roadside The principal trees and plants worshipped are the Sacred Fig or Pipal, the Banyan, the Sacred Basil, the Bilva or wood apple, the Asoka, and the Acacia They are in one way or another associated with some deity The sun, the moon, and certain planets are among the heavenly bodies venerated The ocean and certain great rivers are held sacred Certain mountains, perhaps because they are the abodes of gods and Rishis, are holy Pebbles from the Gandaki and the Narmada, which have curious lines upon them, are worshipped in many households and temples

Worship —Without going into a temple, one can get a fair idea of image worship by seeing how a serpent-stone is treated under a tree It is washed, smeared with sandal, decorated with flowers food in a vessel is placed before it, lamps are waved, and the worshipper goes round it, and bows down his head, or prostrates himself before the image In a temple larger bells are used than the small ones that are brought to such a place jewels are placed on the idol and the offerings are on a larger scale Idols are carried in public procession in palanquins or cars The lower classes sacrifice animals before their gods and goddesses

Domestic Life —Of the daily domestic life of the people a tourist cannot see much He may see a marriage or funeral procession In the former he may notice how a bridegroom or bride is decorated the latter may shock him, for a Hindu dead body is generally carried on a few pieces of bamboo lashed together a thin cloth is thrown over it and the body is tied to the frame The Mahomedan bier is more decent, and resembles the Christian coffin Some Hindus, however, carry the dead to the burial ground in a palanquin with great pomp The higher castes cremate the dead others bury them Burial is also the custom of the Muslims, and the Parsis expose the dead in Towers of Silence

Indian Names.

The personal name of most Hindus denotes a material object, colour, or quality, an animal, a relationship, or a deity The uneducated man, who cannot correctly pronounce long Sanskrit words, is content to call his child, father, brother, uncle, or mother, or sister, as the case may be This practice survives among the higher classes as well Appa Saheb, Anna Rao, Babaji, Bapu Lal, Bhai Shankar, Tatacharya, Jijibhai, are names of this description, with honorific titles added It is possible that in early society the belief in the re-birth of departed kinsmen lent popularity to this practice. Nothing could be more natural than to call a man white, black, or red gold or silver gem, diamond, ruby, pearl, or merely a stone small or tall, weak or strong a lion, a snake, a parrot, or a dog and to name a woman after a flower or a creeper Thus, to take a few names from the epics, Pandu means white, and so does Arjuna Krishna black. Bhima terrible Nakula a mongoose Shunaka a dog Shuka a parrot Shringa a horn Among the names prevalent at the present day Hira is a diamond Ratna or Ratan a jewel Sonu or Chinna gold Velli or Belli, in the Dravidian languages, means white metal or silver Men are often called after the days of the week on which they were born, and hence they bear the names of the seven heavenly bodies concerned When they begin to assume the names of the Hindu deities, they practically enter upon a new stage of civilisation. It is doubtful whether the Animists ever venture to assume the names of the dreaded spirits worshipped by them To pronounce the name of a devil is to invite him to do harm If the spirits sometimes bear the names of human beings, the reason seems to be that they were originally human.

High-caste practices—The high caste Hindu on the other hand, believes that the more often the name of a deity is on his lips, the more merit he earns Therefore he deliberately names his children after his gods and goddesses, so that he may have the opportunity of pronouncing the holy names as frequently as possible These are also sonorous and picturesque Shiva is happy Vishnu is a pervader Govinda is the cowherd Krishna Keshava has fine hair Rama is a delighter Lakshmana is lucky Narayana produced the first living being on the primeval waters Ganesha is the Lord of Shiva's hosts Dinakara is the luminary that makes the day Subrahmanya is a brother of Ganesha Sita is a furrow Savitri a ray of light Tara a star Radha prosperity Rukmini is she of golden ornaments Bhama of the glowing heart Shiva and Vishnu has each got at least a thousand names, and they may be freely drawn upon and paraphrased in naming one's children, and the whole Hindu pantheon is as crowded as it is large When a mother loses several children, she begins to suspect that some evil spirit has conspired against her and in order to make her off-spring unattractive to the powers of darkness, she gives them ugly names, such as Keru, rubbish, or Ukurda, dunghill, or Martoba, the mortal Women are named after rivers, as Sarasvati, Ganga, Bhagirathi, Godavari, or Kaveri, just as men are sometimes called after mountains Manu counsels young men not to choose a wife with such a name, perhaps because a river is an emblem of deviousness and inconstancy, as a hill is an emblem of stability But the names of rivers have not been discarded. The Burmans have a curious custom if a child is born on a Monday, its name must begin with a guttural, on Tuesday with a palatal, on Thursday with a labial, on Saturday with a dental

Family names—When a person rises in importance, he adds to his personal name a family or caste name It was once the rule that the title Sharma might be added to a Brahman's name, Varma to a Kshatriya's, Gupta to a Vaishyas, and Dasa to a Shudra's This rule is fairly well observed in the case of the first two titles, but the meaning of the other two has changed Dasa means a slave or servant, and the proudest Brahman cannot disdain to call himself the servant of some god Thus, although Kalidas, the famous poet, was a Shudra, Ramadas, the famous guru of Shivaji, was a Brahmin The Vaishnavas have made this fashion of calling oneself a servant of some god exceedingly popular, and in Western India high caste Hindus of this sect very commonly add Das to their names The Brahmans of Southern India add Aiyer or Aiyangar to their names Shastri, Acharya, Bhat, Bhattacharya, Upadhyaya, Mukhopadhyaya, changed in Bengal into Mukerji, are among the titles indicative of the Brahmanical profession of studying and teaching the sacred books Among warlike classes, like the Rajputs and Sikhs, the title Singh (lion) has become more popular than the ancient Varma. The Sindhi Mal, as in Gidumal, means brave and has the same force. Raja, changed into Raya, Rao and Rai was a political title, and is not confined to any caste The Bengali family names, like Bose and Ghose, Dutt and Mitra, Sen and Guha, enable one to identify the caste of their bearers, because the caste of a family or clan cannot be changed. Shet, chief of a guild or a town, becomes Chetty, a Vaishya title, in Southern India Mudaliyar and Nayudu, meaning leaders, are titles which were assumed by castes of political importance under native rulers Nayar and Menon are the titles of important castes in Malabar Ram, Lal, Nand, Chand, are among the additions made to personal names in Northern India Suffixes like Ji, as in Ramji or Jamshedji, the Kanarese Appa, the Telugu Garu, the feminine Bai or Devi, are honorific Prefixes like Babu, Baba, Lala, Sodhi, Pandit, Raja, and the Burmese Maung are also honorific

Professional names.—Family names sometimes denote a profession in some cases they might have been conferred by the old rulers Mehta, Kulkarni, Deshpande, Chitnavis, Mahalnavis are the names of offices held in former times One family name may mean a flour seller, another a cane-seller, and a third a liquor-seller To insert the father's name between one's personal and the family name is a common practice in Western India It is rare elsewhere When a family comes from a certain place, the suffix 'kar' or 'wallah' is added to the name of the place and it makes a family surname in Western India Thus we may have Chiplunkars and Surtwallahs, or without these affixes we may have Bhavnagris, Malabaris and Bilimorias, as among Parsis Thus Vasudev Pandurang Chiplunkar would be a Hindu, whose personal name is Vasudev, father's name Pandurang, and family name derived from the village of Chiplun, is Chiplunkar In Southern India the village name precedes the personal name The evolution of Musalman names follows the same lines as Hindu names But Muslims have no god or goddesses, and their names are derived from their religious and secular history These names and titles are often as long and picturesque as Hindu appellations The agnomens Baksh, Din, Ghulam, Khwaje, Fakir, Kazi, Munshi, Sheikh, Syed, Begum, Bibi and others, as well as honorific additions like Khan, have meanings which throw light on Muslim customs and institutions The Parsis also have no gods and goddesses, and their personal names are generally borrowed from their sacred and secular history. Their surnames frequently indicate a profession or a place, as in the case of Hindus in Western India Bathwallah, Readymoney, Contractor, Saklatwallah, Adenwallah and others like them are tell-tale names

Conversions.—As a rule, a child is named soon after it is born, and in the case of males the appellation is not changed The higher Hindu castes have a separate ceremony called the name-giving ceremony performed on the twelfth day after birth When a girl is married in these castes, the husband's family give her a new personal name When a boy is invested with the sacred thread and is made a twice-born, his name is not changed, but when a man joins an order of ascetics, his lay name is dropped, and he assumes a new name So also when a Burman joins an order of monks or nuns, the lay name is superseded by a Pali name Christian converts change their original name when they are baptised

Big Game Hunting.

From the earliest times India has been famous as a land affording ample pastime for the mighty hunter before the Lord Did not Baber, first of the great Mughals, pursue the rhinoceros on the banks of the Indus? And since then the Nimrods of all the ages have found in the East most happy hunting grounds No country, not even Africa, has afforded a greater variety of desirable game The great oxen of India, the gaur, the buffalo, and the yak found upon its northern confines, are unequalled by the bovine animals of any land The big horn and the white goat of the Rocky Mountains are beyond all measure inferior to the fine sheep and goats that inhabit the precipitous fastness of the Himalayas and the Tibetan plains beyond, which though not within the limits of our Eastern Empire, are accessible to sportsmen from India The tiger has been adjudged by experienced observers to be the greatest and most imposing of felines, to whom even the maned lion must give place, both as regards beauty, size, ferocity and offensive armature, nor is the lion unknown in India, though sadly diminished in numbers and in range of habitat The Indian elephant is perhaps inferior in size, though superior in point of utility to his African congener, and India possesses four species of bears which find no counterpart in the Dark Continent Africa again, although abounding in a vast variety of antelopes, can show no stag equal to the bara singh, the sambar, and the spotted deer, whilst among all its tribe of antelopes none surpasses the black buck in grace and beauty

Although the quantity of big game in India has decreased considerably during recent years, there is still no lack of sport for those who have the will to travel far in search of it Under British rule there has been a great increase in population, demanding an increased area of cultivation, while the network of railways that has been spread all over the country has to some extent cut up the haunts of game But in some respects these factors have been advantageous to the hunter Game laws have been instituted, large areas of forest are reserved, and game sanctuaries formed in some localities. Railways have brought within reach distant hunting grounds that could formerly be visited only with difficulty The sportsman from Europe, unacquainted with the language and country, will find great difficulty in carrying out expeditions in pursuit of big game unless he is provided with suitable introductions. But with the aid of friends among the officials it is still possible for the keen hunter to obtain good sport, although for the best of it he must remain in India during at least a portion of the hot season of the year. It is then that the tigers, which have been wandering over extensive areas during the cold weather, may be more easily brought to bag, for the jungle has thinned out, and the great beasts, impatient of thirst, have to frequent the vicinity of water which, away from the rivers, is now confined to scanty pools. For hunting the gaur or bison, perhaps the early part of the rainy season is best, when the leaves that in dry weather crackle so loudly under foot have been softened by the fall of the rain. But they also, and buffaloes, bears and leopards may well be sought for in the hot weather, when the forest, stripped of its leaves, affords them little concealment The stags, which cast their antlers annually, must of course be hunted at the proper season, the spotted deer in the hot weather and other species during the cold season of the year The great horned game of the Himalayas, the ibex, markhor, and the fine sheep to be found in the mountain tastnesses and in the trans-Himalayan regions must be looked for when the snow admits of the sportsmen reaching their habitat Kashmir may well be revisited in March, but the passes that lead to the roof of the world, where *ovis ammon* and *ovis poli* are to be found will probably not be open before June or July

Hunting grounds are to be found throughout the length and breadth of India Mysore and Burma produce the finest bison, but these splendid animals, though strictly preserved, are to be found also in the forests of the Satpura Hills, that paradise of big game The sportsman with a year at his disposal, provided he has suitable introductions and is prepared to work hard, should be able to secure specimens of most of the game animals of India He might well begin in January in the Central Provinces, where he would find black buck, gazelle, Nilgai, and a variety of small game in the open country, and where there should be no difficulty in securing some panthers and sloth bears, sambar, spotted deer and swamp deer In the hills also he will find barking deer and four horned antelope, while tigers are not uncommon, and in remoter parts buffalo may be met with About the middle of March the sportsman could go on to Kashmir, and find there brown and black bears, ibex, markhor and shapoo or oorial, before crossing into Tibet He might be fortunate enough to come across a stag that had not yet cast its antlers, and failing this, he could get his stag on the return journey towards the end of October, or in November. If he has more time at his disposal, Burma might well be visited, for there are found several species not to be obtained in India, such as the tsine, the browantlered deer, and the Malayan bear, and elephants and rhinoceros might perhaps be met with, but this would probably entail an extension of the tour considerably in excess of the twelve months

It is not advisable to lay down the law as to rifles and equipment, but the sportsmen may be recommended not to use small-bore rifles for dangerous game A 450 cordite rifle should suffice for big game, and a smaller bore for antelope and gazelle, while a 12-bore gun will be found most useful for feathered game. All equipment in the way of tents and furniture is best purchased in India, and a list of the necessary articles could be obtained from any official who is acquainted with camp life.

In Southern India all hunting is generally done on foot, but the sportsman would require a couple of ponies. In the Sub-Himalayan Teral elephants are necessary, as the long grass renders hunting on foot practically impossible.

Routes between India and Europe.*

The Indian port for the direct journey to and from Europe is Bombay There are six lines of steamers by which the journey to and from the West *via* Bombay can be performed, either by sea all the way or- and in some cases only—by sea part of the way and by rail across Europe They are the P & O, the Anchor Line, the City and Hall Line, the Austrian Lloyd, the Messageries Maritimes and the Rubattino The Natal line steamers are available for Western passages only, the steamers sailing round the Cape on their Eastward voyages. There are other services between Calcutta and the West, by steamers sailing round Ceylon, and several lines connect Colombo with Europe Of the latter the Orient, the North German and the Bibby Lines are the chief, besides the P & O The Bibby service extends to Rangoon The new railway between India and Ceylon greatly increases the importance by the Colombo route for Southern India The shortest time between London and Bombay is 14 days

The P. & O.

The P & O steamers run weekly from Bombay and London, leaving Bombay on Saturday and London on Friday Alternate sailings each way are direct In other weeks a special steamer runs from Bombay to Aden where it connects with the Australian Homeward Mail and similarly, for the outward voyage, passengers and baggage and mails are transferred on alternate weeks to a steamer at Aden which proceeds thence direct to Bombay The P & O carry the postal mails. The steamers call at Aden, Port Said, Marseilles, and Gibraltar Passengers are not allowed to land at Aden but there is ordinarily time for them to spend some hours ashore at Port Said and Marseilles and a shorter time at Gibraltar Passengers may travel westward from Port Said by any of the following methods —

By fast special mail steamer connecting with the liner at Port Said and running to Brindisi, thence by special train to Calais, thence by ordinary channel steamer to Dover and so to London,

By the liner to Marseilles, thence by special P & O express to Calais and so by Dover to London, or

By Liner to Plymouth or Tilbury Dock.

The arrangements for the eastward voyage are similar, in reverse order, with the exception that no call is made at Plymouth

The following are the single ticket rates from Bombay to Europe —

	First Saloon		Second Saloon	
	A	B	A	B
	Rs	Rs	Rs	Rs
London, with option of landing at Plymouth	858	759	627 or	528
London *via* Marseilles, including rail	894	795	664 or	565
London *via* Marseilles, including rail and sleeping car	936	837		
London *via* Brindisi including rail and sleeping car	936	837	..	..
Gibraltar or Marseilles	792	693	594 or	495
Brindisi	792	693	..	..
Aden	313-8	.	231 or	214-8
Suez or Port Said	726		561 or	462

Free tickets are issued to Karachi passengers by B I S N Co 's steamers between Bombay and Karachi for either eastward or westward voyage The transfer from the B I steamer to the P & O steamer, or *vice-versa*, is made in Bombay harbour by launch, without goingashore.

The following are the return ticket rates between Bombay and Europe, the tickets being available for 24 months —

	1st Class	2nd Class.	
	Rs.	A. Rs.	B. Rs
To London by sea			
Returning—			
From London (by Sea)	1,287-0	940-8	792-0
From London (*via* Marseilles, including rail) . .	1,339-8	985-12	837-4
From Marseilles	1,237-8	915-12	767-4
To London (*via* Marseilles, including rail)			

* The war has partially disarranged the sailing programmes and stopped the European Continental train services; the Austrian-Lloyd steamers have ceased running.

——	1st Class	2nd Class.	
		A	B
Returning—	Rs	Rs	Rs.
From London (*via* Marseilles, including rail)	1,392–0	1,031–0	882–8
From London (by sea)	1,339–8	985–12	837–4
From Marseilles	1,290–0	961–0	812–8
To Marseilles			
Returning—			
From Marseilles	1,188–0	891–0	742–8
From London (*via* Marseilles, including rail)	1,290–0	961–0	812–8
From London (by Sea)	1,237–8	915–12	767–4
To Brindisi			
Returning—			
From Brindisi or Marseilles	1,188–0	..	..
From London (by Sea)	1,237–8		
From London (*via* Marseilles, including rail)	1,290–0		
To London *via* Brindisi			
Returning the same way or *via* Marseilles including rail and sleeping car by the Special Trains in both directions	1,476–0	..	....
To London *via* Marseilles			
Returning the same way or *via* Brindisi including rail and sleeping car, by the Special Trains, in both directions	1,476–0	.	.. .

The first saloon inside cabins on the Main deck of the Mail Steamers are let at the reduced rate of Rs 1,039–8–0 from Bombay to Marseilles and back, or Rs 1,138–8–0 from Bombay to London and back

First Saloon passengers are allowed 3 cwts of personal Baggage free of Freight, Second Saloon passengers and servants 1½ cwt each, Children over three and under 12 years of age half these weights, Ayahs and other native servants 1½ cwt each free

Anchor Line.

The Anchor Line steamers run between Bombay and Liverpool and there are ordinarily two steamers each way per month Westward-bound steamers call at Marseilles, so that passengers can leave the ship there if they wish Other calls are at Port Said and Gibraltar Eastward bound steamers do not call at Marseilles Free tickets by B I S N Co 's steamers are issued to Karachi passengers to and from Bombay The passage rates westward from Bombay are as follows —

Fares from Bombay (all one class)	Single Tickets	Return Tickets	Single Tickets for Native Servants.
	Rs	Rs	Rs
To Suez	413	627	.
To Port Said	446	677	
To Marseilles	578		220
To Marseilles and back from Liverpool		924	.
To London overland from Marseilles	653		.
To London overland from Marseilles and back from Liverpool		999	.
To Liverpool	605	957	264

Passengers are allowed to take, free of charge, 40 cubic feet of baggage, excess being charged at the rate of a shilling per cubic foot Dogs are carried and the charge for them is Rs 50 per animal—arrangements must be made with the ship's butcher as to feeding

The voyage Bombay to Liverpool occupies approximately 30 days. Bombay Agents W. & A Graham & Co.

Ellerman's "City" & "Hall" Lines.

The City and Hall Liners sail westward for the most part from Karachi, *via* Bombay. Some ships go direct from one port and others direct from the other They sail to Liverpool and passengers can be booked *via* Marseilles and Overland either Eastward or Westward Most of the steamers have both first and second class accommodation. Others have one class only. Passengers booking their berths in Karachi for steamers sailing from Bombay are

given free tickets from Karachi to Bombay by a British India S N Co 's steamer They are transferred immediately on arrival in Bombay to the Ellerman liner if she is sailing the same day, otherwise they are landed and at the same time informed as to when the steamer for Europe sails

Adult 1st class passengers are allowed 3 cwt of luggage free, subject to a limit in measurement of 40 feet Children and European servants travelling first class are allowed half that quantity Children and native servants travelling 2nd class are allowed 60 lbs Bicycles in crates or cases are specially charged for

Single fares from Karachi or Bombay —

—	First Saloon.	Second Saloon	Native Servants.
	Rs	Rs	Rs
To Marseilles or Genoa (Return ex-Marseilles or Naples)	578	429	253
To London *via* Marseilles or Genoa including rail (returning ex-Liverpool or Naples at Steamer's option)	653	489	..
To Liverpool by sea	605	462	264
To London *via* Marseilles ex-Genoa including rail return *via* Marseilles	653	489	....

The return fare rates are as follows, the tickets holding good for two years —

—	First Saloon	Second Saloon	Native Servants
	Rs	Rs	Rs.
To Marseilles or Genoa (Return ex-Marseilles or Naples)	891	649	380
To London *via* Marseilles or Genoa including rail (returning ex-Liverpool or Naples at Steamer's option)	999	737	...
To Liverpool by sea	957	704	396
To London *via* Marseilles ex-Genoa including rail return *via* Marseilles	1,091	809	....

Bombay Agents Killick, Nixon & Co

Austrian Lloyd.

Austrian Lloyd steamers sail regularly between Bombay and Trieste, a steamer leaving each place on the 1st and 16th of every month During the homeward and outward seasons the journey between Bombay and Trieste and *vice versa* is performed in 14 days Ships call at Venice during March to June, on the Westward voyage, *en route* to Trieste In addition to the foregoing, there is a service of slower boats, running approximately once a month and occupying about 20 days between Bombay and Trieste

Through bookings to London can be made Dogs and birds may be taken, on payment Passengers sailing westward can hand over their heavy baggage before arrival at Port Said for free transport by sea to London Similarly, baggage can be sent from London in advance to be picked up at Port Said on the outward voyage

The following are the single fares from Bombay (or from Karachi by steamers from Karachi only) —

—	Accelerated Line		Ordinary Line.
	(Saloon)	Intermediate	(Single Saloon)
	Rs	Rs	Rs
To Aden	225	150	173
To Suez	375	285	315
To Port Said	390	300	330
To Trieste or * Venice	500	350	450

* The fare for a deck passage, with food, to Trieste is Rs. 150; without food, Rs. 130. Similar passages to intervening ports at lower charges.

Messageries Maritimes.

Steamers of the Messageries Maritimes sail between Bombay and Marseilles, touching a Aden and Port Said, monthly throughout the year Free passages are granted by B I S. N Co.'s boats for Karachi passengers for the voyage between Karachi and Bombay. Fares .—

(*Single from Bombay*).

—	First Class.		Second Class	Third Class
	A. Rs	B. Rs	Rs	Rs
To Marseilles	792	594	495	225
To London *via* Marseilles	858	660	528	270

(*Return from Bombay*).

—	First Class		Second Class	Third Class
	A. Rs	B Rs	Rs	Rs.
To Marseilles	1,188	891	743	405
To London *via* Marseilles	1,287	990	792	495

Rubattino.

Monthly sailings from Bombay for Messina, Naples and Genoa, Messina ordinarily being reached on the 17th day, Naples on the 18th and Genoa on the 20th The usual baggage allowances are made and baggage is conveyed free by sea from Port Said to London by arrangements similar to those of the Austrian Lloyd.

Fares from Bombay to Naples or Genoa —

Single Journey				Return Journey.			
First Saloon			Second Saloon	First Saloon			Second Saloon.
A Rate.	B Rate	C Rate		A Rate	B Rate	C Rate.	
Rs 550	Rs 500	Rs 450	Rs 350	Rs 825	Rs 750	Rs 675	Rs. 525

The Austrian Lloyd, Messageries Maritimes and Rubattino have a joint arrangement by which passengers taking return tickets may travel one way by one line and return by one of the others

Natal Line.

The steamers make their eastward voyages round South Africa. Westward sailings from Bombay to Weymouth usually once a month during the season.

Fares, Bombay to Weymouth (25 days):—First class, Rs 375 to Rs. 420, according to class of steamer and position of berth Cheap first class tickets are issued for berths in 2-, 3-, and 4 berth cabins

Bibby Line.

Two (in the season, sometimes three) sailings monthly from Rangoon, *via* Colombo and Marseilles, to Liverpool. Fares from Rangoon and Colombo —

	Single		*Return.*		
	1st Class		1st Class, available for 4 months from Rangoon	1st Class, available for 2 years	
	From Rangoon	From Colombo		From Rangoon	From Colombo
	Rs	Rs	Rs	Rs	Rs.
To Marseilles	550	550	900	1,000	825
To London by sea returning from Liverpool	600	575	1,000	1,050	875
To London by sea returning from London *via* Marseilles		..	1,025	1,100	900
To London *via* Marseilles	625	625	1,050	1,150	975
To Marseilles returning from Liverpool by sea	.	.	950	1,025	850
To London by sea returning from Marseilles		..	950	1,025	850

Free 1st class tickets, Tuticorin—Colombo are given to passengers from South India.

Orient Line.

Fortnightly sailings (Australian Mail) on Thursdays from Colombo to Port Said, Naples, Marseilles, Plymouth and London Fares from Colombo —

	1st Saloon		2nd Saloon.	
	Single.	Return, 2 years	Single	Return, 2 years
	Rs	Rs	Rs	Rs.
Suez, Ismailia and Port Said	495	743	462	693
	594	891		
	726	1,089	495	743
Naples, Marseilles and Gibraltar	561	842	495	743
	660	990		
	792	1,188	528	792
Plymouth and London	594	891	528	792
	693	1,040		
	858	1,288	561	842

Concessions for tickets, Tuticorin—Colombo, are given to South India passengers. Tickets are issued for native servants.

It used to be possible to obtain cheap passages, eastward or westward, in cargo ("tramp") steamers. These are now next to impossible to secure, because as the steamers are not licensed to carry passengers, passengers have to sign on as members of the crew, and the recent extension of the Employers' Liability Act then involves the ship's owners in liability to compensation to them for a variety of causes.

Train Services.

The following are the principal European train routes for east and west journeys, with booking charges The fares are the same in either direction and breaks of journey are allowed *en route*

From	To London *Via*	Single Tickets 1st Class	Single Tickets 2nd Class
		Rs a	Rs a
Marseilles	Lyons, Dijon, Paris, Calais, Dover	102 0	70 0
,,	Lyons, Geneva, Bale, Brussels, Ostend, Dover	125 0	84 0
Brindisi	Foggia, Bologna, Turin, Dijon; Paris, Calais, Dover	137 0	93 0
,,	Foggia, Naples, Rome, Venice, Milan, Paris, Calais, Dover	191 0	132 0
,,	Foggia, Naples, Florence, Genoa, Nice, Marseilles, Lyons, Calais, Dover	207 8	142 8
,,	Bologna, Milan, St Gothard, Bale, Calais, Dover, or Boulogne and Folkestone	143 8	98 8
Trieste	Cervignano, Venice, Milan, Turin, Paris, Calais, Dover	138 8	96 4
,,	Cervignano, Venice, Milan, Lucerne, Bale, Paris, Calais, Dover	136 0	94 8
,,	Cervignano, Venice, Milan, Simplon, Montreux, Lausanne, Paris, Calais, Dover	134 0	94 0
,,	Cervignano, Venice, St Gothard, Lucerne, Calais or Boulogne and Folkestone	135 12	95 5
,,	Cervignano, Milan, Como, Lucerne, Mayence, Rhine, steamer to Bonn, railway to Cologne, Calais, Dover	140 4	95 12
,,	Gorz, Villah, Munich, Cologne, Ostend, Dover	120 8	77 8
Venice	Milan, Arona, Gravellona, Simplon, Villeneuve, Montreux, Paris, Calais, Dover	121 10	85 4
,,	Verona, Milan, Turin, Paris, Calais, Dover	125 12	88 0
,,	Milan, Como, St Gothard, Laon, Calais and Dover, or Boulogne and Folkestone	123 8	86 12
,,	Milan, Como, St Gothard, Lucerne, Paris, Calais, Dover	124 8	87 0
Genoa	Turin, Paris, Calais, Dover	109 0	75 8
,,	Milan, Como, Lucerne, Calais, and Dover or Bolougne, Folkestone	112 0	78 0
,,	Milan, St Gothard, Bale, Paris, Calais, Dover	119 0	83 0
,,	Milan, St Gothard, Mayence, Rhine steamer to Bonn, Cologne, Brussels, Calais	121 8	82 8
,,	Milan, Novara, Simplon, Montreux, Lausanne, Paris, Calais, Dover	111 0	77 10
,,	Mentone, Nice, Marseilles, Lyons, Paris, Calais, Dover	131 12	91 0
Naples	Rome, Pisa, Genoa, Turin, Paris, Calais, Dover	134 0	91 0
,,	Rome, Florence, Genoa, Turin, Paris, Calais, Dover	159 0	109 2
,,	Rome, Florence, Venice, Milan, Paris, Calais, Dover	167 8	115 0
,,	Rome, Florence, Milan, St Gothard Railway, Bale, Paris, Calais, Dover	144 0	99 0
,,	Rome, Bologna, Venice, Verona, St Gothard, Lucerne, Paris, Calais, Dover	165 0	114 0

Indian Train Service.

The distances and railway fares from Bombay to the principal centres of other parts of India are as follow —

——	Miles.	1st Class	2nd Class
		Rs a	Rs. a
Delhi, B B. & C I Railway, *via* new Nagda-Muttra direct route	865 (28 hours)	66 4	33 3
Delhi, G I. P. Railway, *via* Agra	957 (28 hours)	66 4	33 3
Simla, *via* Delhi	1,137	103 5	52 11
Calcutta, G I.P from Bombay, *via* Jubbulpore & Allahabad	1,349	99 1	49 9
Calcutta, G I P from Bombay, *via* Nagpur	1,223	91 1½	45 9½
Madras, G I P from Bombay, *via* Raichur	794	68 6	34 4
Lahore, *via* Delhi	1,162	94 2	47 2

THE SUEZ CANAL

The Report of the **Suez Canal Company** for 1913 states that during the year 5,085 ships, representing a net tonnage of 20,033,884 tons passed through the Canal This by comparison with 1912, shows a decrease of 288 ships and of 241,236 tons This decrease is due to a marked decrease in ballast traffic, a drop of 700,000 tons, or about half of the previous year's traffic The growth of the average tonnage of passing ships in 1913 has been a very important factor It has risen from 3,774 to 3,940 tons—a remarkable increase on past years The tonnage of loaded merchant ships has increased by 151,000 tons as against 1912, and 852,000 tons as against 1911 The quantity of goods transported amounts to 25,775,000 tons, a figure which exceeds all previous ones This increase is attributed to the remarkable activity of the coal trade from Great Britain, which badly disturbed by the strike of 1912, is (the Report states) now in full swing once more, and larger cargoes of refined sugar from Adriatic ports, of petrol from Russia and the U S A, and of phosphates from Algeria and Tunis have passed through this year than before One of the most important lines to notice however, is the large increase in the worked metal trade to India and the Far East, especially machinery and railway materials, This points to big developments in those regions directly affected by the Canal Rice from China and Siam has shown big augmentations in bulk and, of course Japan's policy of progress has increased the traffic to that country

Improvement Schemes —It is now officially announced that from and after January 1st, 1915, **the maximum drought of water** allowed to ships going through the **Suez Canal** which is at present 29ft English, will be increased by 1ft, making it 30ft English

The scheme of improvement adopted by the Company on the recommendation of the International Consultative Committee of Works, the British representatives on which are Sir William Matthews and Mr Anthony Lister, is a comprehensive one, and the details suggest that it will meet the needs of the big ship

The maximum permissible draught of ships using the Canal was 24 4 feet in 1870, in 1890 ships drawing 25 4 feet could make the passage, and during the following 24 years the increase has been at the average rate of about 1 foot every six years, thus bringing the maximum draught authorized to 29 feet

A 40 feet Channel —The declared policy of the Canal Company in regard to the deepening of the Canal is to offer a slightly greater depth of water than that available in ports east of Suez It is claimed that, with the exception of Sydney, there is no eastern port which at low tide has a greater depth of water than that now provided in the Canal throughout the full length of nearly 105 miles In any case the work in hand should meet the needs of any ship likely to be built for the eastern trade during the next few years

When the Canal was opened in 1869 the width was 72 feet and the depth about 26 feet 2 inches In June, 1913, the width at a depth of 32 feet 8 inches had been increased to a minimum of 147 feet 6 inches over a length of about 85 miles, and to a width of 328 feet over a distance of about 20 miles The latest scheme makes provision for a depth of 40 feet throughout and for a widening up to 196 feet 8 inches in the south section, and the cutting of an appropriate number of sidings in the north andcentral sections, where a minimum width of 147 feet 6 inches is believed to be sufficient for the requirements of the immediate future

The work of enlarging the capacity of the Canal presents no special difficulty on the engineering side A good deal of sand is occasionally driven into the channel at Port Said during storms, but a remedy for this will be found in extension of the west breakwater by about 2 700 yards at a cost of over £6,000,000 The construction of this extension, which has been in hand for the past two years, is making satisfactory progress The Suez Roads are being adequately dredged in accordance with an agreement between the Egyptian Government and the Company

The Canal in war time —On October 22, 1914, the British Government issued a notification in the following terms to the representatives of foreign maritime Powers in London, and asked them to communicate it to their Governments

"Since the outbreak of war certain ships of enemy countries have remained in the Suez Canal

"Some of these vessels were detained by the Egyptian Government on account of hostile acts committed in the Canal, some because there was reason to apprehend that they contemplated hostile acts, others, though perfectly free, have refused to leave the Canal in spite of the offer of a free pass, thus disclosing their intention to use the ports of the Canal merely as ports of refuge, a measure which is not contemplated by the Suez Canal Convention

"His Majesty's Government do not admit that the Conventional right of free access and use of the Canal enjoyed by merchant vessels implies any right to make use of the Canal and its ports of access for an indefinite time to escape capture, since the obvious result of permitting any such course must be greatly to incommode and even to block the use of the ports and Canal by other ships, and they are consequently of opinion that the Egyptian Government are fully justified in the steps which they are taking to remove from the Canal all enemy ships which have been long enough in the Canal ports to show clearly that they have no intention of departing in the ordinary way, and that they are putting the Canal and its ports to a use which is inconsistent with the use of the Canal in the ordinary way by other shipping"

Travel in India.

Twenty years ago, a tour in India was possible only to the wealthy, the leisured and those who had friends in the country The cost of the journey was very high, the methods of transportation were very slow, and the facilities for travel were so indifferent that it was a bold man who consigned himself to the mercies of the country without a sheaf of letters of introduction Now the mail which is posted in London on Friday night, reaches Bombay in thirteen and a half days, and the passenger can travel by the same route and with the same speed as the letter sacks A dozen lines have covered the sea route between Europe and India and Ceylon with a plexus of regular services The Indian Railways provide facilities on the trunk lines unsurpassed by the *trains-de-luxe* of Europe, and the Indian hotel has grown into a really comfortable caravanserai

In the touring season, which extends from November to March, there is the attraction of a perfect climate It is never very hot, in the North indeed it is really cool it is always fine and fresh and bracing If there is one country in the world to which that elusive term applies, here we have at the season when the tourist arrives the real "Indian summer" Then there is its infinite variety India is in no sense a nation and never will be Its peoples are wide as the Poles asunder, each has its own art, its own architecture, its own customs and its own civilisation A certain superficial resemblance runs through each, beneath lies a never-ending variety which age cannot wither nor custom stale

The Grand Tour.—People coming to India for the first time so often ask — 'Where shall I go?" Well, wherever else the tourist may go, whatever else he should leave out, he should omit nothing on The Grand Tour It is the foolish custom nowadays to sneer at those who follow the beaten tracks, but the visitor who shuns any part of the orthodox journey across India misses what nothing else can repay **Bombay** is by far the most convenient point of departure, for here "the world and steamers wait," here is one of the finest cities in the British Empire, and here the traveller can best complete his outfit and arrangements From Bombay stretch northwards the two great trunk lines of India One, the **Bombay, Baroda and Central India Railway**, leads through the pleasant garden of Gujarat to Ahmedabad, the ancient Moslem capital of the Province, containing fine examples of Mahomedans and Jain architecture, thence to Abu for the famous Jain temples of Dilwara, and on to Ajmere, Jaipur and Agra The other by the **Great Indian Peninsula Railway** carries the tourist over the Western Ghats by a superb mountain railway to Gwalior, whose rock fortress rises like a giant battleship from the plain, and so on to Agra Of the glories of the Taj Mahal, Agra Fort, and the deserted city of Fatehpur Sikri it were supererogatory to speak Another easy stage leads to **Delhi**, that amazing collection of cities, dominated by the little Ridge where British valour kept the mutinous hordes at bay, and finally drove them from the city by a feat of arms unsurpassed in history Then from Delhi, the East Indian line leads comfortably to Benares, Lucknow and Calcutta, with the opportunity of an excursion to Cawnpore, if the spirit moves. The great charm of the Grand Tour is that it reveals the best that India can show This route has the additional advantage that it fits in with any digressions which the time and purse of the traveller may permit No one who can spare the time should fail to push northwards from Delhi to Peshawar, where the flower of the army keeps watch and ward over the Khyber, and up the dread Pass to the eyrie where the fort of Ali Masjid bars the way to all invaders **Calcutta** is the best starting point for Darjeeling, though unfortunately the magnificent mountain panorama visible from there is often obscured at this season by mists Then from Calcutta two alternatives open A fine service of mail steamers leads to **Burma**, and one of the unforgettable memories of the East is a voyage down the Irrawaddy from Bhamo or Mandalay to Prome Again either direct from Calcutta, or *via* Burma, is an easy route to **Madras**, and by way of Madura and Trichinopoly, with their peerless Hindu temples back to Bombay, or on through Tuticorin to **Colombo** But indeed the possibilities of expanding this tour are endless Bombay is the best centre for the rock temples of Elephanta, Kenheri, Karli, Ellora and Ajanta Calcutta is only a short distance from Puri, the one Indian temple where there is no caste, and perhaps the most remarkable Hindu temple in the country From Calcutta also start the river steamers which thread the steamy plains of Bengal and run to the tea gardens of Assam

Specimen Tours

A number of specimen tours in India are given below They are taken from one of the publications of Thos. Cook and Son, from whom further information may be obtained. The traveller

will also find he can obtain assistance from the principal Shipping Agents and Railway Companies, or from Messrs. Cox & Co, Messrs Grindlay & Co, and Messrs King, King & Co.

	1st Class.	2nd Class Rail, 1st Class Steamer.
FROM BOMBAY TO CALCUTTA.	Rs. a	Rs a.
Via the North-West Provinces to Calcutta (including side trip from Calcutta to Darjeeling).		
TOUR I.—From Bombay per B B & C I Railway *via* Ahmedabad, Abu Road (for Mount Abu), Ajmer, Jaipur, Delhi, Agra, Cawnpore, Lucknow and Benares to Calcutta, thence to Darjeeling, and back to Calcutta	209 9	104 15
TOUR II.—From Bombay per G I P Railway *via* Itarsi, Gwalior, Agra, Delhi, Tundla Junction, Cawnpore Lucknow and Benares to Calcutta, thence to Darjeeling, and back to Calcutta	212 13	106 9
FROM BOMBAY TO COLOMBO		
Via the North-West Provinces, Calcutta and Southern India to Colombo (including side trip from Calcutta to Darjeeling).		
TOUR III.—From Bombay as in Tour No I (*via* B B & C. I Ry, Jaipur and the North-West Provinces) to Calcutta side trip to Darjeeling and back to Calcutta, thence *via* Khurda Road, for Puri (Juggannath), Madras, Tanjore, Trichinopoly, Madura, Danushkodi and Talaimannar to Colombo	328 4	171 14
TOUR IV.—From Bombay as in Tour No II (*via* G I P Ry, Itarsi, Agra and the North-West Provinces) to Calcutta, side trip to Darjeeling and back to Calcutta, thence as in Tour No III to Colombo (*via* Southern India)	331 7	176 7
Via the North-West Provinces, Calcutta (including Darjeeling), Burma and Southern India		
TOUR V.—From Bombay as in Tour No I (*via* B B & C I Ry, Jaipur and the North-West Provinces) to Calcutta, side trip to Darjeeling and back to Calcutta, thence British India Steamer to Rangoon, Rail to Mandalay Irrawaddy Steamer to Prome, Rail to Rangoon, British India Steamer to Madras. Rail *via* Tanjore, Trichinopoly, Madura to Danushkodi, Steamer to Talaimannar and Rail to Colombo	512 1	376 7
TOUR VI.—From Bombay as in Tour No II (*via* G I P Ry, Itarsi, Agra and the North-West Provinces) to Calcutta, thence as in Tour No V to Colombo	515 4	378 1
FROM BOMBAY TO RANGOON.		
Via the North-West Provinces and Calcutta to Rangoon (including a tour in Burma, also including a side trip from Calcutta to Darjeeling)		
TOUR VII.—From Bombay as in Tour No I (*via* B B & C I Ry, Jaipur and the North-West Provinces) to Calcutta side trip to Darjeeling and back to Calcutta, thence British India Steamer to Rangoon, Rail to Mandalay, Irrawaddy Steamer to Prome, Rail to Rangoon ..	382 5	260 9
TOUR VIII.—From Bombay as in Tour II (*via* G I P Ry, Itarsi, Agra and the North-West Provinces) to Calcutta, side trip to Darjeeling and back to Calcutta, thence British India Steamer to Rangoon Rail to Mandalay, Irrawaddy Steamer to Prome, Rail to Rangoon	385 8	262 3

—	1st Class.	2nd Class Rail, 1st Class Steamer
	Rs a.	Rs a.
FROM CALCUTTA TO BOMBAY.		
Via the North-West Provinces		
TOUR IX —From Calcutta *via* Benares, Lucknow, Cawnpore, Tundla, Agra, Delhi, Rewari, Jaipur, Ajmer (for Udaipur), Abu Road (for Mt Abu), Ahmedabad and Baroda to Bombay	143 2	71 11
TOUR X —From Calcutta *via* Benares, Moghal Serai, Cawnpore, Tundla, Agra, Delhi, Rewari, Jaipur Ajmer (for Udaipur), Abu Road (for Mt Abu) Ahmedabad and Baroda to Bombay	133 14	67 1
TOUR XI —From Calcutta *via* Benares, Moghal Serai, Cawnpore, Tundla, Agra, Gwalior and Itarsi to Bombay	122 2	61 2
TOUR XII —From Calcutta *via* Benares, Moghal Serai, Cawnpore, Delhi, Muttra, Agra, Gwalior and Itarsi to Bombay	133 8	66 14
CIRCULAR TOUR FROM CALCUTTA		
TOUR XIII —From Calcutta *via* Benares, Lucknow, Cawnpore, Tundla, Agra, Bandikui, Jaipur, Delhi, and Allahabad to Calcutta	167 7	83 13
Extensions, Via Southern India to Colombo		
TOUR XIV —From Bombay *via* Poona, Hyderabad, Wadi, Raichur Madras, Tanjore, Trichinopoly, Madura, Danushkodi, and Talaimannar to Colombo	133 7	74 10
TOUR XV —From Bombay *via* Poona, Hyderabad, Wadi, Guntakal, Bangalore, Erode, Trichinopoly, Madura, Danushkodi, and Talaimannar to Colombo	125 7	70 8
Extensions to above Tours		
From Ajmer to Udaipur and return	31 5	15 10
From Abu Road to Mount Abu and return, one seat in Tonga (This excursion is strongly recommended, the scenery being very beautiful)	7 0	
From Delhi to Lahore and return *via* Umballa and Amritsar	41 12	20 14
From Delhi *via* Bhatinda, Ferozepore to Lahore, returning *via* Amritsar Umballa to Delhi	51 3	25 9
From Calcutta to Darjeeling and return (14 days)	66 7	33 4
From Colombo to Kandy and return	9 0	6 0
From Kurda Road to Puri (Jagganath and return)	5 4	2 10

(*All fares subject to change without previous notice*)

An Indian Glossary.

ABKARI —Excise of liquors and drugs

AIN —A timber tree, TERMINALIA TOMENTOSA

AIN-I-AKBARI —A comprehensive account of India under the Mughal Emperor Akbar, (compiled in 1590 by Abul Fazl)

AMIL —A subordinate executive official under native rule, in Sind the name is still applied to Hindus of the clerical class

ANICUT —A dam or weir across a river for irrigation purposes, Southern India

AUS —The early rice crop, Bengal, syn, Ahu, Assam

AVATAR —An incarnation of Vishnu

BABUL —A common thorny tree, the bark of which is used for tanning, ACACIA ARABICA

BAGHLA —A native boat (Buggalow)

BAIRAGI —A Hindu religious mendicant

BAJRA —The bulrush millet, a common food-grain, PENNISETUM TYPHOIDEUM, syn. cambu, Madras

BAND —A dam or embankment (Bund)

BANDH —A dam (Bund)

BANYAN —A species of fig-tree, FICUS INDICA

BASTI —(1) A village, or collection of huts (2) A Jain temple, Kanara

BATTA —Lit 'discount,' and hence allowances by way of compensation

BAZAR —(1) A street lined with shops, India proper, (2) a covered market, Burma

BER —A thorny shrub bearing a fruit like a small plum, ZIZYPHUS JUJUBA

BEWAR —Name in Central Provinces for shifting cultivation in jungles and hill-sides, syn taungya, Burma, jhum, North-Eastern India

BHADOI —Early autumn crop, Northern India, reaped in the month Bhadon

BHANG —The dried leaves of the hemp plant, CANNABIS SATIVA, a narcotic

BHANWAR —Light sandy soil, syn, bhur

BHARAL —A Himalayan wild sheep, OVIS NAHURA

BHUSA — Chaff, for fodder

BIDRI —A class of ornamental metalwork, in which blackened pewter is inlaid with silver, named from the town of Bidar, Hyderabad

BIGHA —A measure of land, varying widely, the standard bigha is generally five-eighths of an acre

BLACK COTTON SOIL —A dark-coloured soil, very retentive of moisture, found in Central and S uthern India

BOARD OF REVENUE —The chief controlling revenue authority in Bengal, the United Provinces and Madras

BOR —A thorny tree producing a fruit like a small plum, ZIZYPHUS JUJUBA

BRINJAL —A vegetable, SOLANUM MELONGENA, syn egg-plant

BUNDER, or bandar —A harbour or port

CADJAN —Palm leaves, used for thatch

CHABUTRA —A platform of mud or plastered brick, used for social gatherings, Northern India

CHADAR —A sheet worn as a shawl by men, and sometimes by women (Chudder)

CHAITYA —An ancient Buddhist chapel

CHAMPAK —A tree with fragrant blossoms, MICHELIA CHAMPACA

CHAPATI —A cake of unleavened bread (Chaupatti)

CHAPRASI —An orderly or messenger Northern India, syn. pattawala, Bombay, peon, Madras

CHARAS —The resin of the hemp plant, CANNABIS SATIVA, used for smoking

CHAUDHRI —Under native rule, a subordinate revenue official, at present the term is applied to the headman or representative of a trade guild

CHAUKIDAR —The village watchman and rural policeman

CHAUTH —The fourth part of the land revenue, exacted by the Marathas in subject territories

CHELA —A pupil, usually in connexion with religious teaching

CHHAONI —A collection of thatched huts or barracks, hence a cantonment

CHHATRI —A dome or cupola, hence a domed building such as a cenotaph

CHIEF COMMISSIONER —The administrative head of one of the lesser Provinces in British India

CHIKOR —A kind of partridge, CACCABIS CHUCAR

CHINAR —A plane tree, PLATANUS ORIENTALIS

CHINKARA —The Indian gazelle, GAZELLA BENNETTI, often called ravine deer'

CHITAL —The spotted deer, CERVUS AXIS.

CHOLAM —Name in Southern India for the large millet, ANDROPOGON SORGHUM, syn. jowar

CHOLI —A kind of short bodice worn by women

CHUNAM, chuna —Lime plaster

CIRCLE —The area in charge of—(1) A Conservator of forests, (2) A Postmaster or Deputy Postmaster-General, (3) A Superintending Engineer of the Public Works Department

CIVIL SURGEON —The officer in medical charge of a District

COGNIZABLE —An offence for which the culprit can be arrested by the police without a warrant

COLLECTOR —The administrative head of a District In Regulation Provinces corresponding to the Deputy Commissioner in non-regulation areas

COMMISSIONER —(1) The officer in charge of a Division or group of Districts, (2) the head of various departments, such as Stamps, Excise, etc

CONSERVATOR —The Supervising Officer in charge of a Circle in the Forest Department

COUNCIL BILLS —Bills or telegraphic transfers drawn on the Indian Government by the Secretary of State in Council

COUNT —Cotton yarns are described as 20's, 30's, etc, counts when not more than a like number of hanks of 840 yards go to the pound avoirdupois

COURT OF WARDS —An establishment for managing estates of minors and other disqualified persons

CRORE, karor —Ten millions

DACOIT, DAKAIT —A member of a gang of robbers

DAFFADAR —A non-commissioned native officer in the army or police

DAH OR DAO —A cutting instrument with no point, used as a sword, and also as an axe, Assam and Burma

DAKAITI, DACOITY —Robbery by five or more persons

DAL —A generic term applied to various pulses

DAM —An old copper coin, one fortieth of a rupee

DARBAR (1)—A ceremonial assembly, especially one presided over by the Ruler of a State hence (2) the Government of a Native State.

DARGAH —A Mahomedan shrine or tomb of a saint

DARI Dhurrie—A rug or carpet, usually of cotton, but sometimes of wool

DAROGHA —The title of officials in various departments, now especially applied to subordinate controlling Officers in the Police and Jail Departments

DARWAN —A door-keeper

DARWAZA —A gateway

DEBOTTAR —Land assigned for the upkeep of temples or maintenance of Hindu worship

DEODAR —A cedar, CEDRUS LIBANI or C DEODARA

DEPUTY COMMISSIONER—The Administrative head of a District in non-regulation areas corresponding to the Collector in Regulation Provinces.

DEPUTY MAGISTRATE AND COLLECTOR —A subordinate of the Collector, having executive and judicial (revenue and criminal) powers, equivalent to Extra Assistant Commissioner in non-regulation areas

DESAI —A revenue official under native (Maratha) rule

DESH —(1) Native country (2) the plains as opposed to the hills, Northern India. (3) the plateau of the Deccan above the Ghats

DESHMUH —A petty official under native (Maratha) rule

DEVA —A deity.

DHAK —A tree, BUTEA FRONDOSA, with brilliant salmon-coloured flowers used for dyeing, and also producing a gum, syn palas, Bengal, Chhul, Central India

DHARMSALA —A charitable institution provided as a resting-place for pilgrims or travellers, Northern India

DHATURA —A stupefying drug, DATURA FASTUOSA.

DHENKLI —Name in Northern India for the lever used in raising water, syn picottah

DHOTI —The loincloth worn by men

DISTRICT —The most important administrative unit of area

DIVISION —(1) A group of districts for administrative and revenue purposes, under a Commissioner, (2) the area in charge of a Deputy Conservator of Forests, usually corresponding with a (revenue) District, (3) the area under a Superintendent of Post Offices, (4) a group of (revenue) districts under an Executive Engineer of the Public Works Department

DIWAN —The chief minister in a Native State

DIWANI —Civil, especially revenue, administration; now used generally in Northern India of civil justice and Courts

DOAB —The tract between two rivers, especially that between the Ganges and Jumna

DRY CROP —A crop grown without artificial irrigation

DRY RATE —The rate of revenue for unirrigated land.

DUN.—A valley, Northern India.

EKKA.—A small two-wheeled conveyance drawn by a pony, Northern India

EXTRA ASSISTANT COMMISSIONER —See Deputy Magistrate and Collector

FAMINE INSURANCE GRANT —An annual provision from revenue to meet direct famine expenditure, or the cost of certain classes of public works, or to avoid debt

FARMAN —An imperial (Mughal) order or grant

FAUJDARI —Under native rule, the area under a Faujdar or subordinate governor, now used generally of Magistrates' Criminal Courts.

FINANCIAL COMMISSIONER —The chief controlling revenue authority in the Punjab, Burma and the Central Provinces

GADDI, Gadi —The cushion or throne of (Hindu) royalty

GANJA —The unfertilised flowers of the cultivated female hemp plant, CANNABIS SATIVA, used for smoking

GAUR —Wild cattle, commonly called 'bison', BOS GAURUS

GAYAL —A species of wild cattle, BOS FRONTALIS, domesticated on the North-East Frontier, syn mithan

GHAT, Ghaut, (1) A landing-place on a river, (2) the bathing steps on the bank of a tank, (3) a pass up a mountain, (4) in European usage, a mountain range In the last sense especially applied to the Eastern and Western Ghats

GHATWAL —A tenure-holder who originally held his land on the condition of guarding the neighbouring hill passes (ghats), Bengal

GHI, Ghee,—Clarified butter

GINGELLY.—An oilseed, SESAMUM INDICUM, syn til

GOPURAM —A gateway, especially applied to the great temple gateways in Southern India

GORAT —Light alluvial soil, Gujarat

GOSAIN, Goswami —A (Hindu) devotee, lit one who restrains his passions.

GOSHA —Name in Southern India for 'caste' women, lit 'one who sits in a corner', syn parda

GRAM —A kind of pea, CICER ARIETINUM In Southern India the pulse DOLICHOS BIFLORUS is known as horse gram

GUARANTEED —(1) A class of Native States in Central India; (2) A class of railways.

GUR, Goor —Crude sugar, syn. jaggery, southern India, tanyet, Burma

GURAL —A Himalayan goat antelope, CEMAS GORAL

GURU —(1) A Hindu religious preceptor; (2) a schoolmaster, Bengal

HAKIM —A native doctor practising the Mahomedan system of medicine

HALALKHOR —A sweeper or scavenger; lit one to whom everything is lawful food.'

HALI —Current Applied to coin of Native States, especially Hyderabad.

HILSA —A kind of fish, CLUPEA ILISHA.

HTI —An iron pinnacle placed on a pagoda in Burma.

HUKKA —The Indian tobacco pipe, incorrectly spelt "hookah."

IDGAH —An enclosed place outside a town where Mahomedan services are held on festivals known as the Id, etc

INAM —Lit 'reward' Hence land held revenue free or at a reduced rate, often subject to service

INUNDATION CANAL —A channel taken off from a river at a comparatively high level, which conveys water only when the river is in flood

JAGGERY, jagri —Name in Southern India for crude sugar, syn gur

JAGIR —An assignment of land, or of the revenue of land held by a Jagirdar

JEMADAR —A native officer in the army or police

JHIL —A natural lake or swamp, Northern India; syn bil, Eastern Bengal and Assam

JIHAD —A religious war undertaken by Musalmans

JIRGA —A council of tribal elders, North-West frontier

JOWAR —The large millet, a very common food-grain, ANDROPOGON SORGHUM, or SORGHUM VULGARE, syn cholam and jola, in Southern India

JUDICIAL COMMISSIONER —An officer exercising the functions of a High Court in the Central Provinces, Oudh, and Sind

KACHERI, kachahri —An office or office building, especially that of a Government official

KAKAR —The barking deer, CERVULUS MUNTJAC.

KALAR, kallar —Barren land covered with salt or alkaline efflorescences Northern India

KAMARBAND, Cummerbund —A waistcloth, or belt

KANGAR —A kind of portable warming-pan, carried by persons in Kashmir to keep themselves warm

KANKAR —Nodular limestone, used for metalling roads, as building stones or for preparation of lime.

KANS —A coarse glass which spreads and prevents cultivation especially in Bundelkhand, SACCHARUM SPONTANEUM

KANUNGO.—A revenue Inspector

KARAIT —A very venomous snake, BUNGARUS CANDIDUS OR CAERULEUS

KARBHARI —A manager.

KAREZ —Underground tunnels near the skirts of hills, by which water is gradually led to the surface for irrigation, especially in Baluchistan

KARKUN —A clerk or writer, Bombay.

KARMA —The doctrine that existence is conditioned by the sum of the good and evil actions in past existences

KARNAM —A village accountant, Madras, syn. patwari.

KAZI —Under native rule, a judge administering Mahomedan law Under British rule, the kazi registers marriages between Mahomedans and performs other functions, but has no powers conferred by law.

KHALASI.—A native fireman, sailor, artilleryman, or tent-pitcher

KHALSA —Lit 'pure.' (1) Applied especially to themselves by the Sikhs, the word Khalsa being equivalent to the Sikh community (2) land directly under Government as opposed to land alienated to grantees, etc, Northern India

KHARAB —A gravelly poor soil, Bombay

KHARIF —The harvest reaped in late autumn

KHAS —Special, in Government hands khas tahasildar, the manager of a Government estate

KHASADAR —Local levies of foot soldiers, Afghanistan

KHAS-KHAS, Kus Kus —A grass with scented roots, used for making screens which are placed in doorways and kept wet to cool a house by evaporation, ANDROPOGON MURICATUS

KHEDDA, kheda —A stockade into which wild elephants are driven, also applied to the operations for catching

KHILAT —A robe of honour

KHUTBA —The weekly prayer for Mahomedans in general and for the reigning sovereign in particular

KINCOB, kamkhwab —Silk textiles brocaded with gold or silver

KODALI —The implement like a hoe or mattock in common use for digging, syn. mamuti, Southern India

KOS —A variable measure of distance, usually estimated at about two miles The distance between the kos-minars or milestones on the Mughal Imperial roads averages a little over 2 miles, 4 furlongs, 150 yards

KOTHI —A large house

KOTWAL —The head of the police in a town, under native rule The term is still used in Hyderabad and other parts of India

KOTWALI —The chief police station in a head-quarters town

KULKARNI —A village accountant, Bombay, Deccan, syn patwari

KYAUNG —A Buddhist monastery, which always contains a school, Burma

LAKH, lac —A hundred thousand.

LAMBARDAR —The representative of the co-sharers in a zamindari village, Northern India

LANGUR —A large monkey, Semnopithecus entellus

LAT —A monumental pillar

LATERITE —A vesicular material formed of disintegrated rock, used for buildings and making roads, also probably valuable for the production of aluminium

LINGAM.—The phallic emblem, worshipped as the representative of Shiva

LONGYI —A waistcloth, Burma.

LOTA —A small brass water-pot.

LUNGI, loongi—(1) A turban; (2) a cloth worn by women

MADRASA —A school especially one for the higher instruction of Mahomedans.

MAHAJAN.—A native merchant or banker.

MAHAL —(1) formerly a considerable tract of country, (2) now a village or part of a village for which a separate agreement is taken for the payment of land revenue, (3) a department of revenue, *e g* right to catch elephants, or to take stone

MAHALKARI —A subordinate revenue official, Bombay

MAHANT —The head of a Hindu conventual establishment

MAHARAJA —A title borne by Hindus, ranking above Raja

MAHSEER, mahasir —A large carp, BARBUS TOR (lit 'the big-headed')

MAHUA —A tree, BASSIA LATIFOLIA, producing flowers used (when dried) as food or for distilling liquor, and seeds which furnish oil

MAIDAN —An open space of level ground, the park at Calcutta

MAJOR WORKS —Irrigation works for which separate accounts are kept of capital, revenue, and interest

MAKTAB —An elementary Mahomedan school

MALGUZAR (revenue payer) —(1) The term applied in the Central Provinces to a co-sharer in a village held in ordinary proprietary tenure, (2) a cultivator in the Chamba State

MAMLATDAR —The officer in charge of a taluka, Bombay, whose duties are both executive and magisterial, syn tahasildar

MANDAP, or mandapam —A porch or pillared hall, especially of a temple

MARKHOR —A wild goat in North-Western India, CAPRA FALCONERI

MASJID —A mosque Jama Masjid, the principal mosque in a town, where worshippers collect on Fridays

MASNAD —Seat of state or throne, Mahomedan, syn gaddi

MATH —A Hindu shrine or conventual establishment

MAULVI —A person learned in Muhammadan law

MAYA —Sanskrit term for delusion

MELA —A religious festival or fair

MIHRAB —The niche in the centre of the western wall of a mosque

MIMBAR —Steps in a mosque, used as a pulpit

MINAR —A pillar or tower

MINOR WORKS —Irrigation works for which regular accounts are not kept, except, in some cases, of capital

MONSOON —Lit 'season,' but generally applied to the rainy season, or to the regular moisture-laden current of air prevailing at certain seasons

MUFASSAL, mofussil —The outlying parts of a District, Province or Presidency, as distinguished from the head-quarters (Sadr)

MUKADDAM, muccadum —A representative or headman

MUKHTAR (corruptly mukhtiar).—A class of legal practitioner

MUKHTIARKAR —The officer in charge of a taluka, Sind, whose duties are both executive and magisterial, syn tahasildar

MUNG, mug —A pulse, PHASEOLUS RADIATUS syn mag, Gujarat

MUNSIF —Judge of the lowest Court with civil jurisdiction

MURUM, moorum —Gravel, used for metalling roads

NAGARKHANA, nakkarkhana —A place where drums are beaten

NAIB —Assistant or Deputy

NAIK —A leader, hence (1) a local chieftain, in Southern India, (2) a native officer of the lowest rank (corporal) in the Indian army

NAT —A demon or spirit, Burma

NAWAB —A title borne by Musalmans, corresponding roughly to that of Raja among Hindus

NAZAR, nazarana —A due paid on succession or on certain ceremonial occasions

NET ASSETS —(1) In Northern India, the rent or share of the gross produce of land taken by the landlord, (2) in Madras and Lower Burma, the difference between the assumed value of the crop and the estimate of its cost of production

NEWAR —Broad tape woven across bedsteads instead of iron slats

NGAPI —Pressed fish or salted fish paste, largely made and consumed in Burma

NILGAI —An antelope, BOSELAPHUS TRAGOCAMELUS

NIM, neem —A tree, MELIA AZADIRACHTA, the berries of which are used in dyeing

NIZAM —A title borne by the ruler of Hyderabad State

NIZAMAT —A sub-division of a Native State, corresponding to a British District, chiefly in the Punjab and Bhopal

NON-COGNISABLE —An offence for which the culprit cannot be arrested by the police without a warrant

NON-OCCUPANCY TENANTS —A class of tenants with few statutory rights, except in Oudh, beyond the terms in their leases or agreements

NON-REGULATION —A term formerly applied to certain Provinces to show that the regulations of full code of legislation was not in force in them

NULLAH, NALA —A ravine, watercourse, or drain

OCCUPANCY TENANTS —A class of tenants with special rights in Central Provinces, in United Provinces

PADDY —Unhusked rice

PAGA —A troop of horses among the Marathas

PAGI —A tracker of strayed or stolen animals

PAIGAH —A tenure in Hyderabad State

PAIK —(1) A foot soldier, (2) in Assam formerly applied to every free male above sixteen years

PALKI.—A palanquin or litter

PAN.—The betel vine, PIPE BETLE.

PANCHAMA —Low caste, Southern India

PANCHAYAT —(1) A committee for management of the affairs of a caste, village, or town, (2) arbitrators Theoretically the panchayat has five (panch) members

PANDIT —A Hindu title, strictly speaking applied to a person versed in the Hindu scriptures, but commonly used by Brahmans In Assam applied to a grade of Inspectors of primary schools

PARDA, purdah —(1) A veil or curtain, (2) the practice of keeping women secluded, syn gosha

PARDESI —Foreign

PARGANA —Fiscal area or petty sub-division of a tahsil, Northern India

PASHM —The fine wool of the Tibetan goat

PASO —A waistcloth

PAT, put —A stretch of firm, hard clay

PATEL —A village headman, Central and Western India, syn reddi, Southern India, gaonbura, Assam, padhan, Northern and Eastern India

PATIDAR —A co-sharer in a village, Gujarat

PATWARI —A village accountant, syn karnam, Madras, kulkarni, Bombay Deccan, talati, Gujarat, shanbhog, Mysore, Kanara and Coorg, Mandal, Assam

PESHKASH —A tribute or offering to a superior

PHULKARI —An embroidered sheet, lit flower-work

PICE, paisa —A copper or bronze coin worth one farthing, also used as a generic term for money

PICOTTAH —A lever for raising water in a bucket for irrigation, Southern India, syn dhenkul or dhenkuli, or dhikli, Northern India

PIPAL —A sacred tree, FICUS RELIGIOSA

PIR —A Mahomedan religious teacher or saint

PLEADER —A class of legal practitioner

PONGYI —A Buddhist monk or priest, Burma

POSTIN, poshteen —A coat or rug of sheepskin tanned with the wool on, Afghanistan

PRANT —An administrative sub-division in Maratha States, corresponding to a British District (Baroda) or Division (Gwalior), also in Kathiawar

PRESIDENCY —A former Division of British India

PROTECTED —Forests over which a considerable degree of supervision is exercised, but less than in the case of 'reserved' forests

PROVINCE —One of the large Divisions of British India

PUJA —Worship, Hindu

PUNDIT —See Pandit

PURANA —Lit 'old' Hindi, (1) applied to certain Hindu religious books, (2) to a geological 'group', (3) also to 'punch-marked' coins

PUROHIT (*a*)— A domestic chaplain or spiritual guide, Hindu

PWE —An entertainment, Burma

RABI —The harvest reaped in the spring.

RAGI —A small millet used as a food-grain Southern India, syn marua

RAJA —A title borne by Hindus and occasionally by Musalmans, corresponding roughly to that of Nawab which is peculiar to Musalmans

RANA —A title borne by some Rajput chiefs, equivalent to that of Raja

RANI —The wife or widow of a Raja

RAO —A title borne by Hindus, either equivalent to, or ranking below, that of Raja

REGAR —Name for a black soil in Central and Southern India, which is very retentive of moisture, and suitable for growing cotton

REGULATION —A term formerly applied to certain provinces to show that the Regulations or full code of legislation applied to them

REH —Saline or alkaline efflorescences on the surface of the soil, Northern India

RESERVED —Forests intended to be maintained permanently

ROHU —A kind of fish, LABEO ROHITA

RYOTWARI —The system of tenure in which land revenue is imposed on the actual occupants of holdings

SADR, sudder —Chief (adjective) Hence the headquarters of a District, formerly applied to the Appellate Courts

SAL —A useful timber tree in Northern India, SHOREA ROBUSTA

SAMBAR —A deer, CERVUS UNICOLOR, syn jarau

SAN —Bombay hemp, CROTALARIA JUNCEA

SANAD —A charter or grant, giving its name to a class of States in Central India held under a sanad

SARI —A long piece of cloth worn by women as a shawl

SARKAR —(1) The Government, (2) a tract of territory under Muhammadan rule, corresponding roughly to a Division under British administration

SATI —Suicide by a widow, especially on the funeral pyre of her husband

SAWBWA —A title borne by chiefs in the Shan States, Burma

SEMAL or cotton tree —A large forest tree with crimson flowers and pods containing a quantity of floss, BOMBAX MALABARICUM

SEROW, sarau —A goat antelope, NEMORHAEDUS BUBALINUS

SETTLEMENT —(1) The preparation of a cadastral record, and the fixing of the Government revenue from land, (2) the local inquiry made before Forest Reserves are created, (3) the financial arrangement between the Government of India and Local Governments

SHASTRAS —The religious law-books of the Hindus

SHISHAM or sissu —A valuable timber tree, DALBERGIA SISSOO

SILLADAR —A native trooper who furnishes his own horse and equipment

SOLA —A water-plant with a valuable pith, AESCHYNOMENE ASPERA

SOWAR —A mounted soldier or constable.

STUPA or tope —A Buddhist tumulus, usually of brick or stone, and more or less hemispherical, containing relics

SUBAH —(1) A province under Mahomedan rule, (2) the officer in charge of a large tract in Baroda, corresponding to the Collector of a British District, (3) a group of Districts or Division, Hyderabad

SUBAHDAR —(1) The governor of a province under Mahomedan rule, (2) a native infantry officer in the Indian Army, (3) an official in Hyderabad corresponding to the Commissioner in British territory

SUB-DIVISION —A portion of a District in charge of a junior officer of the Indian Civil Service or a Deputy Collector

SUPERINTENDENT —(1) The chief police officer in a District, (2) the official in charge of a hill station, (3) the official, usually of the Indian Medical Service, in charge of a Central Jail

SYCE, sais —A groom

TAHSIL —A revenue sub-division of a District, syn taluka, Bombay, taluka, Madras and Mysore, township, Burma

TAHSILDAR —The officer in charge of a tahsil, syn Mamlatdar, Bombay, township officer or myo-ok, Burma, mukhtiarkar, Sind vahivatdar, Baroda His duties are both executive and magisterial

TAKAVI —Loans made to agriculturists for seed, bullocks, or agricultural improvements ' syn tagai, Bombay

TALATI —A village accountant, Gujarat, syn patwari

TALAV, or talao —A lake or tank

TALUK, taluka —The estate of a talukdar in Oudh A revenue sub-division of a District, in Bombay, Madras and Mysore, syn tahsil.

TALUKDAR —A landholder with peculiar tenures in different parts of India (1) An official in the Hyderabad State corresponding to the Magistrate and Collector (First Talukdar) or Deputy Magistrates and Collectors (Second and Third Talukdars), (2) a landholder with a peculiar form of tenure in Gujarat

TANK —In Southern, Western, and Central India, a lake formed by damming up a valley, in Northern India, an excavation holding water

TARAI —A moist swampy tract, the term is specially applied to the tract along the foot of the Himalayas

TARI, toddy, The sap of the date, palmyra, or cocoanut palm used as a drink, either fresh or after fermentation In Northern India the juice of the date is called sendhi

TASAR, tussore —Wild silkworms, ANTHERAEA PAPHIA, also applied to the cloth made from their silk.

TAZIA —Lath and paper models of the tombs of Hasan and Husain carried in procession at the Muharram festival, syn tabut

TEAK —A valuable timber tree in Southern and Western India and Burma, TECTONA GRANDIS

TELEGRAPHIC TRANSFERS —See Council bills.

THAGI, thuggee.—Robbery after strangulation of the victim

THAKUR —(1) The modern equivalent of the caste name Kshattriya in some parts of Northern India, (2) a title of respect applied to Brahmans, (3) a petty chief, (4) a hill tribe in the Western Ghats.

THAMIN —The brow-antlered deer, Burma, CERVUS ELDI.

THANA —A police station, and hence the circle attached to it

TIKA —(1) Ceremonial anointing on the forehead, (2) vaccination

TIL —An oilseed, SESAMUM INDICUM; also known as gingelly in Madras

TINDAL, tandel —A foreman, subordinate officer of a ship

TOLA —A weight equivalent to 180 grains (troy)

TSINE —Wild cattle found in Burma and to the southward, BOS SONDAICUS, syn hsaing and banteng

UNIT —A term in famine administration, denoting one person relieved for one day.

URIAL —A wild sheep in North-Western India, OVIS VIGNEI

USAR —Soil made barren by saline efflorescence, Northern India

VAHIVATDAR —Officer in charge of a revenue sub-division, with both executive and magisterial functions, Baroda, syn tahsildar

VAID or baidya, Bengal —A native doctor practising the Hindu system of medicine.

VAKIL —(1) A class of legal practitioner, (2) an agent generally

VIHARA —A Buddhist monastery.

VILLAGE —Usually applied to a certain area demarcated by survey, corresponding roughly to the English parish

VILLAGE UNION —An area in which local affairs are administered by a small committee

WAKF —A Muhammadan religious or charitable endowment

WAZIR —The chief minister at a Mahomedan court

WET RATE —The rate of revenue for land assured of irrigation

YOGI —A Hindu ascetic

YUNANI —Lit Greek, the system of medicine practised by Mahomedans.

ZAMINDAR —A landholder.

ZAMINDARI —(1) An estate; (2) the rights of a landholder, zamindar, (3) the system of tenure in which land revenue is imposed on an individual or community occupying the position of a landlord

ZANANA —The women's quarters in a house; hence private education of women

ZIARAT —A Mahomedan shrine, North-Western Frontier

ZILA —A District

The New Capital.

The transfer of the capital of India from Calcutta to **Delhi** was announced at the Delhi Durbar on December 12, 1911. The reasons for it were stated in despatches between the Government of India and the Secretary of State published at the time. It had long been recognised as necessary, in the interests of the whole of India, to de-provincialise the Government of India, but this ideal was unattainable as long as the Government of India was located in one Province, and in the capital of that Province—the seat of the Bengal Government—for several months in every year. It was also desirable to free the Bengal Government from the close proximity of the Government of India which had been to the constant disadvantage of that Province. To achieve these two objects the removal of the capital from Calcutta was essential. Its disadvantages had been recognised as long ago as 1868, when Sir Henry Maine advocated the change. Various places had been discussed as possible capitals, but Delhi was by common consent the best of them all. Its central position and situation as a railway junction, added to its historical associations, told in its favour, and, as Lord Crewe said in his despatch on the subject, "to the races of India, for whom the legends and records of the past are charged with so intense a meaning, this resumption by the Paramount Power of the seat of venerable Empire should at once enforce the continuity and promise the permanency of British sovereign rule over the length and breadth of the country."

The foundation stones of the new capital were laid by the King Emperor on December 15, 1911, when His Majesty said—"It is my desire that the planning and designing of the public buildings to be erected will be considered with the greatest deliberation and care so that the new creation may be in every way worthy of this ancient and beautiful city." Subsequently a **town-planning committee** was appointed—consisting of Captain G. S. C. Swinton, Chairman, and Mr. J. A. Brodie and E. L. Lutyens, members—to advise on the choice of a site for, and the lay-out of, the capital. With them was afterwards associated Mr. V. Lanchester. The terms of their original engagement (subsequently renewed) were stated by the Under Secretary of State to be:—"The members of the committee will receive their travelling and living expenses, and the following fees for a five months' engagement:—Captain Swinton, 500 guineas; Mr. Brodie, 1750 guineas; Mr. Lutyens, 1,500 guineas. The Secretary of State has also undertaken to refund to the Corporation of Liverpool the amount of Mr. Brodie's salary for the period of the absence."

Delhi and its environs.—In their first report, dated from Simla, 13th June 1912, the Committee explain that, in dealing with the choice of a site, they felt that the following considerations were paramount and must receive the closest and most continual attention:—(*a*) Health and sanitation, (*b*) water-supply and irrigation supply, (*c*) the provision of ample room for expansion, (*d*) An extent of land suitable for the location of buildings of various characters and sizes and for the provision of spacious parks and recreation grounds—To be assumed at 10 square miles for the new city and 15 square miles for the Cantonment—(*e*) Cost of land and the cost of executing necessary works on different sites, (*f*) facility for external and internal communication, (*g*) Civil and Military requirements.

On the east of the Jumna they found no suitable site. To the north of Delhi, on the west of the Jumna, where the Durbar camps were pitched they found some general advantages. The area is, for example, upwind and upstream from the present city of Delhi. The ruins and remains of the Delhis of the past do not cumber the ground. While the external communications might need improvement, the tract is fairly well served by existing railways. Roads and canals and the internal communication could be made convenient without excessive expenditure, and a good deal of money has already been spent on the area. But its disadvantages were found to be overwhelming. The site is too small and much of the land is liable to flooding. Similarly, the western slope of the hills to the south of Delhi the Naraiana plain was found unsuitable, mainly because it cannot be considered to be Delhi, is destitute of historical associations, and is shut out from all view of Delhi.

Southern site chosen.—The Committee finally selected a site on the eastern slopes of the hills to the south of Delhi, on the fringe of the tract occupied by the Delhis of the past. They describe it as follows:—"Standing a little to the Delhi side of the village of Malcha, just below the hills almost in the centre of the site, and looking towards the Jumna, Shahjahan's Delhi on the left fills the space between the ridge and the river. Following down from the present city on the foreshore of the riverain Firoz Shah's Delhi, the site of Indra Prastha, Humayun's fort, Humayun's tomb and Nizamuddin's tomb take the eye in a continuous progress to the rocky eminence on which Ghiyasuddin Tughlak erected his fortress city. On the right the Lal Kot, the Kutb, the Kila Rai Prithora, Siri and Jahanpanah complete the circle of the monuments of ancient Delhi. The mid space in the fore ground is filled by Safdar Jan's Mausoleum and the tombs of the Lodi dynasty, while to the left, towards Delhi, Jey Singh's gnomons and equatorial dials raise their fantastic shapes." The land chosen is free from liability to flood, has a natural drainage, and is not manworn. It is not cumbered with monuments and tombs needing reverent treatment, and the site is near the present centre of the town of Delhi.

Healthiness of Site.—In February, 1913, a Committee consisting of Surg.-General Sir C. P. Lukis, Mr. H. T. Keeling, A.M.I.C.E., and Major J. C. Robertson, I.M.S., was appointed to consider the comparative healthiness of the northern and southern sites. Their report, dated 4th March, 1913, states that "the Committee, after giving full consideration to the various points discussed in the above note, is bound to advise the Government of India that no doubt can exist as to the superior

healthiness of the southern site, the medical and sanitary advantages of which are overwhelming when compared with those of the northern site"

Report on Northern Site—In the same month the Town-Planning Committee presented their second report, which dealt with the northern site This had been elicited by the fact that in December, 1912, Sir Bradford Leslie, an engineer with a distinguished Indian career, had read a paper before the Indian section of the Royal Society of Arts in London, in which he set forth plans for building the new capital on the northern site and producing a fine water effect by a treatment of the river Jumna This paper aroused considerable attention in England and its publication synchronised with some letters and articles in the press in India expressing a preference for the northern site The latter voiced a natural attraction to the north site which the Committee themselves experienced on their first visit to Delhi, and enunciated some predilections which the Committee had at one time felt and later abandoned The Town Planning Committee, therefore, undertook to review once more, and in greater detail, the arguments for and against the northern site They came to the conclusion that —"The soil is poor on the northern site as compared with the southern The southern site is already healthy and has healthy surroundings The northern site even after expenditure on sanitary requirements will never be satisfactory If the northern site is to be made healthy, this involves going outside the site itself and making the neighbourhood healthy also The building land to the south is generally good On the north to be used at all it has in places to be raised at considerable cost There is no really suitable healthy site for a cantonment in proximity to a city on the northern site The exigencies of fitting in the requirements to the limited area of the northern site endanger the success of a lay-out as a whole and tend to make for cramping and bad arrangement The result of placing a city on the northern site appears to the Committee to be the creation of a bad example in place of a good one"

Final Town-Planning Report—The final report of the Town-Planning Committee, with a plan of the lay-out, was dated 20th March, 1913 The central point of interest in the lay-out, which gives the motif of the whole in Government House, the Council Chamber and the large blocks of Secretariats This Government centre has been given a position at Raisina hill near the centre of the new city Advantage is taken of the height of this hill and it is linked with the high ground behind so as to appear a spur of the ridge itself Behind the hill a raised platform or forum would be built This will be flanked by the large blocks of Secretariat buildings and terminated at its western end by the mass of Government House and the Council Chamber, with its wide flight of steps, portico and dome. The forum will be approached by inclined ways with easy gradients on both its north and south sides. The main access to this from the last. The axis of the main avenue centres on the north-west gate of Indrapat nearly due east of Government House.

Looking from the eastern end of the forum where the broad avenue enters the Governmental centre and where the great stairways are set, the view is towards the east. "Right and left the roadways go and weld into one the empire of to-day with the empires of the past and unite Government with the business and lives of its people"

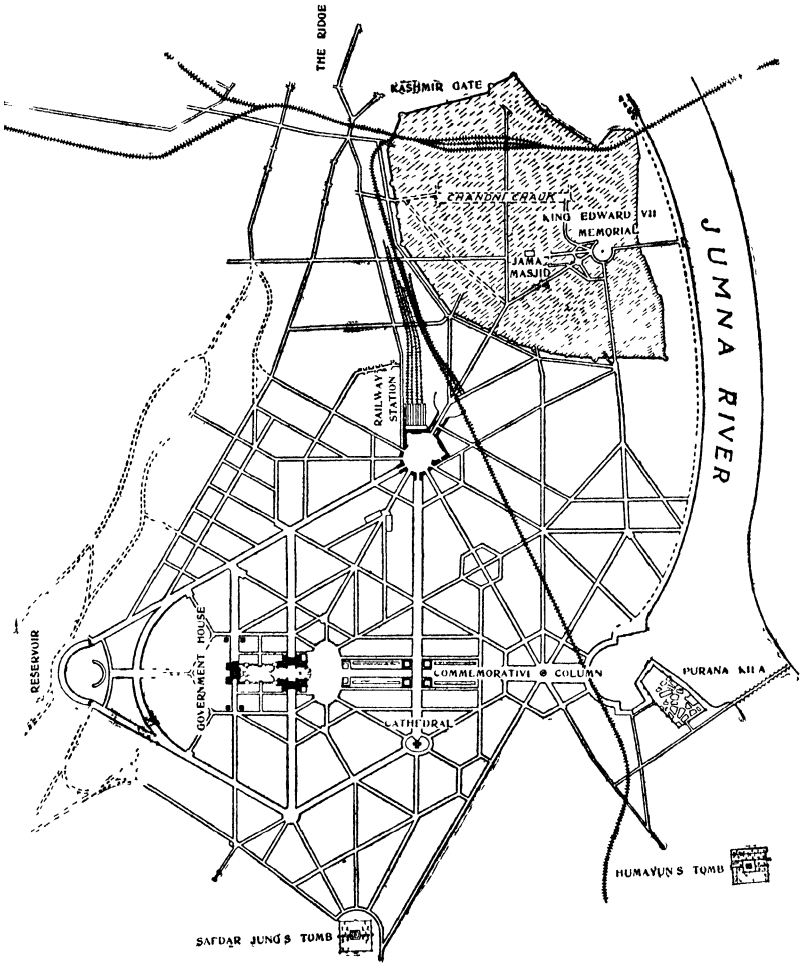
Behind Government House to the west will be its gardens and parks flanked by the general buildings belonging to the Viceregal estate Beyond these again, on the ridge itself, will be a spacious amphitheatre to be made out of the quarry from which much of the stones for roads and buildings may be cut. Above this and behind it will lie the reservoir and its tower which will be treated so as to break the sky line of the ridge To the east of the forum, and below it, will be a spacious forecourt defined by trees and linked on to the great main avenue or parkway which leads to Indrapat Across this main axis, and at right angles to it, will run the avenue to the railway station This will terminate in the railway station, the post office and business quarters at its northern end, and in the Cathedral at its southern extremity.

To the south-east will lie the park area in which stand the ancient monuments of Safdar Jang's Makhbara and the Lodi tombs. This area can be developed gradually as the city expands and has need of public institutions of various kinds The axis running north-east from the Secretariat buildings to the railway station and towards the Jama Masjid will form the principal business approach to the present city At the railway station a *place* will be laid out around which will be grouped the administrative and municipal offices, the banks, the shops and the hotels. On this *place* the post office is placed in symmetrical relation to the railway station.

The processional route will lead down from the railway station, due south to the point where it is intersected by the main east to west axis Here round a *place* will be gathered the buildings of the Oriental Institute, the Museum, the Library and the Imperial Record Office. To the south-west of the railway station will lie the houses of the local administration and the residences of the European clerks

Due south of the forum the residence of the Commander-in-Chief will be placed. Round about the Viceregal estate and the forum lies the ground destined for the residences of the Members of Council, the Secretaries and other officials of the Government of India. To the south-west of Government House lies the club. To the south of the club a low ridge divides the tract into two portions That to the west is well adapted for a golf-course, while the eastern side is designed for a race-course, the ridge itself offering unusual facilities for locating stands and seeing the races.

Communications.—The avenues range from 300 feet to 60 feet with the exception of the main avenue east of the Secretariat buildings where a parkway width of 440 feet has been allowed. The principal avenues in addition to the main avenues are those running at right angles to the main east to west axis


THE RIDGE
KASHMIR GATE
CHANDNI CHAUK
KING EDWARD VII MEMORIAL
JAMA MASJID
JUMNA RIVER
RAILWAY STATION
RESERVOIR
GOVERNMENT HOUSE
COMMEMORATIVE COLUMN
PURANA KILA
CATHEDRAL
HUMAYUN'S TOMB
SAFDAR JUNG'S TOMB

Others form part of a system running from the amphitheatre to the railway station and Commander-in-Chief's residence, and from both the latter to the commemorative column, lying on the axis between Indrapat and Government House is the focal point of the roads and avenues on the parkway.

A lake which can be obtained by river treatment is shown on the plan. The lay-out has been made independent of the water effect, but the Committee think that its ultimate creation will enhance enormously the beauties and general amenities of the new capital. and it should and would become an integral portion of the design now submitted.

The report contains lengthy recommendations concerning water-supply, drainage, sewage system, parks and communications It is imperative, it says —"that a complete scheme of railway arrangements designed to serve the whole of the capital, both old and new, should be an essential feature of the lay-out of the Imperial City, and this important matter should not be left to be settled when it is too late to deal with it" But the expense of the proposed central station is prohibitive, and for some time it will be possible only to carry out that scheme in part, room being left for the later development of the station.

Temporary Capital —For the use of the Government of India during the five years the building of the new capital is expected to occupy, an area has been selected along the Alipur Road, between the present civil station of Delhi and the Ridge The early idea that many of the officials should live under canvas had to be given up, and there are now temporary offices and residences The architecture and method of construction are similar to those adopted in the exhibition buildings at Allahabad in 1910, but the buildings are expected to outlast the transitional period for which they are intended They will subsequently be an asset of some value, the site they occupy becoming a suburb of the capital.

Chief Commissioner Appointed —On October 1, 1912, by proclamation, there was constituted an administrative **enclave of Delhi** under a Chief Commissioner, Mr W. M Hailey, I C S. The Delhi district of the Punjab, from which this enclave was entirely taken, consisted of three tahsils or subdivisions and the enclave was formed by the central tahsils, that of Delhi, and by such part of the southern tahsil, Ballabgarh, as was comprised within the limits of the police post of Mahrauli. The Delhi tahsil has an area of 429 square miles and the police post serves a hilly area of 128 square miles, bringing up the total extent of the enclave to 557 square miles On the basis of the last Census figures the population of this area is some 392,000, of whom close upon 233,000 are within the municipal limits of Delhi City

The Architects' Designs —At the Royal Academy in 1914 there were exhibited drawings by Mr. Lutyens and Mr. Baker, which, though provisional and rather in the nature of what are called Warrant Designs, show how the architectural problems of the new capital are to be solved Government House and the Secretariat have been planned by them as one block, as it were a Capitol, facing towards Indrapat

The **Secretariat** is to be built on the rock of Raisina hill, the top of which has been levelled for the purpose behind the Secretariat is to be a raised causeway forming the approach to Government House. and Government House itself is to be built on a high basement constructed on an outcrop of rock The main processional route to Government House is to be along a sloping way (at a gradient of one in 22½) which leads from a semi-circular piazza, the "Great Court" to the level of the Secretariat buildings.

At the summit of this sloping way is the **"Government Court"**, a space of about 1,100 feet in length, and 400 in breadth, flanked to the north and south by the two blocks of Secretariat buildings These buildings have been designed by Mr Baker and the aggregate cost will be some £750,000 According to the design the eastern end of each block is marked by deep loggias looking out over the central vista In the centre of each block is a dome In the case of the north block this marks an entrance hall in the south block it surmounts a Conference hall with a suite of cloak and reception rooms Each block contains three floors in the lowest are motor garages, godowns, and record rooms in the middle floor are the offices of Members, Secretaries and other officers in the top floor are clerks' rooms. An essential feature of the design, and one which sets the character of the whole building, is the provision of loggias and recessed gateways or exedrae giving views through to the fountain courts situate in the interior of the blocks The verandah so familiar in Indian buildings is altogether absent The architect relies for control of temperature on thick external walls with an air space inside, together with the thick window shutters adopted so widely in Southern Europe, and the wide *chajja* characteristic of Oriental buildings

Between the north and south Secretariat blocks, is the way into the **"Viceroy's Court"** —the raised causeway already referred to— leading up to Government House The Court is about 600 feet in breadth and 1,300 feet in length, it will be treated with grass and waterways and low trees and should form a dignified approach to the final group of buildings At a point midway in the causeway, roads lead off to the north and south, forming alternative lines of approach to Government House

One thus reaches the portico of **Government House** This portico is raised some twenty feet above the causeway and fifty feet above the surrounding country The house itself centres round the great Durbar Hall, a domed structure which dominates the scheme of the buildings surrounding it Grouped round the Durbar Hall are the State rooms and great stairways from the entrance courts on the north and south sides In the right wing is the Chamber of the Legislative Council of the Governor-General and offices for its Members. In April 1912, the Under Secretary of State indicated in Parliament the decision that this Chamber should be attached to the residence of the Governor-General It has, therefore, been included in the design of Government House, but it has been assigned a separate approach through a spacious avenue of its own The left wing contains the private suites. In

the rear of the house will be a raised garden, walled and terraced after the manner of the Moghuls, and behind that again, on the level of the surrounding country, a park which will contain the staff houses and quarters The park will lead up to the rocky slopes of the Ridge which closes in the vista on the west The house, which has been designed by Mr Lutyens, will, with its attached quarters, garden and park, and with the Legislative Council wing, cost approximately £500,000

Style of Architecture —There had been a prolonged "battle of the styles" over Delhi and if these designs gave satisfaction to neither of the extreme and opposed schools of thought, they clearly showed an endeavour to apply, with due regard for Indian sentiment, the spirit and essence of the great traditions of architecture to the solution of structural problems conditioned upon an Indian climate and Indian surroundings and requirements To use the language of the architects themselves, it has been their aim "to express, within the limit of the medium and of the powers of its users, the ideal and the fact of British rule in India, of which the New Delhi must ever be the monument"

The inspiration of these designs is manifestly Western, as is that of British rule, but they combine with it distinctive Indian features without doing violence to the principles of structural fitness and artistic unity Many of the details which will be still more characteristically Indian cannot be displayed at the present stage, for the elaborate ornament and decoration, in which the Indian craftsman excels, can scarcely be shown on large-scale drawings intended mainly to illustrate the general conception of the buildings Much will depend, moreover, upon the resourcefulness and ability of the Indian artificers themselves whom the Government of India proposes to bring together in Delhi to give expression, by their decorative work, to the best traditions of skilled Indian craftmanship

Cost of the Scheme —It was at first tentatively estimated that the cost of the new capital would be four million sterling and that sum was given in the original despatch of the Government of India on the subject A revised estimate was given by H E the Viceroy in Council in March 1914. That estimate is as follows :—

(*a*) Salaries and Allowances, Rs. 70,18,700.

(*b*) Travelling Allowances of Officers and Establishments, Rs. 6,30,000

(*c*) Supplies, Services and Contingencies, Rs 3,78,600.

(*d*) Works Expenditure, (1) Buildings, Rs. 3,59,87,200, (2) Communications Rs 29,91,800, (3) Parks and Public Improvements Rs 27,34,500, (4) Electric Light and Power, Rs 43,40,700 (5) Irrigation, Rs 27,49,000, (6) Water Supply, Sewerage, Drainage, etc Rs. 73,77,900. (7) Purchase of Tools and Plant, Rs. 35,50,600, (8) Survey Camps and General Preliminary Expenditure, Rs. 42,82,100. (9) Maintenance during Construction, Rs 20,09,000.

(*e*) Acquisition of Land taken up, Rs. 36,48,200

(*f*) Other Miscellaneous Expenditure, Rs. 6,000.

Deduct anticipated recovery from tools and plant, Rs 10,00,000.

These figures when added up make an **aggregate total** of Rs 7,67,04,300, or £ 5,113,620, but said His Excellency, "as we are anxious to face our liabilities for starting the new City to the fullest extent possible we consider it necessary to make a special provision for contingencies and unforeseen expenditure in excess of the usual provision that has been made of 5 per cent on the works outlay, by adding a sum of one and a half crores or £1,000,000. We have accordingly a very large reserve to meet future possibilities, which we are not able to foresee at present I should add that the expenditure of this additional crore and a half on unforeseen contingencies will be strictly controlled by the Government of India and no part of it spent unless absolutely necessary. On the other hand the project estimate contains certain items such as land, residences, water supply, electric power, irrigation, on which recoveries in the form of rent or taxes will in addition to meeting current expenditure partially at any rate cover the interest on capital outlay, while there are other items on which some return account of the sale of leases, general taxes, and indirect receipts may be expected"

Two Cathedral Schemes.—In October 1913 a letter was published in *The Times* from the Bishop of Calcutta on the provision of a Cathedral at Delhi He appealed for £50,000 in addition to any grant given by the Government, and quoted in his letter the following statement of approval by the King-Emperor "I heartily approve of the project to build a Cathedral in the new city of Delhi. I trust that the appeal for the necessary funds may meet with a generous response, so that in due time the capital of India may possess a Cathedral which in design and character will testify to the life and energy of the Anglican Church and be worthy of its architectural surroundings both of days gone by and of those to come" His Majesty subscribed £100 and the Queen £50 to the fund The Indian Church Aid Association have received several contributions towards the building fund for the proposed Cathedral Church, in response to the appeal of the Bishop of Calcutta Cheques may be sent to the Secretary, Indian Church Aid Association, Church House, Westminster, S W and crossed Lloyds Bank, St James's Street, S W.

A Roman Catholic Cathedral is also projected and Father Paul Hughes, O.M.C., has been touring India collecting money for the Cathedral Fund

Sanitary Improvements —While the work on the new city has been going forward various improvements in the existing Delhi have been carried out and the sanitary conditions in particular have been much improved The fly nuisance which was extremely bad in Delhi has been much reduced, and other schemes have been formulated as the result of a sanitary survey which embraced the whole of the city. In the past Delhi's death-rate has consistently

exceeded the birth-rate, and but for immigration from the outlying districts the population would have gone down In 1912 the death and birth rates were practically the same, and in 1913 the improvement was even more marked The exact figures are not yet available, but the 1913 death rate was roughly 44 per 1,000 and the birth-rate 48 (these returns are on the basis of the population at the census of 1911, and when they are calculated on the correct population the improvement will be even more apparent) There has been a notable reduction in the infantile mortality in 1912 the number of deaths was 4,091 and in 1913 the number was 3,392 The deaths of people of all ages from fevers, including malaria has fallen from about 6,000 to 4 200 from small-pox from 445 to 112 · from plague from 20 to 5 (all imported) from cholera from 103 to 26 (again all imported).

Higher College for Chiefs—It was proposed during 1914 that a higher college for Chiefs should be established at Delhi and in this connexion a conference of Chiefs and Political Officers was held at Delhi, in March, at which the Viceroy presided. It was subsequently announced that subscriptions offered towards the college amounted to about ten and a half lakhs, various recurring sums were promised, and the Government of India also promised to recommend the Secretary of State a grant of Rs 50,000 a year Thus the whole capital would come to 12½ lakhs The proposal is still under consideration

Stock Exchanges.

There are about 365 Share and Stock Brokers in **Bombay** They carry on business in the Brokers' Hall, bought in 1899 from the funds of the **Share and Stock Brokers' Association** formed to facilitate the negotiations and the sale and purchase of Joint Stock securities promoted throughout the Presidency of Bombay Their powers are defined by rules and regulations framed by the Board of Directors and approved by the general body of Brokers The Board has the power to fix the rates in times of emergencies It is composed of Sir Shapurji Broacha (Chairman), Mr Parbhudas Jivandas (Vice-Chairman), Mr Maneckjee Pestonji Bharucha, Mr Shapurjee Sorabjee Mahimvala, Mr Nasserwanji Pherozesha Karani, Mr. Nagji Motichand, Mr Hirachand Vasanji, Mr. Bhaidas Goculdas, Mr Vadilal Punamchand and Mr N Narandas Govindchand (Secretary)

At first the admittance fee for a broker was Rs 5 which was gradually raised to Rs 1,000. There are two classes of Exchange Brokers, Europeans and Indians, the latter being certified for recognition by the native Stock Exchange Business in Government Paper and all other Trustees' Authorised Securities is carried on under the rules of the Bombay Stock Exchange, but in the street outside the hall.

For many years the **Calcutta** Share Market had its meeting place in various gullies in the business quarter and was under no control except that of established market custom In 1908 the **Calcutta Stock Exchange Association** was formed, a building was leased in New China Bazar Street now called Royal Exchange Place, a representative committee was formed, and the existing trade customs were focussed into rules drawn up for the conduct of business Admittance as a member of the Stock Exchange is by vote of the committee, and the entrance fee is at present Rs 500 The market custom differs very materially from that of most other Stock Exchanges since there are no settlement days, delivery is due the second day after the contract is passed and sales of securities are effected for the most part under blank transfers Another difference in procedure as compared with the London Stock Exchange is that there are no "Jobbers" in the Calcutta market The Dealers who take their place, more or less, are not compelled to quote a buyer's and a seller's rate and are themselves Brokers as well as dealers, calling upon the Banks and other clients and competing with Brokers

There are about 150 members, besides outside brokers, the former consisting of European, Jewish, Marwari, and Bengalee firms The Marwaris predominate The volume of *bona fide* Investment business is comparatively small and insufficient for the number of Brokers The principal business transacted on the Calcutta Stock Exchange is connected with the shares in Jute Mills Coal Companies, Tea Companies registered in India, Miscellaneous industrial concerns (such as Paper, Flour, Sugar) Railway and Transit Companies and Debentures, the latter comprising those of Industrial concerns and Trustee's Investment Securities, namely Municipal and Port Trust Debentures When speculative operations are being actively engaged in, which frequently take the form of forward contracts for delivery in three months' time, the value of securities changing hands may aggregate as much as a crore of Rupees per month, but since the trade is not constant and one year differs very much from another, it would be difficult to estimate what the average annual turn over would amount to The association has an honorary secretary and is not at present affiliated to the Bengal Chamber of Commerce.

Indian Official Reports.

(MOSTLY ANNUAL.)

General.—

Statistical Abstract relating to British India (Parliamentary Paper)

Statistics of British India —

Part I —Industrial (Factories, Mills, Mines, &c)

Part II —Commercial (Foreign Trade and Shipping, &c)

Part III —Commercial Services (Post Office, Railways, Telegraphs, &c)

Part IV (*a*)—Finance and Revenue (Paper Currency, Coinage, Public Debt, &c)

Part IV (*b*)—Finance and Revenue (Principal Heads of Revenue, Salt, Opium, &c)

Part V —Area, Population, and Public Health (Area, Population, Emigration, Births and Deaths, Vaccination, &c)

Part VI —Administrative and Judicial (Administrative Divisions, Civil and Criminal Justice, Registration, Police, Jails, &c)

Part VII —Educational (Education, Printing Presses, and Publications)

Part VIII —Local Funds (Municipalities, Local Boards, and Port Trusts)

Census Reports (Decennial), India and Provincial

Administration Reports Madras, Bombay, Coorg, United Provinces, Punjab, Bengal, Central Provinces and Berar, Burma, Bihar and Orissa, Assam, Andaman and Nicobar Islands, Civil and Military Station of Bangalore, Ajmer-Merwara, Baluchistan, North-West Frontier Province

Justice and Police —

Report on the Administration of Civil Justice for each Province

Report on the Administration of Criminal Justice for each Province

Report on Jails for each Province

Reports on Police, for each Province, and for Bombay Town and Island, Calcutta and Rangoon

Finance.—

Finance and Revenue Accounts of the Government of India

East India Financial Statement (Parliamentary Paper)

Return of Net Income and Expenditure for eleven years (Parliamentary Paper)

Accounts and Estimates Explanatory Memorandum (Parliamentary Paper)

Home Accounts (Parliamentary Paper)

Estimate of Revenue and Expenditure (Parliamentary Paper)

Loans raised in England (Half-yearly Parliamentary Paper)

Loans raised in India (Half-yearly Parliamentary Paper)

Mint Reports for Calcutta and Bombay.

Paper Currency Department Report

Statistics compiled from the Finance and Revenue Accounts.

Land Revenue, &c.—

Land Revenue Administration Provincial Reports for Lower Provinces (Bengal), Bihar and Orissa, Assam, United Provinces, Bombay Presidency (including Sind), Punjab, Central Provinces and Berar, Burma, and Madras

Report on Land Revenue Administration, Land Records, Settlement Operations, Alienation of Land Act, &c, for North-West Frontier Province.

Madras Survey, Settlement and Land Records Department Report

Reports of Land Records Departments for Bombay, Burma, Bengal, United Provinces, and Punjab

Report on Settlement Operations, Punjab

Reports on Survey and Settlement Operations, Bengal and Assam

Reports on Operations of the Land Records and Settlement Departments, Central Provinces and Berar

Report of the Talukdari Settlement Officer, Bombay

Provincial Reports on the Administration of Estate under the Court of Wards

Report on the Punjab Canal Colonies

Separate Revenue (Salt, Excise, &c.)—

Salt Department Reports Northern India, Madras, Bombay, Sind, Bengal, Burma, Bihar and Orissa

Excise Report for each Province

Opium Department Reports United Provinces and Bombay

Stamp Department Report for each Province.

Registration Department Report for each Province

Income Tax Report for each Province

Agricultural and Veterinary.—

Report on the Progress of Agriculture in India.

Report on the Agricultural Research Institute and College, Pusa

Bulletins of the Agricultural Research Institute, Pusa, and of the Provincial Departments of Agriculture

Memoirs of the Department of Agriculture.

Proceedings of the Board of Agriculture.

Agricultural Journal of India (quarterly)

Report of the Department of Agriculture in each Province

Reports on various Agricultural Stations, Experimental Farms, and Botanic Gardens.

Season and Crop Report for each Province

Agricultural Statistics of India

Area and Yield of certain Principal Crops

Report on Production of Tea in India

Report on Tea Culture in Assam.

Statistics compiled from the Reports of the Provincial Civil Veterinary Departments

Report of the Camel Specialist

Report of the Imperial Bacteriologist (Veterinary)

Reports of the Civil Veterinary Departments for Madras, Bombay, United Provinces, Punjab, Bengal, Burma, Assam, North-West Frontier Province, and Bihar and Orissa.

Co-operative Societies.—
Statements showing Progress of the Co-operative Movement in India
Report on Co operative Credit Societies for each Province.
Reports of Conferences of Registrars of Co-operative Credit Societies, India and Provincial.

Forests.—
Review of Forest Administration in British India.
Report on Forest Administration for each Province.
Reports of the Forest Research Institute and the Imperial Forest College, Dehra Dun
Indian Forest Memoirs
Indian Forest Records
Forest Bulletins

Mineral Production and Mines —
Review of Mineral Production (in Records of Geological Survey)
Report on Production of Coal in India
Report of the Chief Inspector of Mines

Trade and Manufactures.—
Annual Statements of Sea-borne Trade and Navigation, India and Provincial (Madras, Bombay, Sind, Bengal, Burma)
Review of the Trade of India (Parliamentary Paper)
Tables of the Trade of India (Parliamentary Paper)
Provincial Reports on Maritime Trade and Customs (including working of Merchandise Mark Act) for Bengal, Bihar and Orissa, Bombay, Sind, Madras, and Burma
Accounts of Sea-borne Trade (monthly and for Calendar Year)
Accounts of Land Trade (monthly)
Annual Statement of Coasting Trade of British India
Report on the Trade and Navigation of Aden
Accounts of Trade carried by Rail and River in India
Report on Inland, Rail-borne, or Rail-and-River-borne Trade for each Province
External Land Trade Reports for Bengal, Bihar and Orissa, Assam, Burma, United Provinces, Punjab, North-West Frontier Province, Sind, and British Baluchistan.
Indian Trade Journal (weekly)
List of Joint-Stock Companies in British India and Mysore
Reports on the working of the Indian Companies Act (Provincial)
Report on the working of the Indian Factories Act for each Province
Report of the Chief Inspector of Explosives.

Public Works.—
Administration Report on Railways (Parliamentary Paper)
Railways and Irrigation Works Return of Capital Expenditure, &c (Parliamentary Paper)
Provincial Reports on Public Works (Buildings and Roads)
Report on Financial Results of Irrigation Operations
Report on Irrigation Revenue for each Province
Reports of Madras and Bombay Irrigation Departments.
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Post Office and Telegraphs.—
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Report of the Operations of the Survey of India.
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Indian Weather Review, Annual Summary.
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Report and Records of the Botanical Survey

Education, Literature, and the Press —
Education Report for each Province
Quinquennial Review of Education (Parliamentary Paper)

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Report on District and Local Boards or Local Funds for each Province
Reports of Port Trusts of Calcutta, Bombay, Madras, Rangoon, Karachi, and Aden

Medical, Sanitary, and Vital Statistics.—
Report of the Sanitary Commissioner with the Government of India
Report on Sanitary Measures in India (Parliamentary Paper)
Report of the Sanitary Commissioner for each Province
Vaccination Report for each Province
Report on Civil Hospitals and Dispensaries for each Province
Report on Lunatic Asylums for each Province
Report of the Chemical Examiner and Bacteriologist for each Province
Scientific Memoirs by Officers of the Medical and Sanitary Departments
Reports of the All-India Sanitary Conferences
Reports of the Imperial Malaria Conferences
Indian Journal of Medical Research (Quarterly).

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Calcutta Port Emigration Report
Bengal Inland Emigration Report.
Assam Immigration Report

Prices and Wages.—
Prices and Wages in India.
Variations in Indian Price Levels.
Reports of Provincial Wage Censuses.

The customs revenue is mainly derived from the general import duty, certain special import duties such as those on arms, liquors, sugar, petroleum and tobacco, and an export duty on rice General import duties, which were abolished in 1882, were reimposed in 1894, since which date the general rate of duty on commodities imported into British India by sea has been 5 per cent. *ad valorem* Cotton was exempted in 1894 when the general duties were received, in December 1894 a 5 per cent duty *ad valorem* was imposed on imported cotton goods and yarns, while an excise duty of 5 per cent was imposed on all yarns of counts above 20 spun at power mills in British India; in February 1896 cotton yarns and threads imported or manufactured in India were freed from duty, while a uniform 3½ per cent *ad valorem* duty was imposed on all woven cotton goods imported or manufactured in India at power mills The products of hand looms are exempted. The duties are levied for fiscal purposes, and not for the protection of Indian industries. It will be noted that machinery (excluding tools and implements to be worked by manual or animal labour), railway materials, gold, living animals, food grains, coal, raw cotton, raw wool, cotton twist and yarn and sewing and darning threads, printing materials and books (but not paper) are, among others, on the free list In 1896-97, the first year of the existing arrangements, the net custom revenue amounted to Rs 3,45 lakhs and in 1902-03 Rs 4,26 lakhs Last year it reached Rs 9,22 lakhs. The rapid expansion of the cotton and petroleum industries of India has interferred with further improvement of the import duty realised In 1913-14 no important change was made in the tariff and the gross revenue from imports, salt excluded, was Rs 9,36 lakhs, a considerably larger sum than the revenue (Rs 8,62 lakhs) realised in the previous year.

Schedule II—Import Tariff.

No	Names of Articles.	Per	Rate per duty. Rs a p.
	Arms, Ammunition, and Military Stores.		
	Including also any articles, other than those included in Nos 1 to 12 of this schedule which are "arm" within the meaning of the Indian Arms Act, and any articles which the Governor-General in Council may, by notification in the *Gazette of India*, declare to be "Ammunition" or "Military Stores" for the purposes of this Act		
1	Firearms other than pistols, including gas and air guns and rifles	Each	50 0 0
2	Barrels for the same whether single or double . .	,,	30 0 0
3	Pistols	,,	15 0 0
4	Barrels for the same, whether single or double ..	,,	10 0 0
5	Springs used for firearms, including gas and air guns and rifles	,,	8 0 0
6	Gun-stocks, sights, blocks and rollers .. .	,,	5 0 0
7	Revolver-breeches, for each cartridge they will carry	,,	2 8 0
8	Extractors, nippers, heel-plates, pins, screws, tangs, bolts, thumb-pieces, triggers, trigger-guards, hammers, pistons, plates and all other parts of a firearm (including a gas and air gun or rifle) not herein otherwise provided for, and all tools used for cleaning or putting together or loading the same	,	1 8 0
9	Machines for making, loading or closing cartridges ..		10 0 0
10	Machines for capping cartridges .	,	2 8 0
	Exception I—Articles falling under the 5th, 6th, 8th, 9th or 10th head of the foregoing list, when they appertain to a firearm falling under the 1st or 3rd head, and are fitted into the same case with such firearm		Free.
	Exception II—The following are also free, namely—		
	(*a*) Arms forming part of the regular equipment of an officer entitled to wear diplomatic, military, naval, or police uniform,		Free.
	(*b*) A sword, a revolver, or a pair of pistols, when accompanying an officer of His Majesty's Regular Forces, or a commissioned officer of a volunteer corps, or certified by the commandant of the corps to which such officer belongs, or, in the case of an officer not attached to any corps by the officer commanding the station or district in which such officer is serving, to be imported by the officer for the purposes of his equipment		

Schedule II—(Import Tariff)—*continued*

No.	Names of Articles	Per	Rate of Duty.
	Arms, Ammunition, and Military Stores.—*contd.*		
	(*c*) Swords and revolvers which are certified by an Inspector-General of Police to be part of the ordinary equipment of members of the Police force under his charge (*d*) Swords forming part of the equipment of native commissioned officers of His Majesty's Army; (*e*) Swords for presentations as army or volunteer prizes, (*f*) Arms, ammunition, and military stores imported with the sanction of the Government of India for the use of any portion of the military forces of a Native State in India which may be maintained and organised for Imperial Service, (*g*) Morris tubes and patent ammunition when imported by officers commanding British and Native regiments or volunteer corps, for the instruction of their men		
	Proviso 1.—No duty in excess of 10 per cent *ad valorem* shall be levied upon any of the articles numbered 1 to 10 in the foregoing list when they are imported in reasonable quantity, for his own private use, by any person lawfully entitled to possess the same		
10	Machines for capping cartridges—*contd.*		
	Exception II (*g*) Morris tubes and patent ammunition, etc—*contd*		
	Proviso 2.—When any articles which have been otherwise imported, and upon which duty has been levied or is leviable under numbers 1 to 10, are purchased retail from the importer by a person lawfully entitled as aforesaid, in reasonable quantity for his own private use, the importer may apply to the Customs Collector for refund or remission (as the case may be) of so much of the duty thereon as is in excess of 10 per cent *ad valorem* and if such Collector is satisfied as to the identity of the articles and that such importer is in other respects entitled to such refund or remission he shall grant the same accordingly		
11	Gunpowder, all sorts	*ad valorem*	Ten per cent.
12	All other sorts of arms, ammunition, and military stores		

By the Commerce and Industry Department Notification No 3798—90, dated the 27th May 1911, all articles, other than those specified below, liable to duty under head, 5, 6, 8, 9, or 10, as the case may be, of the above schedule, were exempted from so much of the duty leviable thereunder on importation into British India as is in excess of duty of 10 per cent *ad valorem* —

Main springs and Magazine springs
Gun-stocks and Breech blocks
Actions (including skeleton and waster)
Breech bolts and their heads
Cocking pieces,
Locks (for Muzzle-Loading arms).
Machines for making, loading, closing or capping cartridges for rifled arms.

Schedule III—(Import Tariff.)

No	Names of Articles	Per	Rate of Duty.
	Liquors, Opium, Salt, Fish, Tobacco and Silver.		Rs. a p
1	LIQUORS (*a*)—		
	Ale, beer, and porter Cider, and other fermented liquors	Imperial gallon or 6 quart bottles	0 3 0
	Liqueurs and sweetened spirits, cordials, bitters, perfumed spirits, and toilet preparations containing spirit	,,	13 0 0
	Spirit which has been rendered effectually and permanently unfit for human consumption	*ad valorem*	Five per cent
	Spirit used in drugs, medicines, or chemicals	Imperial gallon or 6 quart bottles of the Strength of Londonproof	7 13 0 and the duty to be increased or reduced in proportion as the strength of the spirit exceeds or is less than London proof
	Spirit, other sorts	,,	9 6 0 and the duty to be increased or reduced in proportion as the strength of the spirit exceeds or is less than London proof.
	WINES—		
	Champagne and all other sparkling wines not containing more than 42 per cent of proof spirit	Imperial gallon or 6 quart bottles	3 12 0
	All other sorts of wines not containing more than 42 per cent of proof spirit	,,	1 8 0
	Provided that all sparkling and still wines containing more than 42 per cent of proof spirit shall be liable to duty at the rate applicable to "Spirit, other sorts"		
2	OPIUM (*b*) and its alkaloids	seer of 80 tolas	24 0 0
3	SALT (c)—	Indian maund of 82⅔ lbs avoirdupois weight	The rate at which excise duty is for the time being leviable on salt manufactured in the place where the import takes place. (*d*)

Schedule III—(Import Tariff)—*contd.*

No	Names of Articles	Per	Rate per duty.
	LIQUORS, OPIUM, SALT, FISH, TOBACCO AND SILVER—*concld.*		
4	SALTED FISH, wet or dry .	Indian maund of 82$\frac{2}{7}$ lbs avoirdupois weight	Such rate or rates of duty not exceeding twelve annas as the Governor-General in Council may, by notification in the *Gazette of India*, from time to time prescribe. (*e*)
5	TOBACCO—		
	Unmanufactured	pound	1 0 0
	Cigars . .	,,	1 10 0
	Cigarettes weighing less than 3 lb per thousand	thousand .	3 2 0
	Cigarettes weighing 3lb or more per thousand	pound	1 4 0
	Manufactured, other sorts	,, .	1 2 0
6	SILVER bullion or coin, except current coin of the Government of India which is free	ounce	

(*a*) Spirit imported from any port in British India, and protected by the certificate of an officer empowered in that behalf, is chargeable with only the amount, if any, by which the duty leviable thereon exceeds the duty shown by such certificate to have been already paid.—(Act VIII of 1894, Section 7)

(*b*) Opium imported from any port in British India, and protected by the certificate of an officer empowered in that behalf, is chargeable with only the amount, if any, by which the duty leviable thereon exceeds the duty shown by such certificate to have been already paid —(Act VIII of 1914, Section 7)

(*c*) Salt imported from any port in British India, and protected by the certificate of an officer empowered in that behalf, is chargeable with only the amount, if any, by which the duty leviable thereon exceeds the duty shown by such certificate to have been already paid —(Act VIII of 1894, Section 7)

(*d*) By Finance Department Notification No 1748-Exc, dated the 20th March 1907, the duty was fixed at one rupee in the case of Burma, Bengal, Madras, Bombay and Sind. In case of Aden the duty is one rupee for each 140 lb avoirdupois.

(*e*) The rate is six annas.

Schedule IV—(Import Tariff.)

GENERAL DUTIES

No	Names of Articles	Per	Tariff Valuation	Duty.
	ANIMALS, LIVING.		Rs. a p.	
1	HORSES, CATTLE, SHEEP, and all other living animals of all kinds	. . .	....	Free.
	ARTICLES OF FOOD AND DRINK.			
2	COFFEE	cwt.	42 0 0	Five per cent.
3	FRUITS AND VEGETABLES (except fresh fruits and vegetables not separately enumerated, which are free)—			
	Almonds without shell	,,	80 0 0	,,
	,, in the shell	,,	20 0 0	,,
	,, (kaġazi) . . .	,,	70 0 0	,,

Schedule IV.—(Import Tariff.)—*contd.*

No	Names of Articles	Per	Tariff Valuation.	Duty.
	ARTICLES OF FOOD AND DRINK—*contd*		Rs a p	
3	FRUITS AND VEGETABLES—*contd.*			
	Cashew or cajoo kernels .. .	cwt	28 0 0	Five per cent.
	Coconuts, Straits .	thousand	70 0 0	,,
	,, other	,,	65 0 0	,,
	,, kernel (khopra) .	cwt	22 0 0	,,
	Currants . .	,,	22 0 0	,,
	Dates, dry, in bags .	,,	7 0 0	,,
	,, wet, ,, baskets and bundles	,,	6 0 0	,,
	,, ,, in pots, boxes, tins, and crates	,,	8 0 0	,,
	Figs, Persian, dried .. .	,,	9 0 0	,,
	Garlic ..	,,	6 0 0	,,
	Hops	.		Free.
	Pistachio nuts	cwt	37 0 0	Five per cent.
	Prunes, Bucora (alu-Bokhara) ..		*ad valorem*	,,
	Raisins, black		,,	,,
	,, kishmish, Persian Gulf	.	,,	,,
	,, Munakka ,, ,,	cwt	11 0 0	,,
	,, other sorts .		*ad valorem*	,,
	Walnuts, all descriptions		,,	,,
	All other sorts of fruits and vegetables		,,	,,
4	GRAIN AND PULSE including broken grain and pulse, but not including flour			Free.
5	MINERAL AND AERATED WATERS, and all unfermented and non-alcoholic beverages		*ad valorem*	Five per cent.
6	PROVISIONS, OILMAN'S STORES, AND GROCERIES—			
	Bacon . .		,,	,,
	Beef and Pork . .		,,	,,
	Beche de mer	.. .	,,	,,
	Butter . ..	lb	1 4 0	,,
	Cassava, Tapioca or Sago	cwt	12 0 0	,,
	Cheese . .	. .	*ad valorem*	,,
	China preserves in syrup	cwt (nett)	24 0 0	,,
	,, ,, dry, candied	lb	0 5 0	,,
	Cocum	cwt.	4 8 0	,,
	Fish-maws . .	....	. .	Free.
	Flour .. .	....	*ad valorem*	Five per cent.
	Ghi	cwt	75 0 0	,,
	Margarine .	...	*ad valorem*	,,
	Pork hams .	....	,,	,,
	Shark-fins . .	. .	....	Free.
	Singally and sozille .	.	....	,,
	Vinegar, in cask . ..		*ad valorem*	Two and one-half per cent.
	,, not in cask—			
	,, Persian .		,,	Five per cent.
	,, Indian . ..		,,	,,
	All other sorts of provisions, oilman's stores, and groceries		,,	,,

Schedule IV.—(Import Tariff.)—*contd.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	ARTICLES OF FOOD AND DRINK—*contd.*		Rs a p	
7	SPICES—			
	Betelnuts, raw, whole, split, or sliced, from Goa	cwt	13 8 0	Five per cent.
	,, ,, ,, ,, ,, ,, Straits and Dutch East Indies . .	,,	8 0 0	,,
	,, whole, from Ceylon	,,	11 0 0	,,
	,, raw, split (sun-dried) from Ceylon	,,	20 0 0	,,
	,, all other sorts .		*ad valorem*	,,
	Chillies, dry	cwt	12 0 0	,,
	Cloves	,,	52 0 0	,,
	,, stems and heads	,,	10 0 0	,,
	,, in seeds, narlavang .	,,	13 0 0	,,
	Ginger, dry	,,	18 0 0	,,
	Mace	lb	1 12 0	,,
	Nutmegs .	,,	0 5 0	,,
	,, in shell	,,	0 3 0	,,
	Pepper, black	cwt	3 0 0	,,
	,, white	,,	60 0 0	,,
	All other sorts of spices		*ad valorem*	,,
8	SUGAR, crystallised, beet	cwt	9 12 0	,,
	,, ,, and soft, refined in China	,,	11 8 0	,,
	,, ,, ,, ,, from Java, 23 Dutch standard and above	,,	9 8 0	,,
	,, ,, ,, ,, from Java, 16 to 22 Dutch standard	,,	8 12 0	,,
	,, ,, ,, ,, from Java, 15 Dutch standard and under	,,	8 4 0	,,
	,, ,, ,, ,, from Mauritius, equal to 16 Dutch standard and over	,,	9 8 0	,,
	Molasses from Java ..	,,	2 4 0	,,
	,, ,, other countries	,,	2 8 0	,,
	Sugar all other sorts, including saccharine produce of all kinds and confectionery	. ..	*ad valorem*	,,
9	TEA, black .	lb	0 11 0	,,
	,, green . . .	,,	0 10 0	,,
	CHEMICALS, DRUGS, MEDICINES AND NARCOTICS AND DYEING AND TANNING MATERIALS			
10	CHEMICAL PRODUCTS AND PREPARATIONS—			
	Acid, sulphuric .	.	*ad valorem*	,,
	Alkali, Indian (sajji-khar)	cwt	2 6 0	,,
	Alum .	,,	5 0 0	,,
	Arsenic (China mansil) . .	,,	20 0 0	,,
	,, other sorts . .	.	*ad valorem*	,,
	Copperas, green .	.. .	,,	Two and one-half per cent.
	Explosives namely, blasting gelatine, dynamite, roburite, tonite, and all other descriptions, including detonators and blasting fuse	..	*ad valorem*	Five per cent.
	Sal ammoniac	cwt	31 0 0	,,
	Soda ash	,,	3 12 0	,,
	Soda Bicarbonate	,,	5 0 0	,,

Schedule IV.—(Import Tariff.)—*contd*

No	Names of Articles.	Per	Tariff Valuation.	Duty
	ARTICLES OF FOOD AND DRINK—*contd*		Rs a p	
10	CHEMICALS, PRODUCTS AND PREPARATIONS—*contd*			
	Sulphate of Copper	cwt	19 0 0	Five per cent.
	Sulphur (brimstone), flour	,,	5 8 0	,,
	,, ,, roll	,,	5 4 0	,,
	,, ,, rough		*ad valorem*	,,
	All other sorts of chemical products and preparations, including saltpetre, borax, grape-sugar, and glucose, but excluding nitrate of soda, muriate of potash, sulphate of ammonia, sulphate of potash, kainit salts, nitrate of lime, calcium cyanamide and mineral superphosphates which are free		,,	,,
11	DRUGS, MEDICINES AND NARCOTICS—			
	Aloes, black		,,	,,
	,, Socotra		,,	,,
	Aloe-wood		,,	,,
	Anti-plague serum			Free.
	Asafœtida (hing)	cwt	115 0 0	Five per cent.
	,, coarse (hingra)	,,	30 0 0	,,
	Atary, Persian		*ad valorem*	,,
	Banslochan (bamboo camphor)	lb	0 6 0	,,
	Brimstone (amalsara)		*ad valorem*	,,
	Calumba root	cwt	8 0 0	,,
	Camphor, refined, other than powder	lb	1 4 0	,,
	Camphor, in powder		*ad valorem*	,,
	Cassia lignea	cwt	25 0 0	,,
	China root (chobchini), rough	,,	9 0 0	,,
	,, ,, ,, scraped	,,	15 0 0	,,
	Cocaine		*ad valorem*	,,
	Cubebs	cwt	95 0 0	,,
	Galangal, China	,,	7 0 0	,,
	Pellitory (akalkara)		*ad valorem*	,,
	Peppermint, crystals		,,	,,
	Quinine and other alkaloids of cinchona			Free.
	Salep	cwt	140 0 0	Five. per cent.
	Senna leaves		*ad valorem*	,,
	Storax, liquid (rose mellos or salaras)	cwt	33 0 0	,,
	All other sorts of drugs, medicines, and narcotics, except opium and tobacco (for which see Schedule III)	....	*ad valorem*	,,
12	DYEING AND TANNING MATERIALS—			
	Alizarine dye, dry, 40 per cent	lb	1 2 0	,,
	,, ,, ,, 50 ,,	,,	1 6 0	,,
	,, ,, ,, 60 ,,	,,	1 10 0	,,
	,, ,, ,, 70 ,,	,,	1 14 0	,,
	,, ,, ,, 80 ,,	,,	2 2 0	,,
	,, ,, ,, 100 ,,	,,	2 9 0	,,
	,, ,, moist 10 ,,	,,	0 4 0	,,
	Alizarine dye, moist, 16 per cent	,,	0 5 6	,,
	,, ,, ,, 20 ,,	,,	0 6 6	,,
	Aniline ,, ,, indigo blue	,,	0 6 0	,,
	,, ,, dry	,,	0 14 0	,,
	,, salts	....	*ad valorem*	,,

Schedule IV.—(Import Tariff.)—*contd.*

No.	Names of Articles	Per	Tariff Valuation	Duty.
12	DYEING AND TANNING MATERIALS—*contd*		Rs. a. p.	
	Avar bark	cwt.	3 12 0	Five per cent
	Buzgand (gulpista) .	.	*ad valorem*	,,
	Cochineal . .	lb.	0 15 0	,,
	Gallnuts (myrabolams)	...	*ad valorem*	,,
	,, Persian	cwt.	33 0 0	,,
	Madder or manjit	. .	*ad valorem*	,,
	Orchilla weed		,,	,,
	Sappon wood and root	..	,,	,,
	Turmeric .		,,	,,
	All other sorts of dyeing and tanning materials .		,	,,
	METALS AND MANUFACTURES OF METALS			
13	HARDWARE AND CUTLERY, including ironmongery and platedware, and also including machines, tools, and implements to be worked by manual or animal labour [*Exceptions, which are free* (i) Water-lifts sugar-mills, oil-presses, and parts thereof, and any other machines and parts of machines ordinary used in processes of husbandry, or for the preparation for use or for sale of the products of husbandary, which the Governor-General in Council may, by notification in the *Gazette of India*, exempt, (ii) the following agricultural implements, when constructed so that they can be worked by manual or animal power, namely, winnowers, thershers, mowing and reaping machines, elevators, seed-crushers, chaff-cutters, root-cutters, horse and bullock gears, ploughs, cultivators, scarifiers, harrows clod-crushers, seed-drills, hay-tedders, and rakes, (iii) the following dairy appliances, when constructed so that they can be worked by manual or animal power namely, cream separators, milk sterilizing or pasteurizing plant, milk aerating and colling apparatus, churns, butter dryers, and butter workers, (iv) the following articles used in the manufacture of cotton, namely bobbins, warping) forks for looms, healds, heald cords, heald knitting needles, laces, lags and needles for dobbies, pickers (buffalo and others) picking bands, picking levers, picking sticks (over and under) reed pliers, reeds, shuttles (for power looms), springs for looms, strappings, and weft forks, (v) box backs and wells and rough unshaped bobbin ends, when imported by or on behalf of a manufacturer or millowner and certified by him to be intended exclusively for use in his mill]	. .	...	....
14	MACHINERY namely, prime-movers and component parts thereof, including boilers and componenet pats thereof; also including locomotive and portable engines, steam-rollers, fire-engines, and other machines in which the prime-mover is not separable from the operative parts	....	.. .	Free.
	MACHINERY (and component parts thereof), meaning machines or sets of machines to be worked by electric steam, water, fire or other power not being manual or animal labour, or which, before being brought into use, require to be fixed with reference to other moving parts, and including belting of all materials for driving machinery ..	....	....	,,

Schedule IV.—(Import Tariff.)—*contd.*

No.	Names of Articles.	Per	Tariff Valuation	Duty.
	METALS AND MANUFACTURES OF METALS—*contd.*		Rs a p	
14	MACHINERY, etc—*contd.*			
	Provided that the term does not include tools and implements to be worked by manual or animal labour, and provided also that only such articles shall be admitted as component parts of machinery as are indispensable for the working of the machinery and are, owing to their shape or to other special quality, not adapted for any other purpose.			
	Note—Machinery and component parts thereof made of substances other than metal are included in this entry			
15	METALS, unwrought and wrought, and articles made of metals—			
	Brass, orsidue and leaves, European		*ad valorem*	Five per cent
	,, ,, ,, China .		,,	,,
	,, patent or yellow metal, sheets weighing 1 lb or above per square foot, and sheathing, braziers, and plates	cwt	54 0 0	,,
	,, patent or yellow metal (old)	,,	37 0 0	,,
	,, sheets, flat or in rolls, weighing less than 1lb per square foot		*ad valorem*	,,
	,, wire		,,	,,
	,, all other sorts		,,	,,
	Copper, bolt and bar, rolled . .			
	,, braziers, sheets, plates and sheathing	cwt	65 0 0	,,
	,, nails and composition nails ..		*ad valorem*	,,
	,, old . ..	cwt	45 0 0	,,
	,, pigs, tiles, ingots, cakes, bricks, and slabs	,,	60 0 0	,,
	,, China, white, copperware	lb	2 0 0	,,
	,, foil or dankpana, white, 10 to 11 in × 4 to 5 in.	hundred leaves	1 14 0	,,
	,, foil or dankpana, coloured, 10 to 11 in × 4 to 5 in.	,,	2 0 0	,,
	,, wire, including phosphor bronze .		*ad valorem*	,,
	,, all other sorts, unmanufactured and manufactured, except current coin of the Government of India, which is free ..		,,	,,
	German Silver		,,	,,
	Gold bullion and coin		. .	Free.
	,, leaf		*ad valorem*	Five per cent.
	Iron, anchors and cables	. .	,,	One per cent.
	,, Lowmoor and similar qualities, all descriptions .		,,	,,
	,, angle, T other than Lowmoor or Swedish ..	ton	100 0 0	,,
	,, ,, and hoop, other than Lowmoor or Swedish, if galvanised, tinned, or lead-coated	..	*ad valorem*	,,
	,, bar, Swedish and similar qualities ..	ton	183 0 0	,,
	,, ,, Swedish and similar qualities, nail-rod, round-rod, and square, under half an inch india.	,,	195 0 0	,,

Schedule IV.—(Import Tariff.)—*contd.*

No.	Names of Articles	Per	Tariff Valuation	Duty.
	METALS AND MANUFACTURES OF METALS—*contd.*		Rs a. p	
15	METALS, unwrought and wrought, and articles made of metals—*contd*			
	Iron bars, other kinds	ton	100 0 0	One per cent.
	" " " " nail-rod, round-rod, and square, under half an inch in diameter	"	105 0 0	"
	" " " " if galvanised, tinned, or lead-coated	.	*ad valorem*	"
	" beams, joists, pillars, girders, screwpiles, bridge work, and other such descriptions of iron, imported exclusively for building purposes		"	"
	" channels, including channel for carriages		"	"
	" plate and sheet, Swedish and charcoal	.	"	"
	" bars, plates, and sheets, Swedish and charcoal if galvanised, tinned, or lead-coated	.	"	"
	" plate, other kinds, above ⅛ inch thick, and strips	ton	115 0 0	"
	" sheets, other kinds, up to ¼ inch thick	"	120 0 0	"
	" sheets (other than corrugated), plates or strips, other kinds, if galvanised, tinned, lead-coated, chequered or planished	. .	*ad valorem*	"
	" sheets, corrugated, galvanised or black .	ton	185 0 0	"
	" hoop	"	135 0 0	"
	" nails, rose, wire, and flat-head	cwt	10 0 0	"
	" " other kinds, including galvanised, tinned, or lead-coated . .		*ad valorem*	"
	" nuts and bolts, also hooks and nuts for roofing, galvanised or black	.	"	"
	" old ..	cwt	2 " 8 0	"
	" pig .	.	*ad valorem*	"
	" pipes and tubes, including fittings therefor, such as bends, boots, elbows, tees, sockets, flanges, and the like	...	"	"
	" rails, chairs, sleepers and bearing, and fish-plates, spikes (commonly known as dog-spikes,) switches and crossings other than those described in No 60, also lever-boxes, clips and tie-bars		"	"
	" rice-bowls		"	"
	" ridging, guttering, and continuous roofing		"	"
	" rivets and washers, all sorts	.	"	"
	" wire, including fencing wire and wire-rope but excluding wire-netting	. .	"	"
	" cans or drums, when imported containing petroleum, which is separately assessed to duty at one anna and six pies per Imperial gallon under No 16 namely —			
	Iron, cans, tinned, other than petrol tins of two gallons capacity	can	0 3 6	Five per cent.
	" " or drums, not tinned, of two gallons capacity ..	"	0 2 0	"
	" drums of four gallons capacity—			
	(*a*) with faucet caps	drum	1 0 0	"
	(*b*) ordinary .	"	0 8 0	"

Schedule IV.—(Import Tariff)—*contd.*

o.	Names of Articles	Per	Tariff Valuation.	Duty.
	METALS AND MANUFACTURES OF METALS—*contd.*		Rs. a. p	
5	METALS, unwrought and wrought, and articles made of metals—*contd*			
	Iron, all other sorts, including dies or circles and wire netting		*ad valorem*	Five per cent.
	Lametta	.	,,	,,
	Lead, all sorts (except sheets for tea chests which are free)		,,	,,
	Quicksilver	lb	1 10 0	,,
	Shot, bird	cwt	22 0 0	,,
	Steel, anchors and cables		*ad valorem*	One per cent.
	,, blooms	.	,,	,,
	,, angle, T	ton	100 0 0	,,
	,, ,, ,, and hoop, if galvanised, tinned, or lead-coated		*ad valorem*	,,
	,, bars, (other than cast steel)	ton	100 0 0	,,
	,, ,, Swedish and similar qualities	.	*ad valorem*	,,
	,, ,, nail-rod, round-rod, and square, under ½ inch in diameter	ton	105 0 0	,,
	,, bar, galvanised, tinned, lead-coated, planished, or polished		*ad valorem*	,,
	,, channel, including channel for carriages		,,	,,
	plates, above ⅛ inch thick, and strips	ton	115 0 0	,,
	,, sheets, up to ⅛ inch thick	,,	120 0 0	,,
	,, sheets (other than corrugated), plates or strips, if galvanised tinned, lead-coated, chequered, or planished	.	*ad valorem*	,,
	,, sheets, corrugated, galvanised or black	ton	185 0 0	,,
	,, hoop	,,	135 0 0	,,
	,, nails	.	*ad valorem*	,,
	,, nuts and bolts, also hooks and nuts for roofing, galvanised or black	.	,,	,,
	,, old	cwt	2 8 0	,,
	,, beams, joists, pillars, girders, screwpiles, bridge-work, and other such descriptions of steel, imported exclusively for building purposes		*ad valorem*	,,
	,, cast and blistered, including spring and tub steel		,,	,,
	,, ridging, guttering, and continuous roofing	.	,,	,,
	,, pipes and tubes, including fittings therefor, such as bends, boots, elbows, tees, sockets, flanges, and the like	.	,,	,,
	,, rails, chairs, sleepers and bearing, and fish-plates, spikes (commonly known as dog-spikes), switches, and crossings, other than those described in No 60, also lever-boxes, clips, and tie-bars	..	*ad valorem*	One per cent
	,, rivets and washers, all sorts	.	,,	,,
	,, wire, including fencing wire and wire-rope, but excluding wire-netting	.	,,	,,

Schedule IV.—(Import Tariff.)—*contd.*

No.	Names of Articles	Per	Tariff Valuation	Duty.
	METALS AND MANUFACTURES OF METALS—*contd*		Rs. a p	
15	Metals, unwrought and wrought, and articles made of metals—*concld.*			
	Steel, cans or drums, when imported, containing petroleum, which is separately assessed to duty at one anna and six pies per Imperial gallon under No 16 namely —			
	Steel, cans, tinned, other than petrol tins of two gallons capacity	can	0 3 6	Five per cent.
	„ „ or drums, not tinned, of two gallons capacity . ..	„	0 2 0	„
	„ drums of four gallons capacity—			
	(*a*) with faucet caps .	drum	1 0 0	„
	(*b*) ordinary .	„	0 8 0	„
	„ all other sorts, including discs or circles and wire-netting .		*ad valorem*	„
	Tin, block . .	cwt	162 0 0	„
	„ foil, and other sorts .	..	*ad valorem*	„
	Zinc or spelter, nails . .	.	„	„
	„ „ tiles or slabs, soft ..	cwt.	25 0 0	„
	„ „ „ „ hard	„	20 0 0	„
	„ „ all other sorts, including boiler tiles	.	*ad valorem*	„
	All other sorts of metals	.	„	„
	OILS			
16	PETROLEUM, including also naphtha and the liquids commonly known by the names of rock-oil, Rangoon oil, Burma oil, kerosene, paraffin oil, mineral oil, petroline, gasoline, benzol, benzoline, benzine, and any inflammable liquid which is made from petroleum, coal, schist, shale, peat or any other bituminous substance or from any products of petroleum	Imperial gallon	.	One anna and six pies
	PETROLEUM which has its flashing point at or above two hundred degrees of Fahrenheit's thermometer and is proved to the satisfaction of the Customs Collector to be intended for use exclusively for the batching of jute or other fibre, or for lubricating purposes	....	*ad valorem*	Five per cent.
	PETROLEUM which has its flashing point at or above one hundred and fifty degrees of Fahrenheit's thermometer and is proved to the satisfaction of the Customs Collectors to be intended for use exclusively as fuel or for some sanitary or hygienic purpose	...	„	„
	Cocoanut oil	cwt	32 0 0	„
	All other sorts of oil, animal or vegetable (including otto of all kinds), and mineral, including Paraffin wax	....	*ad valorem*	„

Schedule IV.—(Import Tariff)—*contd.*

No	Names of Articles	Per	Tariff Valuation	Duty
	OTHER ARTICLES UNMANUFACTURED AND MANUFACTURED.		Rs. a. p.	
17	APPAREL, including drapery, haberdashery and millinery, and military and other uniforms and accoutrements, but excluding cotton, hosiery (for which see No 30) and boots and shoes (for which see No 45), and excluding also uniforms and accoutrements appertaining thereto, imported by a public servant for his personal use, which are free . .		*ad valorem*	Five per cent.
18	ART, WORKS OF, except (1) statuary and pictures intended to be put up for the public benefit in a public place, and (2) memorial of a public character intended to be put up in a public place, including the materials used, or to be used, in their construction, whether worked or not, which are		,,	,,
19	BAMBOOS, common, grass, hay, rushes, straw, and leaves .		. .	Free.
20	BOOKS, printed, including covers for printed books, maps, charts, and plans, proofs, music, and manuscripts .		....	,,
21	BRISTLES AND FIBRE, for brushes and brooms .		....	,,
22	BRUSHES AND BROOMS, all sorts ..		*ad valorem*	Five per cent
23	BUILDING AND ENGINEERING MATERIALS, namely, asphalt, bricks and tiles, cement of all kinds, fireclay earthenware piping, lime, and other kinds not otherwise described ..		,,	,,
24	CABINETWARE AND FURNITURE .	.	,,	,,
24*a*	CHALLENGE CUPS OR TROPHIES which have been won by any military unit (including volunteer corps) or by a particular member or members of any such unit in India or which have been sent by donors resident abroad for presentation or competition in India			Free
	Provided that the articles are certified by the officer commanding the unit or brigade or any higher military authority or any of their staff officers as having been offered for competition or presented with the sole or main object of encouraging military efficiency, and that they have had engraved on them before being shipped the object for which presented and, except in the case of those sent by donors resident abroad for competition in India, the name of the winner or winners.			
25	CARRIAGES AND CARTS, including motor cars, bicycles, tricycles, jinrikshas, bath chairs, perambulators, trucks, wheelbarrows, and all other sorts of conveyances and component parts thereof, but excluding motor cars designed to carry goods and containing a prime-mover, which are free	.	*ad valorem*	Five per cent.
26	CHINESE AND JAPANESE WARE including lacquered-ware, but excluding earthenware, china and porcelain (for which see No 32)	....	,,	,,

Schedule IV.—(Import Tariff)—*contd.*

No	Names of Articles	Per	Tariff Valuation.	Duty.
	OTHER ARTICLES, UNMANUFACTURED AND MANUFACTURED—*contd*		Rs. a p	
27	CLOCKS, WATCHES, and other time-keepers, and parts thereof		*ad valorem*	Five per cent.
28	COAL, COKE, AND PATENT FUEL			Free.
29	CORDAGE, ROPE, and twine made of any vegetable fibre		*ad valorem*	Five per cent.
30	COTTON, AND ARTICLES MADE OF COTTON—			
	Cotton, raw			Free
	,, twist and yarn			,,
	,, sewing and darning thread			,,
	,, piece-goods, hosiery, crochet cotton thread, and all other manufactured cotton goods not otherwise described		*ad valorem*	Three and one-half per cent.
31	EARTH, COMMON CLAY, AND SAND			Free
32	EARTHENWARE (except earthenware piping, for which see No. 23), china, china clay porcelain, and imitation or false coral		*ad valorem*	Five per cent.
33	FANS OF ALL KINDS, except common palm-leaf fans, which are free		,,	,,
34	FIREWORKS, all sorts, including fulminating-powder		,,	,,
35	FLAX, AND ARTICLES MADE OF FLAX, including linen-thread		,,	,,
36	FURNITURE, TACKLE, AND APPAREL, not otherwise described, for steam, sailing, rowing, and other vessels		,,	,,
37	GUMS, GUM-RESINS, and articles made of gum or gum-resin—			
	Copal		,,	,,
	Cutch and gambier (natural)	cwt	20 0 0	,,
	Gamboge	lb	1 12 0	,,
	Gum Ammoniac	cwt	30 0 0	Five per cent
	,, Arabic	,,	22 0 0	,,
	,, Bdellium		*ad valorem*	,,
	,, Benjamin, ras	cwt	32 0 0	,,
	,, ,, cowrie	,,	80 0 0	,,
	,, Bysabol (coarse myrrh)	,,	25 0 0	,,
	,, Olibanum or frankincense			Free
	,, Persian (false)	cwt	18 0 0	Five per cent.
	Myrrh	,,	30 0 0	,,
	Rosin	,,	12 0 0	,,
	All other sorts of gums, gum-resins, and articles made of gum or gum-resin, including caoutchouc and gutta-percha		*ad valorem*	,,
38	HEMP, including Manila hemp, and articles made therefrom		,,	,,

Schedule IV.—(Import Tariff)—*contd.*

No.	Names of Articles	Per	Tariff Valuation.	Duty
	OTHER ARTICLES, UNMANUFACTURED AND MANUFACTURED—*contd*		Rs. a. p	
39	HIDES AND SKINS (except raw or salted hides and skins, which are free), including parchment and vellum, gold-beaters' skins, and all other descriptions of hides or skins . .	.	*ad valorem*	Five per cent
40	HORN . .	.	....	Free
	,, articles made of, not otherwise described		*ad valorem*	Five per cent.
41	INSTRUMENTS, APPARATUS, AND APPLIANCES, and parts thereof—Computing, Dental, Distilling, Diving, Drawing, Educational, Electric, Electric lighting, Galvanic, Measuring, Musical, Optical, Philosophical, Phonographic, Photographic (including materials for Photography), Scientific, Surgical, Surveying, Telegraphic, Telephonic, Typewriters, and all other sorts, except Telegraphic instruments and apparatus, and parts thereof, when imported by or under the orders of a railway company, and any instruments, apparatus, and appliances when imported by a passenger as part of his personal baggage and in actual use by him in the exercise of his profession or calling which are free All band instruments (other than stringed instruments), imported by a Native regiment of His Majesty's regular forces in India, or by a unit of the Imperial Service Troops, or by a Military Police Battalion, and certified by the Officer Commanding the regiment or unit or the officer in charge of the Military Police Battalion to be for the *bona fide* exclusive use of the regimental band, or the band attached to the Military Police Battalion, as the case may be, and the following accessories thereto, are also free of duty —			
	Bags for bagpipes Cardholders Carriages (brown or black) Cases for reeds and mouthpieces Cases (leather or wooden) Chanters, pipe, and practice Cleaners for brass and reed instruments Cord for bagpipes Crooks. Drones for bagpipes Drum heads Drum sticks Drum flesh hoops Fingertops Green broadcloth for drums Green Silk ribbon for drums	Key pads for reed instruments Ligatures for reed instruments Mouthpieces and caps therefor Mutes for brass instruments Pipe tassels for bagpipes Reeds Ribbons for bagpipes Ropes for drums Sanks and slides for brass instruments Silver buckles for drums Silver buttons for drums Springs Snares Taps for brass instruments Valve corks Valve tops and needles	...	,,	,,

Schedule IV.—(Import Tariff)—*contd.*

No.	Names of Articles	Per	Tariff Valuation	Duty.
	OTHER ARTICLES UNMANUFACTURED AND MANUFACTURED.		Rs a p	
42	IVORY AND IVORY-WARE—			
	Unmanufactured—			
	Elephants' grinders	cwt	300 0 0	Five per cent.
	„ tusks (other than hollows, centres, and points), each exceeding 20lb in weight, and hollows, centres, and points each weighing 10lb and over	„	800 0 0	„
	Elephants' tusks (other than hollows, centres, and points), not less than 10lb and not exceeding 20lb each, and hollows, centres, and points each weighing less than 10lb	„	700 0 0	„
	Elephants' tusks, each less than 10lb (other than hollows, centres, and points)	„	450 0 0	„
	Sea-cow or moye teeth, each not less than 4lb	„	175 0 0	„
	Sea-cow or moye teeth each not less than 3lb and under 4lb	„	150 0 0	„
	Sea-cow or moye teeth, each less than 3lb	„	120 0 0	„
	All other sorts, manufactured and unmanufactured		*ad valorem*	„
43	JEWELLERY AND JEWELS, including plate and other manufactures of gold and silver—			
	Silverware, plain } other than	tola	1 2 0	„
	„ embossed or chased } European	„	1 6 0	„
	All other sorts, except precious stones and pearls, unset, which are free		*ad valorem*	„
44	Jute, raw		....	Free
	„ articles made of, except second-hand or used gunny bags, which are free		*ad valorem*	Five per cent.
45	LEATHER, and articles made of leather, including boots and shoes, harness and saddlery, except saddlery of a military pattern imported by an officer of His Majesty's regular forces and forming part of the equipment with which he is required to supply himself under Army Regulations, which is free		„	„
46	MALT		„	„
47	MANURES of all kinds, including animal bones			Free.
48	OILCAKE, also bran, fodder, and cattle-food of all kinds		..	„
49	OIL-CLOTH AND FLOOR-CLOTH, including linerusta, linoleum, and tarpaulins		*ad valorem*	Five per cent.
50	PAINTS, COLOURS, PAINTERS' MATERIALS and compositions for application to leather, wood, and metals—			
	Lead, red, dry	cwt	18 0 0	„
	„ white, dry	„	22 0 0	„
	Ochre, other than European, all colours	„	5 0 0	„
	Paints, composition	..	*ad valorem*	„
	„ patent driers	..	„	„
	Turpentine	Imperial gallons.	3 4 0	„
	Verdigris		*ad valorem*	„
	Vermilion, Canton	box of 90 bundles.	115 0 0	„
	Zinc, white, dry	....	*ad valorem*	„
	All other sorts including glue and putty	....	„	„

SCHEDULE IV—(IMPORT TARIFF).

No.	Names of Articles.	Per.	Tariff Valuation	Duty
	OTHER ARTICLES, UNMANUFACTURED AND MANUFACTURED—*contd.*		Rs a. p	
51	PAPER, PASTEBOARD, MILLBOARD, AND CARDBOARD of all kinds, including ruled or printed forms and account and manuscript books, labels, advertising circulars, sheet or card almanacs and calendars, Christmas, Easter, and other cards, including cards in booklet form including also waste paper and old newspapers for packing, but excluding trade catalogues and advertising circulars imported by packet, book, or parcel post, which are free		*ad valorem*	Five per cent
	PAPER, articles made of paper and papier-mache .		,,	,,
52	PERFUMERY—			
	Gowla husked and unhusked	cwt	55 0 0	
	Kapurkachri (zedoary)	,,	17 0 0	,,
	Patch leaves (patchouli)	,,	20 0 0	,,
	Rose-flowers, dried	,,	27 0 0	,,
	Rose-water .	Imperial gallon	2 0 0	,,
	All other sorts, except perfumed spirit (for which see Schedule III)	.	*ad valorem*	,,
53	PITCH, TAR, AND DAMMER—			
	Bitumen		,,	,,
	Dammer		,,	,,
	Pitch, American and European		,,	,,
	,, coal		,,	,,
	Tar, American and European		,,	,,
	,, coal .		,,	,,
	,, mineral		,,	,,
54	PLANTS AND BULBS living, also dried for herbaria		..	Free
55	PRECIOUS STONES AND PEARLS, unset (including the stones generically known as Cambay stones, such as agates, cornelians, and onyx)	.	.	,,
56	PULP of wood, straw, rags, paper, and other materials		..	,,
57	PRINTING AND LITHOGRAPHING MATERIAL, namely, presses, type, ink, brass rules, composing sticks, chases, imposing tables, and lithographic stones, stereo-blocks, roller moulds, roller frames and stocks, roller composition, standing screw and hot presses, perforating machines, gold blocking presses, stereotyping apparatus, metal furniture, paper folding machines, and paging and numbering machines, but not including paper .	.	..	,,
58	RAGS	. .	.	,,
59	RACKS for the withering of tea leaf	.. .	.	,,
60	RAILWAY MATERIAL for permanent-way and rolling-stock, namely, cylinders, girders, and other material for bridges, rails, sleepers, bearing and fish-plates, fish-bolts, chairs, spikes, crossings, sleeper fastenings, switches, interlocking apparatus, brake gear, couplings and springs, signals, turn-tables, weigh-bridges, engines, tenders, carriages, wagons, traversers, trollies, trucks, and component parts thereof, also the following articles when imported by or under the orders of a railway company, namely, cranes, water cranes, water tanks, and standards, wire and other materials for fencing.			

SCHEDULE IV—(IMPORT TARIFF).

No	Names of Articles	Per	Tariff Valuation.	Duty
	OTHER ARTICLES, UNMANUFACTURED AND MANUFACTURED—*contd.*	–	Rs a. p.	
	Provided that for the purpose of this exemption "railway" means a line of railway subject to the provisions of the Indian Railways Act, 1890, and includes a railway constructed in a Native State under the suzerainty of His Majesty, and also such tramways as the Governor-General in Council may, by notification in the *Gazette of India* specifically include therein	.	.	Five per cent.
61	SEEDS, except oil-seeds imported into British India by sea from the territories of any Native Prince or Chief in India which are free—			
	All sorts	.	*ad valorem*	
62	SHELLS AND COWRIES—			
	Chanks—large shells, for cameos		,,	,,
	,, white, live .		,,	,,
	,, ,, dead .		,,	,,
	Cowras		,,	,,
	Cowries, bazar, common	cwt	4 0 0	,,
	,, yellow, superior quality	,,	5 0 0	,,
	,, Maldive ..	,,	7 0 0	,,
	,, Sankhli	,,	140 0 0	,,
	Mother-of-pearl, nacre			Free
	Nakhla	cwt	105 0 0	Five per cent.
	Tortoise-shell . .	lb	13 0 0	,,
	,, nakh .	,,	5 8 0	,,
	All other sorts, including articles made of shell, not otherwise described		*ad valorem*	,,
63	SHIPS AND OTHER VESSELS for inland and harbour navigation, including steamers, launches, boats, and barges, imported entire or in sections .. .	....	....	Free.
64	SILK AND ARTICLES MADE OF SILK—			
	Bokhara	lb	6 0 0	Five per cent
	Floss	. ..	*ad valorem*	,,
	Piece-goods	.	,,	,,
	Sewing thread, China	.	,,	,,
	Raw silk—Yellow Shanghai, including re-reeled .	lb	4 12 0	,,
	,, ,, from Indo-China, and places in China other than Shanghai including re-reeled .. .	,,	5 0 0	,,
	Mathow	,,	3 6 0	,,
	Panjam	,,	2 8 0	,,
	Persian	,,	4 8 0	,,
	Siam	,,	3 6 0	,,
	White Shanghai, Thomkoon or Dupplon	,,	3 4 0	,,
	,, ,, other kinds, including re-reeled .	,,	6 4 0	,,
	,, other kinds of China, including re-reeled	,,	6 12 0	,,
	Waste and Kachra	. .	*ad valorem*	,,
	All other sorts, including cocoons	...	,,	,,
65	SOAP	....	,,	,,

SCHEDULE IV—(IMPORT TARIFF)

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	OTHER ARTICLES, UNMANUFACTURED AND MANUFACTURED.—*concld.*			
66	SPECIMENS ILLUSTRATIVE OF NATURAL SCIENCE, including also antique coins and medals		....	Free
67	STATIONERY, excluding paper (for which see No. 51).	. .	*ad valorem*	Five per cent
68	STONE AND MARBLE, and articles made of stone and marble .		,,	,,
69	TALLOW AND GREASE, including stearine		,	,
70	TEA CHESTS of metal or wood, whether imported entire or in sections, provided that the Customs Collector is satisfied that they are imported for the purpose of the packing of tea for transport in bulk		.	Free.
71	TEXTILE FABRICS, not otherwise described		*ad valorem*	Five per cent
72	TOILET REQUISITES, not otherwise described ..	.	,,	,,
73	TOYS, including toy-books and requisites for all games		,,	,,
74	UMBRELLAS, parasols, and sunshades of all kinds		,,	,,
75	WALKING STICKS and sticks for umbrellas, parasols, and sunshades of all kinds, mounted and unmounted, driving, riding, and other whips fishing-rods and lines		,,	,
76	WOOD AND TIMBER (except firewood, which is free), and articles made of wood, not otherwise described . .		,,	,,
77	WOOL, raw		....	Free.
	,, articles made of, including felt		*ad valorem*	Five per cent.
78	ALL OTHER ARTICLES, manufactured or unmanufactured, not described in the Schedule .		,,	,,

SCHEDULE V—(IMPORT TARIFF)

No.	Names of Articles.	Per	Rate of duty.
			Rs. a. p.
1	Rice husked or unhusked, including rice flour, but not including rice bran and rice-dust, which are free	Indian maund of 82⅔ lb avoirdupois weight.	0 3 0

Note.—Under Act IX of 1903 a customs duty at the rate of a quarter of a pie per pound has been levied from the 1st April 1903 on all tea produced in India and exported from any customs port to any port beyond the limits of British India or to Aden. The proceeds of this cess are paid to the Tea Cess Committee appointed under Section 4 of the Act. On the recommendation of this Committee the maximum rate of a quarter of a pie per pound may be reduced.

Botanical and Zoological Surveys.

The Botanical Survey is under the direction of the Superintendent of the Royal Botanic Garden, Calcutta, with whom are associated the Economic Botanists belonging to the Agricultural Department In 1912 the post of Reporter on Economic Products was abolished and replaced by that of Economic Botanist to the Botanical Survey Much of the systematic botanical work of India is done for the department by forest officers and others Over 2,000 specimens were obtained in 1911-12 by the officer deputed to accompany the Abor Expedition as botanist, and a material addition was made to the information available as to the vegetation of the little-known frontier region traversed

Mammal Survey—An important movement has recently been inaugurated by the Bombay Natural History Society which has collected subscriptions for a survey of the mammals of India This Survey was begun in 1911 with the object of getting together properly prepared specimens of all the different kinds of Mammals in India, Burma and Ceylon so that their distribution and differences might be more carefully worked out than had been done before, also to form as complete as possible a collection of specimens for the Society's Museum in Bombay Before the Survey started the Society had a very small collection, and even in the British Museum in London the Indian specimens were very poorly represented Three trained collectors from England are in the service of the Society and the specimens obtained by the Survey are being worked out at the British Museum and duplicates presented to the different Indian Museums In India most of the country has been worked on the West Coast from Coorg as far north as Mount Abu, also the Central Provinces, Kumaon and Bengal The whole of Ceylon has been worked, and so has a considerable part of Burma. At the present time owing to the war only one collector is in the field in Sikkim, the others having gone to the front Funds for the Survey were raised by subscription from the principal Native Chiefs and some prominent Bombay citizens together with grants from the Government of India, the Government of Ceylon, the Government of Burma, the Government of the Malay States, and the different local Governments as well as donations from the Royal Society, the British Museum and the Zoological Society of London

The Board of Scientific Advice was established in 1902 to co-ordinate official scientific inquiry, to ensure that research work is distributed to the best advantage, and to advise the Government of India in prosecuting practical research into those questions of economic or applied science on the solution of which the agricultural and industrial development of the country so largely depends The Board includes the heads or leading representatives of the Survey, Agricultural, Civil Veterinary, and other Scientific Departments, with the Inspector-General of Forests and the Director of the Indian Institute of Science The programmes of investigation of the various departments are submitted to it for discussion and arrangement, and an annual report is published on the work done, as well as a general programme of research for the ensuing year The reports and the programmes formulated are communicated for consideration to an Advisory Committee of the Royal Society, which from time to time furnishes valuable suggestions and advice

The Indian Research Fund—Scientific research work is rapidly developing in India In 1911 the sum of 5 lakhs (£33,000) out of the surplus opium revenue was set aside as an endowment for research into epidemic diseases in connection with the Central Research Institute, at Kasauli It was hoped that this sum might be largely augmented by private subscriptions An Indian Research Fund Association was constituted, and a good deal of work has already been undertaken Its objects are defined as "the prosecution and assistance of research, the propagation of knowledge and experimental measures generally in connection with the causation, mode of spread and prevention of communicable diseases" Fresh investigations into kala azar and cholera have been inaugurated, and an officer was deputed, at the expense of the Fund, to study yellow fever in the regions where it is endemic, with a view to taking steps to prevent its introduction into India A further grant of 6 lakhs (£40,000) was made to the Central Research Fund from the opium surplus of 1911-12 It has been decided to devote to research and anti-malarial projects 5 lakhs (£33,000) a year from Imperial revenues commencing in 1913-14 A new periodical, The "Indian Journal of Medical Research" was instituted in 1913 and is published four times annually, as the official organ of the Research Fund The journal deals with every branch of research directly or indirectly connected with medical and sanitary science, and forms a record of what is being done in India for the advance of this work.

NATIVE PASSENGER SHIPS.

The following Resolution by the Government of India was issued in October 1913, as a result of inquiries set on foot after the loss of the Titanic.—

"The Board of Trade made a comprehensive revision of the scale of boats and life-saving appliance to be provided on board ships in the United Kingdom and appointed committees of experts to deal with collateral questions arising in the same connection. Meanwhile, the maritime local Governments have been consulted as to the necessity for revising the rules which govern vessels in British India, particularly those under the Native Passenger Ships Act 1887, the Pilgrim Ships Act 1895, and the Indian Emigration Act 1908, which are read in the notifications detailed above The replies show that while a revision is undoubtedly necessary, there is a great divergence of opinion as to the extent to which it is required and the

lines on which it should proceed The subject is one of considerable difficulty and complexity, involving a number of technical and other questions which need careful scrutiny The Government of India have therefore decided to appoint a committee representative of official and non-official interests which will enquire generally into the sufficiency of the existing rules and report its views to the Government The committee will consist of the following President and members —President, Mr C G Todhunter, I C S , Collector, Madras Presidency Members—the Hon'ble Sir Fazulbhoy Currimbhoy Ebrahim, Bombay , Commander C J C Kendall, D S O , R I M , Port Officer, Calcutta , Mr W H Ogston, partner in Messrs Killick, Nixon & Co , Bombay, Captain P Dest Cronix, Marine Department, British India Steam Navigation Company, Calcutta "

The Committee met at Bombay on the 10th November and subsequently visited other ports It was to submit its report to the Government of India on the 1st March 1914

Difficulties of the Question—The appointment of the committee was welcomed by the Press, though some criticisms were directed against the apparent narrowness of the scope of the inquiry The whole subject is one of considerable difficulty and complexity It is well-known that the standards laid down under the enactments now in force are not adequate to provide accommodation for all on board It would be invidious to specify any one vessel to illustrate the inadequacy of the present standards, but it may roughly be said that, on the assumption that the cubic capacity which should be provided in life-boats should be at the rate of ten cubic feet per adult, the accommodation now provided will only afford room for 20 to 50 per cent of the number of passengers carried The question is further complicated by reason of the fact that of a number of native passenger ships many are never out of sight of land during their voyages, and that any insistence on the principle that there should be life-boat accommodation for all on board will necessarily result in the curtailment of the carrying capacity It is doubtful therefore whether, in the case of passenger ships which are engaged in the carriage of passengers between ports separated by inconsiderable distances, some relaxation should not be allowed in the matter of providing life-boat accommodation for all on board The matter is thus essentially one for local investigation

Working of the Act.—Under the Native Passenger Ships Act (X of 1887) the term "Native Passenger Ships" is applied to sailing-ships, which carry as passengers more than thirty natives of Asia or Africa, and to steam-ships carrying more than sixty such natives Local Governments have discretionary power, with the sanction of the Governor-General in Council, to alter these numbers to fifteen and thirty, respectively A long voyage is defined in the Act as a voyage in which the ship will, in ordinary circumstances, be continuously out of port for one hundred and twenty hours or more and a short voyage as one in which the ship will not, in ordinary circumstances, be continuously out of port for one hundred and twenty hours The space allotted to passengers, and some of her conditions, differ in a long and a short voyage

The total number of persons who left Indian ports in native passenger ships under the Act, X of 1887, that is, who left as passengers, being neither emigrants to the Colonies of elsewhere nor pilgrims to the holy places in Arabia, was 2,526,248 in 1911-12.

TIDAL CONSTANTS.

The approximate standard time of High Water may be found by adding to, or subtracting from, the time of High Water at London Bridge, given in the calendar, the corrections given as below —

		H	M
Gibraltar	*sub*	0	32
Malta	*add*	1	34
Karachi	*sub*	2	33
Bombay	„	1	44
Goa	„	2	44
Point de Galle	*add*	0	12
Madras	*sub.*	5	6
Calcutta	*sub.*	0	19
Rangoon Town	*add*	2	41
„ River Entrance	„	1	35
Penang	*sub*	1	39
Singapore	„	3	25
Hongkong	„	4	27
Shanghai	„	0	34
Yokohama	*add*	3	6
Valparaiso	*sub*	4	40
Buenos Ayres	*add*	4	0
Monte Video	„	0	32

Wild Animals and Snakes.

In the 25 years ending in 1911 the number of human beings reported to have been killed in British India by wild animals was 67,389, and by snakes 543 994, making together a total of 611,383, but the figures are far from accurate Up to the year 1900 deaths from mad dogs and jackals were included in the returns, but as these animals are not ordinarily dangerous to human beings or cattle, the figures have been omitted since 1901 The annual average number of persons killed during successive quinquennia since 1876 is as follows :—

	By wild animals	By snakes
Five years ending 1880	3,090	17,214
,, ,, ,, 1885	2,752	19,605
,, ,, ,, 1890 ..	2,581	21,267
,, ,, ,, 1895 ..	2,925	21,054
,, ,, ,, 1900 ..	3,456	22,175
,, ,, ,, 1905 ..	2,461	22,296
,, ,, ,, 1910 ..	2,210	21,571

As regards the mortality from wild animals it will be observed that the average number of deaths is lowest in the quinquennium ending 1910 The abnormal number of deaths in the quinquennium ending 1900 is ascribed indirectly to the famine conditions prevailing in Bengal during the year 1900, which drove people in large numbers to the jungles in search of food, while the drought also brought down wild animals into the open country in search of water. The total number of persons killed in 1911 aggregated 1,898 as compared with 2,382 in 1910, the decrease being noticeable in every province except Bombay, but there the total number of deaths was 26, as compared with 22 in the previous year

The tiger is the animal most destructive to human life, and is responsible for 38 per cent. of the total number of deaths caused by wild animals in the last five years. Leopards, wolves, and bears account for 15, 12, and 4 per cent. respectively

Of the total number of persons (namely 1,898) killed in the year 1911, the tiger accounted for 762, the leopard for 253, and wolves and bears for 270. Elephants and hyenas are the two other classes whose ravages are distinguished in the returns, between them they were responsible for 76 deaths in 1911 Of the 565 deaths attributed to "other animals," 243 are assigned to alligators and crocodiles, 63 to wild pig., 24 to buffaloes, 23 to wild dogs, and 160 to unspecified animals.

As regards mortality from snakebite, in 1913 decreases were noticed in the North-West Frontier Province and Burma and, as in 1912, Coorg returned only one death. In Bombay the introduction of special remedial measures are being considered for the extermination of snakes in the Ratnagiri district, which has an unenviable notoriety in the Presidency In this respect Sir Lauder Brunton's lancets are reported to have effected a fair number of cures in cases in which they were used, but as on previous occasions, the information furnished in these reports does not justify any definite conclusions as to the efficacy of this method of treatment.

Loss of Cattle—In the 25 years dealt with in these tables, the number of cattle killed by wild animals and snakes was 2,067,920 and 187,436, respectively, making a total of 22,255,356 The average number of cattle killed during successive quinquennia since 1876 is as follows :—

	By wild animals	By snakes
Five years ending 1880 .	47,969	3,052
,, ,, ,, 1885 .	47,501	1,810
,, ,, ,, 1890	63,030	3,157
,, ,, ,, 1895 .	83,955	4,857
,, ,, ,, 1900 .	82,465	8,476
,, ,, ,, 1905 .	86,761	9,322
,, ,, ,, 1910 .	90,037	10,072
For the year 1911 ..	91,704	10,534

In the case of cattle, the leopard is even more destructive than the tiger, and between them they are responsible for 80 per cent of the total deaths from wild animals in the last five years (the proportion being leopards 48 per cent. and tigers 32 per cent.). Wolves come next with 12 per cent.

Of the total number of cattle killed (namely 91,704) by wild animals exclusively in 1911, the leopard accounted for 42,745, the tiger for 28,832, and wolves for 11,922. Of the cattle destroyed by "other animals", 56 per cent. is ascribed to wild dogs. The total for 1913 was 94,000.

The statistics relating to the **Destruction of Wild Animals and Snakes**, especially the latter, are even more imperfect than those showing the deaths of human beings and cattle. The rewards given by Government for the destruction of wild beasts have averaged Rs. 1,65,652 annually for the last three years, of which 64 per cent. is on account of tigers and leopards killed.

Persian Gulf Trade.

The British connection with the Persian Gulf has been a matter of steady growth since the earliest developments of England's mercantile and political interests in eastern seas, and is now so intimate that Lord Curzon made an official tour of the Gulf Ports as Viceroy of India in 1904, while the two Conservative and Liberal British Foreign Ministers of recent years have both affirmed the principle that for any other Power to attempt to establish a port there would be regarded by Great Britain as an unfriendly act Britain has policed the Gulf, surveyed, mapped and buoyed it.

British and British-Indian trade in the Gulf amounts to several millions sterling a year. The whole of the Gulf is practically dependent upon the British Mail services for its postal communications. It was the Indian Government that laid the cable up the Gulf and across Persia. British trade spreads its web inland from the Gulf littoral in numerous directions and is chiefly directed through the Gulf ports into southern and western Persia. Persian imports flow in from two directions. from the north, *via* Russian routes, and from the south and west *via* the Gulf ports, and practically the whole of British and Indian trade with Persia is carried by the latter routes The statistics of British and Indian trade with Persia are, therefore, practically a record of what goes by the Gulf entrances.

Since the chronic disturbance of the southern routes began a few years ago, a good deal of British trade of small bulk has been diverted to the Russian postal routes There is also a comparatively small, but rapidly developing, overland trade with India *via* Nushki and Quetta, in Baluchistan.

The main trade **entrances to Persia** from the Persian Gulf are —

(1) Through Basra, (approached from the Gulf by the Shatt-el-Arab) thence by river barge up the R Tigris to Baghdad and thence by camel and mule caravan across the Turco-Persian frontier at Khanikin, to Kermanshah, in the West Persian Highlands, and on through Hamadan to north and central Persia and Teheran,

(2) Through Bushire and inland *via* Shiraz to Isphahan, in Central Persia, and

(3) Through Bandar Abbas, at the entrance of the Gulf, and *via* Kerman to Seistan and Khorasan, in eastern and north-eastern Persia

Another entrance is through Mohamerah and into the western highlands *via* the Karun Valley.

The last published report on the trade of Persia by the British Legation in Teheran shows that during the preceding year the trade of Persia with foreign countries amounted to over £20 million. Russia stood first and the British Empire second in the combined list of imports and exports In comparing British and Russian trade, it must be remembered that there have at no time been such obstacles to trade in the north—Russian's road of entry—as there have been in the rest of Persia, and the roads have remained open for caravans to move freely along them.

Hamadan, an ancient meeting point of several trade roads in the rich highlands of Western Persia, is the largest centre of British trade in Persia, taking about three-quarters of a million pounds' worth of British goods annually and growing in importance **Kermanshah**, westward of Hamadan, is the forwarding centre, before Hamadan is reached, of the important stream of British trade pouring in through the Persian Gulf port of Basra and up the Shatt-el-Arab to Baghdad. The customs returns of Kermanshah show in normal years a total of about £1,000,000 worth of goods imported from the United Kingdom. Of this (principally Manchester goods), it is estimated that three-quarters are for Hamadan Large Arab-Jewish merchants established in Manchester ship their goods direct from that city to Baghdad, whence they are forwarded to agents in Hamadan Apart from Lancashire cotton goods and a little Sheffield cutlery there are no British imports of consequence. The war with Turkey has, of course, upset these arrangements It is said that inland transport tariffs being excessive and the southern roads unsafe from robbers, British merchants generally have found it impossible to compete with Germany and Russia It was alleged that these two countries, being within easier reach, were able to supply the bazars of North Persia with goods at a much smaller cost and that, although the quality is very inferior, this matters little to the average Persian

A Turkish Chamber of Commerce was formed at Hamadan in 1911-12 Its members consist of most of the Arab agents of British and Arab firms in Manchester.

Great developments in British trade with this part of Persia will ensue when the railway from Mohammerah, at the head of the Persian Gulf, into this region is opened Engineers are already on the spot engaged in the preliminary work of construction The rate of progress depends on the state of the tribes which are restless British goods by direct steamers ordinarily take as a minimum the following time in transit —London to Basra, six weeks; Basra to Baghdad, five days (but delay in transhipment is frequent) From Baghdad to Kermanshah both mule and camel transport are available during the summer months, but the latter is suspended in winter between November and March.

The Baghdad Route.

British trade *via* Basra to Baghdad is chiefly transit trade for Persia, as indeed is the greater portion of all Baghdad trade During recent years the virtual closing of the South Persian routes benefited the Baghdad traffic by obliging goods which formerly entered by other lines to adopt that *via* Baghdad and Kermanshah instead. The commencement of large irrigation works at Hindiyah and Habbaniyah in Mesopotamia by the British firm of Sir John Jackson, Limited, in 1911, on behalf of the Turkish Government, brought money into the country and increased the purchasing power of a part of the population. On the other hand the political chaos in Southern Persia has had a prejudicial effect upon the import trade.

The effects of the present war are, of course, not yet fully developed The Baghdad route is closed and trade elsewhere greatly hampered.

Bushire.

Bushire is the most important direct trade entrance from the Gulf into Persia The area in the southern part of the country, for which the port of Bushire serves as a distributing centre, falls roughly into two divisions (*a*) The towns along the main caravan route up to and including Isphahan (such as Shiraz, the principal centre, Kazerum, Abadeh) and the province of Fars generally, (*b*) the coast littoral, south of the first mountain range on the way to Shiraz, for a distance of more than 150 miles in length and embracing, near the borders of Arabistan, the large town of Behbehan and its district

From 1908 onwards deterioration in the state of security throughout Southern Persia has been marked.

Shipping.

Two hundred steamships with a total tonnage of 319,234 tons entered the port of Bushire during the last year for which complete official returns were available before the War The following British lines are interested in the shipping trade of the Gulf and despatched either their own or chartered ships —

Anglo-Algerian Steamship Company, Limited, (1896)

Bucknall Steamship Lines, Limited

West Hartlepool Steam Navigation Company

Messrs Andrew Weir and Co and other chartered steamers

British India Steam Navigation Company, Limited

Arab Steamship Lines, Limited

Bombay and Persia Steam Navigation Company, Limited

In addition, several German and some Russian vessels belonging to or for the Hamburg-America Line called at Bushire The number of independent chartered steamers also showed a tendency to increase, and with the extension of trade on the Tigris and the developments projected in that district it is not unlikely that other companies will make their appearance A Dutch service of steamers from Java to the Gulf was recently in contemplation The Arab Steamship Line, with its head office in Bombay, has made rapid progress and now has several ships in the trade, which are carrying considerable quantities of cargo.

Bahrein Islands.

An important trading centre in the Persian Gulf is the Bahrein Islands, lying in an indentation of the Arabian coast on the western shore of the Gulf. The Bahrein Group consists for practical purposes of two islands, Awal (the main island) and Muharrak The former is 30 miles (maximum measurement and has an area of 208 square miles The population of the islands is reckoned at about 100,000 As a port and trade centre, it is a place of resort for people from the adjacent countries—Persia, Turkish Arabia, Katar and Trucial Oman, and to a less degree Central Arabia. There is a large interchange of produce. Apart from these commercial visitors there is also the large community engaged in the pearl fishery, who in 1906 were estimated as numbering some 17,500 souls The pearl trade dominates the whole commercial situation

The Hindus and the Persians of Bahrein include a number of prosperous merchants who control the bulk of the general import trade The Hindus, moreover, represent a considerable amount of capital in India, to which they add their Bahrein gains In the shipping business (exclusive of the native coasting trade) European influence is absolute

Communications with India and the Gulf ports are maintained by the regular services of two lines of steamers

Bundar Abbas.

The district of Bunder Abbas consists of a narrow strip of sandy and inhospitable looking country lying between high ranges of mountains on the north and the shores of the Persian Gulf on the south The town itself lies near the western end of the district, and is the seat of a Persian Deputy-Governor, who is subordinate to the Governor of the Gulf Ports It consists of a squalid collection of houses, extending for about 1½ miles along the shore, its inhabitants are poor and unprogressive The population is approximately estimated at 10,000, but a large exodus takes place in summer which considerably reduces this number The port owes its present existence to the fact that it is a convenient, or perhaps the least inconvenient, *entrepot* for goods destined for the south-eastern portion of the Shah's dominions It possesses from a shipping point of view but one advantage and many drawbacks

Exports of produce grown in the Bunder Abbas district are extremely small, similarly it is estimated that probably not more than about 5 per cent of the total imports are consumed locally Bunder Abbas is the port of the Kerman districts, and to a large extent of Laristan also Now-a-days, owing to the still greater insecurity of the northern trade routes, the large bulk of the Kerman exports are sent down to the Gulf

Great disadvantage and handicap are caused to trade at Bunder Abbas by the very high telegraph rates in force between Bunder Abbas and all other places

Muscat.

Muscat is the capital and the principal port of the Sultanate of Oman, which comprises a portion of the south-eastern coast of Arabia up to the entrance to the Persian Gulf Muscat is the only port of call for steamers in Oman, but as the town lies at the end of a cove surrounded by huge rocky hills, it has no means of communication with the interior The neighbouring town of Matrah, about 2 miles up the coast, supplies this want, and is the local centre for trade with the interior.

The majority of the settled inhabitants live by agriculture, of which date cultivation is the principal form, but the mountainous and arid nature of the country does not lend itself to remunerative agriculture, and the quarrelsome nature of the tribesmen does not encourage modern methods The total trade is about three quarters of a million annually and taken by countries that with India is largest.

India and the War.

On August 5th, a proclamation by Lord Hardinge—as Governor-General of India and *ex-officio* Vice-Admiral—announced that war had broken out between His Majesty and Germany The news instantly elicited from every part of India proofs of loyalty and devotion to the British Raj, and in a day or two it was obvious to the whole world that, so far from seizing upon England's pre-occupation as a favourable opportunity for promoting internal dissensions, India had never been so united in sentiment and purpose Far more marked than the dislocation of business and everyday life which naturally occurred was the intense desire of every class of Indian to be of some service in the just cause which England had undertaken to maintain, and the country may fairly be said to have become vocal through the ruling chief who inquired of the Viceroy "What orders has His Majesty for me and my troops?"

Offers made in India—The extent to which the Indian Government, and the Princes and peoples of India, proposed to share in the burden of the war only gradually became known At the end of August Lord Kitchener made the brief statement in the House of Lords that the expeditionary force was to be increased by two divisions and a cavalry division besides other troops from India In explanation of that, Lord Crewe spoke of the keen desire of Indians to take part in the war and of the impossibility of any internal trouble in India which would require the presence there of the troops sent to Europe "It is well known in India," he said, "that the African troops of the French Army have been assisting the troops in France of native origin, and I feel certain that it would be a disappointment to our loyal Indian fellow-subjects all the more on that account if they found themselves for any reason debarred from taking part in the campaign on the Continent of Europe We shall find our Army reinforced by soldiers, high-souled men, of first-rate training, and representing an ancient civilisation, and we feel certain that if they are called upon they will give the best possible account of themselves side by side with our British troops in encountering the enemy"

It is not yet possible to state the exact number of troops eventually sent from India, but it will probably be found to be between 150,000 and 200,000 On the other hand a number of **Territorials** were sent to India from England, the first contingent, consisting of twelve battalions of infantry and eleven batteries of Field Artillery arriving at Bombay and Karachi early in November These Territorial troops are to undergo a course of training which has for its object their preparation for active service in the field in the shortest possible time The Commander-in-Chief considers the Kitchener test of 1904 to be the best all round standard for the purpose, which has been modified to meet the requirements of the present situation (A list of the Territorial units in India, with the Stations to which they have been posted, is given on another page)

Summary of Offers.

On September 9th, the following Telegram from the Viceroy to the Secretary of State was read in Parliament —

"Following is a summary of offers of service money, etc, made in India to the Viceroy The Rulers of the Native States in India, who number nearly seven hundred in all, have with one accord rallied to the defence of the Empire and offered their personal services and the resources of their States for the war From among the many Princes and Nobles who have volunteered for active service, the Viceroy has selected the Chiefs of Jodhpur, Bikaner, Kishangarh, Rutlam, Sachin, Patiala, Sir Pertab Singh, Regent of Jodhpur, the Heir-Apparent of Bhopal, and a brother of the Maharaja of Cooch Behar, together with other cadets of noble families The veteran Sir Pertab would not be denied his right to serve the King-Emperor in spite of his seventy years, and his nephew, the Maharaja of Jodhpur, who is but sixteen years old, goes with him.

"All these have, with the Commander-in-Chief's approval, already joined the Expeditionary Forces The Maharaja of Gwalior and the Chiefs of Jaora and Dholpur, together with the Heir-Apparent of Palanpur, were, to their great regret, prevented from leaving their States Twenty-seven of the larger States in India maintain Imperial Service Troops, and the services of every corps were immediately placed at the disposal of the Government of India on the outbreak of war The Viceroy has accepted from twelve States contingents of cavalry, infantry, sappers and transport, besides a camel corps from Bikaner, and most of them have already embarked

"As particular instances of generosity and eager loyalty of the Chiefs the following may be quoted —Various Durbars have combined together to provide a hospital ship to be called 'The Loyalty' for the use of the Expeditionary Forces The Maharaja of Mysore has placed Rs 50 lakhs at the disposal of the Government of India for expenditure in connexion with the Expeditionary Force The Chief of Gwalior, in addition to sharing in the expenses of the hospital ship, the idea of which originated with himself and the Begum of Bhopal, has offered to place large sums of money at the disposal of the Government of India and to provide thousands of horses as remounts From Loharu in the Punjab and Las Bela and Kalat in Baluchistan come offers of camels with drivers, to be supplied and maintained by the Chiefs and Sardars Several chiefs have offered to raise additional troops for military service should they be required, and donations to the Indian Relief Fund have poured in from all States The Maharaja of Rewa has offered his troops, his treasury, and even his private jewellery for the service of the King-Emperor In addition to contributions to the Indian Fund, some Chiefs—namely, those of Kashmir, Bundi, Orchha, and Gwalior and Indore—have also

given large sums to the Prince of Wales' Fund. The Maharaja of Kashmir, not content with subscribing himself to the Indian Fund, presided at a meeting of 20,000 people held recently at Srinagar and delivered a stirring speech, in response to which large subscriptions were collected.

"Maharaja Holkar offers, free of charge, all horses in his State Army which may be suitable for Government purposes Horses have also been offered by Nizam's Government, by Jamnagar, and other Bombay States Every Chief in the Bombay Presidency has placed the resources of his State at the disposal of Government, and all have made contributions to the Relief Fund. Loyal messages and offers have also been received from the Mehtar of Chitral and tribes of the Khyber Agency as well as the Khyber Rifles Letters have been received from the most remote States in India, all marked by deep sincerity of desire to render some assistance, however humble, to the British Government in its hour of need.

"Last, but not least, from beyond the borders of India have been received generous offers of assistance from the Nepal Durbar, the military resources of the State have been placed at the disposal of the British Government and the Prime Minister has offered a sum of three lakhs of rupees to the Viceroy for the purchase of machine guns or field equipment for British Gurkha Regiments proceeding over seas, in addition to large donations from his private purse to the Prince of Wales' Fund and the Imperial Indian Relief Fund To the 4th Gurkha Rifles, of which the Prime Minister is Honorary Colonel, the Prime Minister has offered Rs 30,000 for the purchase of machine guns in the event of their going on service The Dalai Lama of Tibet has offered 1,000 Tibetan troops for service under the British Government His Holiness also states that Lamas innumerable throughout the length and breadth of Tibet are offering prayers for success of British Army and for happiness of souls of all victims of war.

"The same spirit has prevailed throughout British India. Hundreds of telegrams and letters have been received by Viceroy expressing loyalty and desire to serve Government either in the field or by co-operation in India. Many hundreds have also been received by local administrations. They come from communities and associations, religious, political, and social, of all classes and creeds, also from individuals offering their resources or asking for opportunity to prove loyalty by personal service. The following may be mentioned as typical examples:—The All India Moslem League, the Bengal Presidency Moslem League, the Moslem Association of Rangoon, the Trustees of the Aligarh College, the Behar Provincial Moslem League, the Central National Mahomedan Association of Calcutta, the Khoja Community and other followers of Aga Khan, the Punjab Moslem League, the Mahomedans of Eastern Bengal, the Citizens of Calcutta, Madras, Rangoon, and many other cities, the Behar Landholders Association, the Madras Provincial Congress Committee, the Taluqdars of Oudh, the Punjab Chiefs' Association, the United Provinces Provincial Congress Committee, the Hindus of the Punjab, the Khalsa Diwan representing orthodox Sikhs, the Bohra Community, and the Parsee Community of Bombay.

"The Delhi Medical Association offer the field hospital that was sent to Turkey during Balkan War; Bengalee students offer enthusiastic services for an ambulance corps, and there were many other offers of medical aid. The Zemindars of Madras have offered 500 horses, and among other practical steps taken to assist Government may be noted the holding of meetings to allay panic, keep down prices, and maintain public confidence and credit. Generous contributions have poured in from all quarters to Imperial Indian Relief Fund"

In presenting the above statement to Parliament Lord Crewe said that similar offers had reached the Secretary of State from Chiefs who happened to be in Europe. The Gaekwar of Baroda and the Maharaja of Bharatpur, to mention two only, had placed the whole resources of their States at the disposal of His Majesty's Government The Indian community in England, including the Indian students, had made loyal offers of services. He felt confident that the House and the country would feel deep appreciation of this magnificent demonstration of the loyalty with which the Princes and peoples of India had identified themselves with the cause of the Empire.

The Aga Khan also offered all his resources and to serve in the ranks of any Indian regiment.

Messages from the King-Emperor.

In opening the session of his Council on September 8, the Viceroy read the following message addressed to the princes and peoples of India by His Majesty the King-Emperor.—

"During the past few weeks the peoples of my whole Empire at home and overseas have moved with one mind and purpose to confront and overthrow an unparalleled assault upon the continuity, civilisation and peace of mankind.

"The calamitous conflict is not of my seeking. My voice has been cast throughout on the side of peace. My Ministers earnestly strove to allay the causes of strife and to appease differences with which my Empire was not concerned. Had I stood aside when, in defiance of pledges to which my Kingdom was a party, the soil of Belgium was violated and her cities laid desolate, when the very life of the French nation was threatened with extinction, I should have sacrificed my honour and given to destruction the liberties of my Empire and of mankind. I rejoice that every part of the Empire is with me in this decision.

"Paramount regard for treaty faith and pledged word of Rulers and peoples is the common heritage of England and India.

"Amongst the many incidents that have marked the unanimous uprising of the populations of my Empire in defence of its unity and integrity, nothing has moved me more than the passionate devotion to my Throne expressed both by my Indian and English subjects and by Feudatory Princes and Ruling Chiefs of India and their prodigious offers of their lives and

their resources in the cause of the realm. Their one voiced demand to be foremost in conflict has touched my heart and has inspired to highest issues the love and devotion which, as I well know, have ever linked my Indian subjects and myself. I recall to mind India's gracious message to the British nation of good-will and fellowship which greeted my return in February 1912, after the solemn ceremony of my Coronation Durbar at Delhi, and I find in this hour of trial a full harvest and a noble fulfilment of the assurance given by you that the destinies of Great Britain and India are indissolubly linked."

Later, when the first contingent of Indian troops landed in France, they were greeted with the following message from the King —

"I look to all my Indian soldiers to uphold the *Izzat* of the British Raj against an aggressive and relentless enemy. I know with what readiness my brave loyal Indian soldiers are prepared to fulfil this sacred trust shoulder to shoulder with their comrades from all parts of the Empire. Rest assured you will always be in my thoughts and prayers I bid you go forward and add fresh lustre to the glorious achievements and noble traditions of courage and chivalry of my Indian Army, whose honour and fame is in your hands"

Speech by the Viceroy.—In presenting the King's first message H. E. Lord Hardinge explained in greater detail the situation described by His Majesty in the first few sentences of that message Referring to the deep loyalty and attachment of the Indian people to the Throne, he said that the fact that the Government of India were in a position to help the mother country by the despatch of such a large proportion of our armed forces was a supreme mark of his absolute confidence in the fidelity of our troops and in the loyalty of the Indian people He went on to say —

"It was moreover with confidence and pride that I was able to offer to His Majesty the finest and largest military force of British and Indian troops for service in Europe that has ever left the shores of India I am confident that the honour of this land and of the British Empire may be safely entrusted to our brave soldiers, and that they will acquit themselves nobly and ever maintain their high traditions of military chivalry and courage. To the people of India I would say at this time—'Let us display to the world an attitude of unity, of self-sacrifice and of unswerving confidence under all circumstances in the justice of our cause and in the assurance that God will defend the right."

Sir Gangadhar Chitnavis then moved a resolution, which was seconded by the Raja of Mahmudabad, expressing the opinion that the people of India, in addition to the military assistance now being afforded by India to the Empire, would wish to share in the heavy financial burden now imposed by the war on the United Kingdom, and requesting the Government of India to take this view into consideration and thus to demonstrate the unity of India with the Empire. The result of that resolution was to be seen a few days later in Parliament.

Expense of the Indian Force.

On September 16, the Prime Minister moved in the House of Commons —"That His Majesty having directed a military force, consisting of British and Indian troops, charged upon the revenues of India, to be despatched to Europe for service in the War in which this country is engaged, this House consents that the ordinary pay and other ordinary charges of any troops so despatched, as well as the ordinary charges of any vessels belonging to the Government of India that may be employed in this expedition which would have been charged upon the resources of India if such troops or vessels had remained in that country or seas adjacent shall continue to be so chargeable, provided that, if it shall be necessary to replace the troops or vessels so withdrawn by other vessels or forces, then the expense of raising, maintaining and providing such vessels and forces shall be repaid out of any moneys which may be provided by Parliament for the purposes of the said expedition"

In support of the motion Mr Asquith said that in all the moving exhibitions of patriotism evoked by the war none had more touched the feelings of the Country than the response which the princes and people of India had made to the need of Great Britain. He went on to explain that in consequence of the provisions of Section 55 of the Government of India Act 1858, it was not constitutionally right or proper to charge upon the revenues of India, except in the case of actual invasion or of sudden and unforeseen emergency, the cost of troops that might be sent outside that country. The assent of both Houses of Parliament was needed before any such charge could be imposed upon the revenues of India.

Mr Bonar Law, who seconded the resolution said this assistance from India came not from force, but from good will, and he believed that it came because on the whole everyone who left England to take part in the Government of India, from the Viceroy to the humblest official, was inspired by the tradition that it was his duty not to exploit India for the benefit of England, but to rule it for the good of the people of India We had, he said, made mistakes, but on the whole we had succeeded and it was because, in the main, the people of India recognised that was the spirit in which the Government was carried on, that England had received their assistance in the hour of need. After further speeches, by Sir John Jardine and others, the question was put and agreed to

Statement by the Under-Secretary of State.—In the House of Commons on November 26, Mr C Roberts, Under Secretary for India, moved a motion, which was agreed to, relating to the expenses of the Indian Expeditionary Force He explained that two months previously the Prime Minister moved a resolution which the House had sanctioned, giving consent to the payment from Indian revenues of the ordinary charges of the British and Indian troops dispatched to Europe That resolution did not sanction the application of Indian revenues to pay the cost of the military operations outside India in non-European areas, and it was, therefore, necessary to pass the present supplementary motion. India did not seek to

make any profit or saving out of the absence of the troops which she would have had to pay for if they had remained in India, and it had therefore been agreed, with the unanimous assent of the Legislative Council, that Indian resources should continue to bear the normal expense while Great Britain bore the extraordinary expense

After a tribute to the work done in the field by Indian troops, and to the enthusiastic support given by the Indian princes, Mr Roberts said — "A wave of instinctive and emotional loyalty has swept over the people of India But it would be unfair not to recognize that besides this there is among the Indian educated classes a loyalty based on reason and the recognition of facts It is at times less warmly expressed, but it is none the less substantial It is sensible of the undeniable benefits conferred by British rule It regards—not to put the case too high—the present regime as the best working arrangement for India It is satisfied that within the framework of the Empire legitimate hopes and aspirations can in due time be met I think that this more sober sentiment finds expression also among those Moslems who cannot but feel the strain on their religious sympathies imposed by the insensate folly of Turkey's attack upon the British Empire Men like the Nizam of Hyderabad or the Aga Khan have been unhesitating in the advice they have given to those with whom their views naturally carry weight Indian Moslems have, I believe, made up their minds that their secular allegiance is due to the King-Emperor They know that their religion obtains the amplest toleration and respect in the British Empire and that the idea that the present war is a religious war is an absurdity The matter is perhaps summed up in the remarks of an Indian Musulman "Why should anyone question the loyalty of India? Is it not our Empire too?"

The raids of the "Emden" —While the ships of the East Indies Squadron and other ships of the Royal Navy in Indian waters were convoying transports from Bombay and Karachi and safeguarding the mail routes, considerable damage was done to British shipping by the "Emden" That German cruiser was particularly active in the Bay of Bengal, off Ceylon, and in the neighbourhood of the Maldive and Laccadive Islands An Admiralty statement issued in the latter part of October, announced that up to that time only 27 British merchant ships had been accounted for by the enemy, but of that number a large proportion had been sunk by the "Emden" As a result the Shipping Companies experienced considerable difficulty in obtaining lascar crews

On Sept 22 the "Emden" arrived off Madras shortly after dark and shelled the town, doing much damage to some oil tanks and to various houses on the sea front as well as to shipping in harbour Madras is not fortified and is unprovided with search lights, but a battery there opened fire on the "Emden", with the result that she at once put to sea A Press Communique issued by the Madras Government shows that three were killed and sixteen wounded during the attack, the killed being J S Fletcher, a cadet on the S S "Chupra", an Indian police constable, and a watchman of the Burma Oil Company. Among the wounded were six Europeans on the S S "Chupra" The moral effect of this attack was to some extent felt in other sea ports from which migration up-country was recorded, and a feeling of uneasiness continued until it was announced, early in November, that the 'Emden" had been sunk off the Cocos (Keeling) Islands.

The following is a list of the "Emden's" victims —

Indus	3,393	Taken and sunk in the Bay of Bengal Sept 10-14
Lovat	6,102	
Killin	3,514	
Diplomat	7,615	
Trabbock	4,014	
Kabinga	4,657	Taken and released Sept 12
Clan Matheson	4,775	Sunk Sept 14.
King Lud	3,650	Sunk Sept 30.
Foyle	4,147	
Riberia	4,147	
Tymeric	3,814	
Buresk	4,350	Captured Sept 30.
Glyfedale	4,437	Taken and released Sept 30
Pontopoios	4,049	Ta'en by Emden, released by H M S Yarmouth, Oct 16
Troilus	7,562	Captured and sunk Oct 20
Clan Grant	3,948	
Benmohr	4,806	
Chilkana	5,146	
Pomabbel	473	
Exford	4,542	Captured Oct 20.
Saint Egbert	5,526	
Jemchug (Russian Cruiser)		Sunk Penang Oct 30.
Mousquet (French Destroyer)		

The War with Turkey.

It was announced on November 1 that war had broken out between His Majesty's Government and Turkey On the previous day a Press Communique had been issued at Simla detailing the Turkish attacks on Odessa and Russian ships and indicating the consistently aggressive attitude of the Turkish Government adopted at German instigation The purchase by Turkey of the German men-of-war the Goeben and Breslau was followed by the sowing of mines in the Dardanelles and the detention of British merchant vessels, and eventually by the closing of the Dardanelles Another reason for grave disquietude had been the unfriendly treatment by responsible Turkish officials in Baghdad and Mesopotamia of British subjects and the open incitement of the population by the Turkish official circles against Great Britain and her Allies Notwithstanding all this provocation His Majesty's Government intimated that if Turkish were substituted for German crews on the Goeben and Breslau, if British merchant shipping were not impeded, and if Turkey would honourably carry out the duties of a neutral State, not only would all these illegalities and hostile acts be overlooked, but that a solemn and written guarantee would be given that Great Britain would scrupulously respect the independence and integrity of the Ottoman Empire Furthermore, assurances were given that at the conclusion of peace Great Britain would see that no conditions were laid down

which would impair that independence and integrity and that economic conditions of a character favourable to Turkey would be obtained. In spite of these assurances the attitude of Turkey towards Great Britain became increasingly provocative.

Further Provocations by Turkey.—The Press Communique went on to describe military preparations in Syria obviously designed to facilitate an attack on Egypt German intrigues were set on foot in Syria, Egypt and elsewhere with a view to inciting the people to take part in this conflict and reports were even received of the despatch of Turkish emissaries to India with the object of stirring up anti-British feelings among Indian Mahomedans

The Communique concluded by saying — "Great Britain, the greatest Mahomedan power in the world and the faithful and consistent friend of Turkey, whom she has steadfastly helped to maintain her position in Europe and to recover her stability, which was shaken in the Balkan War, would see with the greatest regret that Turkey had been decoyed into ranging herself on the side of England's enemies and into adopting an attitude as unjustified as it would be ungrateful, but it cannot be denied that the present situation shows that there is a chauvinistic element endeavouring to drive Turkey into war with England for the benefit of Germany and of Austria, the secular enemy of the Turkish State" Additional information as to the course of events leading up to the war with Turkey was subsequently published in an official White Paper This contained a record of the efforts of Germany to corrupt the Moslems and afforded an indisputable testimony of Great Britain's patience, despite Turco-German acts of provocation and intrigues, and of her solicitude for Moslem interests It also showed that Enver Pasha, the Turkish War Minister, almost alone among the cabinet wished for war early in August

Attitude of India.—German intrigues and the teachings of bellicose Pan-Islamites failed to wean Indian Mahomedans from their loyalty to the British Raj From Mahomedan Leagues and Associations all over India the Viceroy received resolutions deploring the action of Turkey and thanking Government for the assurance that the Holy Places would be immune from attack **The Nizam of Hyderabad** issued a Farman in which he said — "Let it be generally known that at this critical juncture it is the bounden duty of the Mahomedans of India to adhere firmly to their old and tried loyalty to the British Government especially when there is no Moslem or non-Moslem power in the world under which they enjoy such personal and religious liberty as they do in India and when moreover they are assured by the British Government, that, as it has in the past, always stood the best friend of Islam so will it continue to be Islam's best friend and will always protect and cherish its Moslem subjects"

The Aga Khan also sent a message to Indian Mahomedans in which he said — "No Islamic interest was threatened in this war and our religion was not in peril. Nor was Turkey in peril, for the British and Russian Empires and the French Republic had offered solemnly to guarantee Turkey all her territories in complete independence if she had remained at peace Turkey was the Trustee of Islam and the whole world was content to let her hold our Holy Cities in her keeping Now that Turkey has so disastrously shown herself a tool in German hands she has not only ruined herself but has lost her position of Trustee of Islam and evil will overtake her. Turkey has been persuaded to draw the sword in an unholy cause from which she could not but be ruined, whatever else happened, and she will lose her position as a great nation, for such mighty Sovereigns as the King Emperor and the Tsar can never be defeated Thousands of Moslems are fighting for their Sovereign already and all men must see that Turkey has not gone to war for the cause of Islam or for the defence of her independence. Thus our only duty as Moslems now is to remain loyal, faithful and obedient to our temporal and secular allegiance."

At a meeting held in Bhopal further evidence of Mahomedan loyalty was given by the **Begum of Bhopal**, who, in the course of an address, said — "I have every hope that my subjects will show their customary zeal in carrying out my wishes and I have no doubt but they will follow me and my ancestors and predecessors as well as their own forbears, in remaining firm in their loyalty and devotion to the British Crown I also expect my co-religionists to act on the advice I have ventured to offer them while I, gentlemen, am and will always remain loyal to the treaties which exist between the Bhopal Durbar and the British Government and which are binding on me, not only as a true follower of Islam, but also as a Ruling Chief under the protection of the British Government"

The **Nawab of Rampur,** in a proclamation issued to his subjects, pointed out that the war was not sought by the British Government, and that the British cause, was a just one. He therefore enjoined his subjects and invited all Mahomedans in India to remain steadfast in their loyalty, and to do everything in their power to further the British cause, which is also the Indian cause. A manifesto issued by the **Nawab of Tonk**, after expressing His Highness's regret that Turkey should have embarked upon this war, ignoring both the innumerable favours received from Great Britain and the fact that vast numbers of her co-religionists enjoy full religious freedom and pass their lives in peace under the protection of Great Britain, declared that it is the bounden duty of all Mahomedans in India to be loyal and faithful to the British Empire, and to leave nothing undone to prove that loyalty.

An official *communique*, published at Delhi on November 29, stated —"In reply to a letter announcing the outbreak of war between Great Britain and Turkey, His Excellency the Viceroy has received a most cordial and friendly acknowledgment from His Majesty the Amir, who had already declared his firm intention to maintain the **neutrality of Afghanistan**, in the present war. His Majesty in friendly terms expresses regret that the Ottoman Government should have embarked on war with Great Britain." A few days later a rescript from the **Shah of Persia** was published announcing the neutrality of Persia.

The Holy Places.—The Mahomedan public was further reassured by a Government announcement in regard to the Holy Places of Arabia, including the Holy Shrines of Mesopotamia and the Fort of Jedda.

"These Holy Places and Jedda," it said, "will be immune from attack or molestation by the British Naval and Military forces so long as there is no interference with pilgrims from India to the Holy Places and Shrines in question At the request of His Majesty's Government, the Governments of France and Russia have given them similar assurances"

Trade and Finance and Exchange.

One of the first questions which had to be solved by the financial authorities in India on the outbreak of the war was the support of Exchange. The Indian Government have to meet in London every year what are called the Home Charges—interest on the debt, pay and pensions, and the cost of purchasing stores. These are ordinarily met by the balance of trade in favour of India, and are financed by the sale of Council Bills by the Secretary of State on the Government of India. But when for any reason the export trade of India is checked, then Council Bills are unsaleable. Indeed there may for arise a demand for remittances from India to London, and if this is not met from the Gold Reserve Fund or other sources exchange must break. It is unfortunate in many respects that the occurrence of the war found the Indian currency system in a state of flux. The Secretary of State and his financial advisers for many years maintained that securities were as good as gold a strong body of opinion in India has held the view that in time of crisis nothing could take the place of gold. The effect of the policy pursued by the Secretary of State is that the major portion of the Gold Reserve Fund, created out of the profits on coining to meet Home Charges or an adverse balance of trade, was invested, and the recommendation of the Currency Commission strongly to increase the gold holding in Reserve was too recent to be acted upon As was anticipated, the declaration of war produced an immediate demand for Sterling Bills on London, or Reverse Councils as they are sometimes called It took a little time to adjust the necessary machinery, but a Notification was issued early in August, that the Government of India would sell sterling bills or telegraphic transfers on London at gold export point, up to a million a week On one occasion only, the first week, was this million taken up: the weekly biddings rapidly dropped until on November 5 none were taken, but the demand revived later and has persisted longer than was anticipated This arises in considerable degree from the paralysis of the cotton industry, for the export of cotton from Bombay is the chief staple in the trade of the closing months of the year, and the Continent is, with Japan, the chief purchaser of the Indian staple. On page 179 the weekly allotments of sterling bills up to November 12 is given. the subsequent figures are November 19, £390,000; November 26, £560,000; December 3, £560,000; December 10, £371,000. The demand for Council Bills has, strange to say, existed on a small scale side by side with the demand for Sterling Bills in India But the extent to which the Secretary of State is behind with his remittances may be gleaned from the last official return, which shows the following results —Amount estimated in the Financial Statement to be remitted during 1914-15, £20,000,000 · remitted from 1st April, 1914 to 12th December 1914, by Council Bills, £4,388,477. balance to be remitted from 13th December 1914, to 31st March 1915, £15,611,523 The Secretary of State has met his immediate needs by borrowing in London, where his Bills have met with a ready demand

Currency—The next pre-occupation of the Government of India lay with the currency Whilst the circulation of notes in India has shown considerable expansion of recent years, especially since arrangements were made for the encashment of notes of low denominations in all parts of India, in time of crisis the Indian puts his faith to metal, and in an increasing degree to gold Fortunately the war found the Paper Currency Reserve in a very strong position indeed It held in India 34 crores of silver coin and bullion and 18 36 crores of gold and gold bullion. It was the desire of the financial authorities to give gold freely on demand, but it became evident that gold was being withdrawn from the reserve not for legitimate purposes, but to sell sovereigns at a premium to the ignorant. Consequently the authorities placed an absolute embargo on the issue of gold Thereafter there was a considerable rush to exchange notes for silver, but the reserve was so strong that this rush was never embarrassing. The transfer of the rupees in the Gold Reserve Fund to the Paper Currency Reserve in exchange for sovereigns, the accumulation of silver in payment for Reserve Councils and the rapid restoration of confidence in the convertibility of the Note Issue kept the silver reserve at such a high figure that the Government were never embarrassed on this account The detailed statements are given on page 178

Finances—The questions connected with exchange and currency took precedence over the general questions of finance. These arose later Fortunately the war opened when the Government were in an exceptionally strong financial position The cash balances at the end of July amounted to 30 crores of rupees, or seven crores in excess of the estimated figure These balances began rapidly to fall This is the season of the year when the revenue collections are small, and two important heads were seriously affected by the war—the railway receipts and the Customs revenue Moreover the Government of India had to meet heavy charges in India on account of the great expeditionary forces which were sent to Europe, Egypt, the Persian Gulf and East Africa. There was also a partial run on the Post Office Savings Banks, against which no cash reserve is held. On the other hand the Government of India's balances had not to meet the drain felt when the Secretary of State is selling Council Bills freely A fair idea of the influence of the war on internal finance up to October of the present year as compared to the corresponding period of 1913 can be derived from an analysis of the Statement of Receipts and Payments at the Civil Treasuries in India. It is shown that

the Land Revenue has decreased 66 lakhs and the Customs are behind by 63 lakhs. The Total Civil Expenditure this year was 173 lakhs higher. The Issues from Post Office came to 750 lakhs more than last year The net Marine Expenditure was 271 lakhs greater and the Military Issues were 250 lakhs more The Railway Receipts were behind by 184 lakhs. Council Bills sales this year were 1,511 lakhs short. Government have taken loans aggregating six million pounds The Cash Balance decreased in October by 961 lakhs and closed at 1,380 lakhs.

Trade—Unfortunately the outbreak of the war found the trade of India in a very unsatisfactory position For nearly twelve months there had been very heavy over-trading in the great head of the import trade—**piece-goods**—with the result that there was an unprecedented accumulation of stocks which had their reflex action in the accumulation of stocks of cloth and yarn made in the Indian mills Moreover there was a growth of these stocks after the war broke out, as goods ordered a long time previously came pouring in. The situation was aggravated when the middlemen, through whom the bulk of the trade passes, realised all available assets and sought refuge in their homes from the imaginary terrors of the war Then the rapid decline in the values of cotton carried the inference that very soon new supplies would be coming forward at prices far below those at which these great stocks were laid down This accumulation of stocks of piecegoods has hung like a pall over the Indian market, depressing a situation which otherwise would have been strong Then the rains of 1914 were abundant and well-distributed In the normal course of events we might have looked for a very prosperous season, as the harvest of export crops was large But the Continent of Europe is a large buyer of Indian produce—cotton, jute and oilseeds; this market was almost closed The staple export trade of Western India is cotton, and for cotton there is a very small demand. Again, when signs of a revival of confidence set in the raids of the Emden alarmed the timid and caused a set-back. Calcutta was the first to experience a revival, as the demand for two of her great staples, **jute and tea**, was exceedingly good. A recent message from Calcutta (December 15) announced that business was very much as usual But Bombay at the close of the year lay under the shadow of a sluggish demand for cotton and a huge stock of piecegoods, which coming after the disturbance of the financial situation caused by the failures of the Swadeshi Banks (q v pp. 248-252) hindered any strong revival of business. The **results of the war on trade** are clearly shown in the following official summary of imports and exports for the current year—the year commencing April 1st:—**During the seven months ended October, 1914, as compared with the corresponding period of 1913, the value of imports declined by Rs. 17·93** crores to Rs 87 46 crores and the total export declined by Rs 26 96 crores to Rs. 112 1 crores. The export of Indian merchandise show a decrease of Rs 27 06 crores or 19.4 per cent, whilst the exports of Foreign Merchandise show an increase of Rs. 9 69 lakhs The grand total of imports, exports and re exports amounted to Rs 199 58 crores a against Rs 244 47 crores.

In an article on foreign trade since the outbreak of war, the *Indian Trade Journal* a Christmas time said the important influence which have been at work since the outbreak o war to **reduce the volume of India's overseas trade** may be summarised as follows — (1) The closing of markets on the cessation o commercial relations with the enemy countries (2) the curtailment of trade with France and Belgium, (3) the restriction of trade with neutral nations, (4) the scarcity of tonnage since a large number of merchant vessels were required for the transport of troops, and (5 the restriction of the free movement of trading vessels owing to the raids of an enemy cruiser in the Indian Ocean. Exports from India declined 44 per cent. in August 61 per cent. in September, as compared with 45 per cent and 37 per cent, respectively, for these months in the case of the United Kingdom. Exports from India in October showed a decline of 54 per cent as compared with October, 1913, as against 39 per cent. in the case of the United Kingdom Imports for August and September into India declined by 20 and 56 per cent, respectively while in the United Kingdom they declined 2 and 26 per cent for these months. Import into India in October showed a decline of 25 per cent, as against 28 per cent. in the imports o the United Kingdom. These comparisons are with the corresponding months of 1913.

The hampering conditions referred to in the preceding paragraph were most severe in September A decrease of 61 per cent. in export and 56 per cent. in imports sufficiently illustrates this. The trade returns for October show a decrease of 54 and 25 per cent.—an indication that Indian commerce was then moving in the direction of **normal conditions.**

Imports of Treasure declined by Rs. 4 9 crores to Rs 14 33 crores Gold bullion fell by Rs 3.34 crores to Rs. 6 06 crores and sovereigns by Rs 3 73 crores to Rs. 1.82 crores while Silver bullion improved by Rs. 1.2 crores to Rs 5 86 crores Exports of Treasure also declined by Rs. 2.59 crores to Rs. 2 7 crores.

The **tonnage of vessels** entered at ports in British India from Foreign countries and British Possessions with cargoes during the seven months April to October 1914, amounted to 3,246,151 tons, and the tonnage cleared was 3,723,803 tons, as against 3,823,627 tons entered and 4,743,865 tons cleared during the corresponding seven months of 1913.

SUMMARY TABLE showing the VALUE of Imports and of Exports of Foreign Merchandise, of Exports of Indian Merchandise and of Total Exports for each month in the two previous years, and for the completed months of the current year :—

—	IMPORTS			EXPORTS, FOREIGN MERCHANDISE		
	1912-13	1913-14	1914 15	1912-13.	1913-14	1914-15
	Rs	Rs	Rs	Rs	Rs	Rs
April	13,96,22,664	15,04 15,524	14,49,63,703	40,63,508	42,03,952	39,23,091
May	11,62,92,735	14,30,53,963	13,58,96,906	48,07,085	38,28,617	35,00,061
June .	10,46,51,140	12,22,43,850	12,68,19,583	37,30,030	35,35,165	40,42,424
July .	11,69,67,158	14,47,61,327	14,00,30,230	42,03,669	37,71,878	51,28,504
August	12,04,77,715	16,13,04,289	12,92,62,767	36,45,157	35,38,556	23,07,757
September ..	14,63,68,071	16,65,18,547	7,39,86,111	36,65,242	32,24,102	10,35,885
October ..	15,01,96,005	16,55,65,522	12,36,12,013	40,24,876	34,90,712	36,35,107

—	EXPORTS, INDIAN MERCHANDISE			TOTAL EXPORTS		
	1912-13	1913-14	1914-15	1912-13	1913-14	1914-15
	Rs	Rs	Rs	Rs	Rs	Rs
April	20,90,27,623	21,03,17,624	20,41,12,296	21,31,91,131	21,45,31,576	20,80,35,387
May .	20,66,33,199	19,29,48,029	21,04,42,737	21,14,40,264	19,67,76,646	21,39,42,798
June	20,21,48,966	17,53,93,368	21,42,58,128	20,58,78,996	17,89,28,533	21,83,005
July ..	20,47,67,333	20,25,74,635	19,17,26,336	20,89,70,002	20,63,40,513	19,68,54,840
August	17,25,12,967	17 24,09,032	9,88,79,420	17,60,58,124	17,59,47,588	10,11,87,177
September	18,07,29,705	19,47,77,977	7,56,47,131	18,42,94,947	19,80,02,379	7,96,83,016
October	20,42,66,542	21,68,38,522	9,95,95,649	20,82,90,418	22,03,29,234	10,32,30,756

Measures of Precaution.

The **export of Welsh coal** and of various articles capable of being used as military or naval stores was prohibited, and a schedule issued of what articles would be treated as absolute contraband and conditional contraband.

One of the first effects of the war was a rise in the **price of foodstuffs** but this was met by firm action on the part of the local governments and municipalities. In Bombay, for example, an Advisory Committee was formed for regulating prices, and the prices fixed by them from time to time were published in the *Government Gazette*

Special Ordinances were proclaimed dealing *inter alia* with the position of enemy aliens in India, and a camp for **prisoners of war** was established at Ahmednagar to which several hundred German and Austrian males were sent from all parts of India and from East Africa.

Censorship of News.—Immediately after the declaration of war it was notified that "in view of the recent declaration of war with Germany and the extreme necessity of maintaining secrecy regarding military and naval movements the Governor-General proposes to promulgate the ordinance prohibiting the publication of news relating to the movements and dispositions of His Majesty's forces of to works undertaken for the defence of the British Empire, save where such information has been supplied for publication by Government or has been approved by a Government censor Any contraventions of the provisions of the ordinance will constitute an offence and any matters so published will be liable to confiscation Prosecutions under the ordinance will only be allowed upon complaints made or under authority from the Governor-General in Council, a local Government or an officer empowered in this behalf by the Governor-General in Council and will be triable only by District and Sub-Divisional, or Presidency Magistrates"

An Indian Army Order notified, in November, that, in addition to enlistments under existing conditions, **enlistments in the Regular Army** would be opened in India under certain conditions for men between 19 and 35 years of age. These enlistments will be for a period of three years with the colours, or if the war lasts longer for the duration of the war, if, however, the war lasts for less than three years the men so enlisting will be discharged with all convenient speed

Prize Courts.—The Courts specified in the first column of the Schedule below have been duly constituted Prize Courts in territories under the Government of India The officers named in the third column have been authorised to conduct Prize Proceedings on behalf of the Crown in respect of cargoes on the detained enemy vessels named in the second column, and to these officers all enquiries with regard to British or neutral cargoes shipped on these vessels should be addressed.

Prize Court	Name of enemy vessel	Officer to whom all enquiries should be addressed
High Court of Judicature, Calcutta	Perla Trostburg Frankenfels Freienfels Rotenfels Pagenturm Kurmark	Solicitor to Government.
High Court of Judicature, Bombay	Rheinfels Warturn Karadeniz	Ditto
Court of the Judicial Commissioner in Sind, Karachi	Braunfels	Government Pleader of the Judicial Commissioner's Court, Sind.
Chief Court of Lower Burma, Rangoon	Alesia	Government Advocate
Court of the Resident, Aden	Wartenfels. Lindenfels Erzherzog Franz Ferdinand Varzin.	Second Assistant to the Political Resident, Aden

Relief Funds.

On the initiative of His Excellency the Viceroy a large sum of money was raised in India for the relief of distress caused by the war. A central committee was formed, over which the Viceroy presided, and which included the Governor of Bengal, the Governor of Madras, the Governor of Bombay and the Commander-in-Chief, the members of H E the Viceroy Executive Council the heads of other Local Governments and Administrations and the following Ruling Chiefs:—Their Highnesses the Maharaja of Bikaner, the Begum of Bhopal, the Maharaja of Gwalior, the Nizam of Hyderabad, the Maharaja of Indore, the Maharaja of Jaipur, the Maharaja Regent of Jodhpur, the Maharaja of Kashmir, the Maharao of Kota, the Maharaja of Mysore, the Maharaja of Patiala, the Maharaja of Rewa, and the Maharana of Udaipur.

Under its control an executive committee was formed and local branches were constituted The treasurer of the Fund is Sir A. Kerr, and the joint secretaries are Mr. F W. Johnston and Major John Mackenzie. Up to the time this book went to press, subscriptions to the fund amounted to over Rs. 65 lakhs.

Among the provincial offshoots of this fund is the **Women's Branch** of the Bombay Presidency Fund, which was started by Lady Willingdon, with the object of collecting comforts for the troops and of making up quantities of suitable garments.

The **St. John Ambulance Association** sent the following circular letter to all the three hundred centres of the Association in India :—

"England is now at war, and there is evidence of intense enthusiasm on the part of the public in this country and a great desire to help our troops in the field. One of the most important functions of a Red Cross or ambulance society is to direct such patriotic enthusiasm into correct channels, and I am to suggest that your centre should form a ladies' committee with the following objects —(1) To collect funds, (2) to collect gifts of articles likely to be of use to troops on service; (3) to collect material for ambulance detachments should such be formed."

The report of the India Branch of the Association for the year ending September 30, 1914, says that at an important meeting of the Executive Committee in Simla, on August 12, it was decided to initiate forthwith adequate measures to supplement where necessary the ordinary medical and ambulance services of the country. Committees of ladies were forthwith organised at all Centres throughout India for the collection of articles likely to be needed for the sick and wounded, or money with which to purchase them, and a depot was opened at Bombay for their reception and shipment to the theatre of war. The enrolment was also arranged for of local detachments of ambulance workers, men and women combined, at as many stations in India as possible in readiness for service locally.

A depot for the reception and distribution of gifts was subsequently organised at Bombay.

Hospitals.—Adequate provision for the sick and wounded on return to India was one of the first needs thought of by the wealthy. On August 12 the **Maharaja of Gwalior** telegraphed to the Viceroy, on behalf of himself, the Nizam of Hyderabad, the Begum of Bhopal, the Maharajas of Jodhpur, Rewah and Datia, and a number of other ruling chiefs, offering a hospital ship of three hundred beds to be named "Loyalty" and this offer was accepted The ship selected was the s s. "Empress of India," belonging to the Canadian Pacific Railway Company and she was chartered by the Maharaja of Gwalior for one lakh of rupees per month She contains about 500 beds and first sailed from Karachi for England in December.

Another Hospital Ship was provided by the **Madras** Presidency, to the fitting up of which a number of gifts in kind and in money were made by various societies and private individuals. This vessel, a new British India steamer, was ready by the middle of November under the charge of Col. G. G. Giffard.

The Director of Medical Services has prepared a number of selected hospitals for Indian troops, especially for those coming from East Africa and the Persian Gulf. These hospitals total about 1,600 beds.

In Bombay a hospital was prepared in the Prince of Wales Western India Museum, a building nearing completion, and by the beginning of November it was ready for use with accommodation for 108 patients and space for further expansion if necessary up to 250 beds. This hospital is known as the **Lady Hardinge War Hospital.** For the transport up-country of the less seriously wounded, two hospital trains were prepared.

It was announced at the end of November that the Committee of the Bombay Presidency Branch of the Imperial Indian War Relief Fund had offered to provide a 500-bed hospital for Indian troops engaged in the war. This offer was accepted, and measures were taken for the organisation of this hospital, which, under the title of **The Bombay Presidency Hospital** is to be entirely equipped, staffed and maintained from the Bombay Presidency including Sind, and will be located, probably at some convenient base in Egypt, but at any place that the military authorities may, with a view to the requirements of the British Indian forces operating in the field, determine to be most desirable.

Contributions from Ruling Chiefs—The manner in which the Ruling Princes subscribed to the various war funds, in addition to providing the Hospital Ship already mentioned, has been very generous and general. By the beginning of December they had given about £190,000 to the Prince of Wales' Relief Fund and the Indian Relief Fund approximately £800,000 to the expenses of the war. This latter sum includes £400,000 from the Nizam of Hyderabad and £330,000 from the Maharaja of Mysore. A further sum of nearly £30,000 was given to provide motor cycles, binoculars, telescopes, etc, and £24,500 of this was given by the Maharaja Scindia of Gwalior, who also gave a motor ambulance of 41 cars for the use of the troops in Europe and arranged for the establishment of a convalescent home in East Africa Besides their gifts many Chiefs presented large numbers of horses, mules and camels and even gave their own private motor cars Finally it should be remembered that a number of Imperial Service troops are now included in the expeditionary forces and are being maintained at the expense of their respective states

Funds in England—In addition to the work undertaken by the Imperial Indian Relief Fund, various agencies in England are contributing to the welfare and comfort of the Indian Expeditionary Force and giving help towards the care of their dependents in India. A statement, issued by the Secretary of State in October, explained that the organisation of **additional hospital accommodation** for the Indian troops of the force and the provision of extra comforts for them in the field had been undertaken, by authorisation of the Secretary of State for India and with the full concurrence of the Secretary of State for War, by the St. John Ambulance Association, which appointed a special Indian Soldiers' Fund Sub-Committee to deal with the many questions arising out of the special needs of our Indian soldiers in Europe. The activities of this Sub-Committee, under the Chairmanship of Sir John Hewett, have taken two main directions. The first object was the provision of hospital accommodation, and it was found possible to provide at once a hospital of at least 500 beds from funds subscribed by the public. The second was to supplement the official supply of warm clothing and medical comforts, as well as other comforts, for the

troops in the field. The Sub-Committee established for these objects the **Indian Soldiers' Fund** on behalf of which the late Lord Roberts issued an appeal for subscriptions In view of the fact that the Indian Sub-Committee in London of the St. John Ambulance Association has a special organisation, with official facilities, for the despatch of presents to the Indian troops, an appeal was made that other agencies for the same purpose should work in close co-operation with the Sub-Committee

Indian Field Ambulance.—A statement was issued in London by the Press Bureau, in November, to the following effect —

The Indian Field Ambulance Training Corps, under the command of Lieutenant-Colonel R. J Baker, Indian Medical Service (retired), is now in training in London and in its week-end camp at Eastcote.

A detachment of 30 men, including four medical officers (or civil medical practitioners), four clerks, four cooks, and 19 ward orderlies, has been supplied by the Corps, in response to a request from the War Office, and has started for Netley Hospital under the command of Lieutenant-Colonel Sharman, Indian Medical Service (retired), to serve in connection with the Indian troops A further small detachment of nursing orderlies has been supplied by the Corps for emergency service on hospital ships And the probability is that the War Office will make further requests for men to serve in similar capacities as time goes on. Recruits giving their services will, of course, come under military discipline, and will receive such pay as the War Office allows. The rates of pay offered up till now have been for clerks, cooks, and orderlies, 4s. a day, for subordinate medical assistants, 10s. a day, and for medical officers for civil medical practitioners), 20s a day In all cases hitherto rations and lodgings have also been provided Qualified medical men are eligible for the better-paid positions Students with medical training or with some experience of ambulance work can be very useful in nursing and interpreting, and others may be of use in other ways.

Trade with the enemy.

The position of firms in India which were wholly or partly German or Austrian is defined in a Press Communique which says — Government are advised that one of the effects of a declaration of war is to dissolve *ipso facto* all contracts of partnership between British and enemy subjects In the case, therefore, of firms where the partners are British and German or Austrian subjects the partnership would appear to be *ipso facto* dissolved, and the firms must decide whether they wish to carry on the business under British or German (or Austrian) management, and if Government are satisfied that the German or Austrian partners have in fact ceased to have any voice in the management of the firm, and due advertisement of the fact has been made, Government will be prepared, so far as Government are concerned, to recognise the remaining partners as successors in interest of the original firm and as British firms subject to the same duties and responsibilities that are imposed by the Royal Proclamation on all persons resident, carrying on business or being in the British Empire The same principles will be applied where neutral subjects are partners with Germans or Austrians In the case of firms which are wholly German or Austrian or decide to continue under German or Austrian management, a license under Royal Authority is necessary to enable them to continue their trade, and each application for such a license will be considered on its own merits with due regard to British interest

On November 17, a notification under the Foreigners' Ordnances, 3, 7, and 8 of 1914, was published issuing an order to be known as the **hostile foreigners trading order** (where hostile foreigner, is to mean any subject of the German Empire, Austria-Hungary or of the Ottoman Empire, other than an Egyptian subject). It empowered local Governments to inspect all books of any company, firm, association or body of individuals and to require information to be given Also to authorise a search of premises to ascertain whether business is being carried on by any hostile foreigner or by a firm of the same any individual or firm found to belong to this category is forbidden to carry on business except in accordance with any license that may be issued after application to the Government of India, submitted through the local Government concerned Powers are also given for requiring all assets to be deposited with a receiver appointed by the local Government Later in November it was notified that a general **licence to trade** in British India might be granted to a hostile firm if it satisfied the following conditions —

(1) That the company is registered in the United Kingdom or in a British possession

(2) That on the 3rd day of August 1914, such company was not the agent for any person carrying on a business or trade in the territories of any State now at war with His Majesty

(3) That on the 3rd day of August, 1914, not more than one-third of the issued share capital was held by, or on behalf of, and no appointment of director was held by any person or persons being subjects of any State now at war with His Majesty

(4) That on the 3rd day of August, 1914, no director, manager or other officer was a subject of any such State, and

(5) That such company is not specifically excluded from the benefit of this general licence by a notification in the *Gazette of India* by the Governor General in Council in this behalf for the time being in force

On November 30, an ordinance was notified, empowering the Governor-General in Council, generally also each Local Government individually, to call for information as to stocks of articles of commerce and to make searches for same, also to take possession of any **stocks unreasonably withheld** from the market, also to fix compensation for same.

A Royal Proclamation, dated August 7, set forth the law and policy with regard to trading with the enemy and stated that "it is contrary to law for any person resident or trading on business, or being in OUR Dominions to trade or have any commercial intercourse with any person resident, carrying on business, or

being in the German Empire without our permission" A similar proclamation dealt with trade with Austria-Hungary, and the effect of them, so far as India is concerned, may be judged by the following statistics relating to the **volume of India's trade with the belligerents** It appears from "The Review of the Trade of India in 1913-14" that the share of Germany in the import trade during that year was 6 9 per cent against 64 1 per cent. of the United Kingdom, 5 8 per cent of Java, 2 6 per cent of Japan, 2 6 per cent of the United States, and 2 3 per cent. of Austria-Hungary Germany's share, in the export trade last year, was 10 3 per cent against 23 7 per cent. of the United Kingdom, 9 2 per cent of Japan, 8 9 per cent. of the United States, 7 1 per cent. of France, 4 9 per cent of Belgium and 3 9 per cent of Austria-Hungary.

The value of Indian trade with Germany last year, says the Director of Statistics, has increased, costly British goods being largely displaced in India by German cheap manufactures German manufacturers have secured special advantages by the application of technical skill, chemical science or a combination of both, in the supply of certain goods, such as musical instruments and mineral dyes from coal tar The development of German shipping has also encouraged direct imports from, as well as export of cotton, hides, jute, oilseeds, and rice for manufactures, to Germany. Cotton manufactures, dyes, copper, iron and steel, machinery and woollens bulk in the import trade The substantial improvement in exports is chiefly due to increased shipment of raw jute and cotton, and seeds Special Officers were placed on duty to inquire into and report on the possibilities of the development of indigenous industries in the circumstances caused by the outbreak of war.

An **exhibition of samples** of imported German and Austrian goods was held at Calcutta in December under the direction of the Commercial Intelligence Department The following classes of articles were exhibited glass beads and glassware of various kinds, matches, soap, hardware including enamelled ironware, locks, hinges and sates, metal lamps, cutlery, etc, earthenware, pencils, brushes, toys, textiles, especially German shawls, blankets, flannels, mixed silk and cotton velvets, Austrian shawls and braid At the same time samples of Indian manufactures of similar classes of goods, and Indian manufactures were exhibited Such an exhibition of samples will, it is hoped, be held this year at Bombay and Madras, if suitable arrangements can be made. A number of pamphlets dealing with the trade of Germany and Austria-Hungary with India has been issued by the Commercial Intelligence Department.

Imports from Germany.

Some of the principal articles of merchandise imported from Germany into India during the year 1913-14

Articles.		Quantity.	Value.
			£
Cement	cwt	324,555	47,015
Chemicals and Chemical preparations		..	84,072
Drugs and medicines (total) .			69,802
Alizarine dyes . .	lbs	4,637,450	129,764
Aniline „ . .	„	7,553 830	408,302
Glass and Glassware (total) .		.	190,577
Hardware (excluding cutlery and electroplated ware)		.	482,284
Copper (total) .. .	cwt.	248,897	866,212
Sugar	„	14,071	12,217
Cotton goods (total)			944,504
Wool manufactures (including yarn) (total) . . .		....	716,384

Exports to Germany.

Some of the principal articles of merchandise exported from India to Germany during the year 1913-14.

Articles.		Quantity.	Value.
			£
Coir, manufactured (excluding rope)	cwt	212,859	158,840
Dyeing and tanning substances (total)	,,	301,073	107,112
Grain, pulse and flour (total)	,,	7,144,963	2,376,911
Rice, not in the husk	,,	6,317,901	2,096,054
Barley	,,	22,957	6,816
Wheat	,,	501,509	187,042
Hides, raw	,,	388,109	2,044,062
Skins, ,,	,,	12,794	77,343
Lac	,,	52 764	182,811
Oil cake	,,	379,185	100,009
Seeds (total)	,,	4,052,978	2,740,318
Copra	,,	479,797	657,628
Rape	,,	1,163,973	650,734
Linseed	,,	966,526	537,009
Groundnuts	,,	188,724	115,321
Sesamum	,,	330,208	270,887
Mowa	,,	567,670	309,791
Castor	,,	95,228	98,618
Cotton, raw	,,	1,688,070	4,001,628
Jute, ,,	tons	158,380	4,499,111
Gunny bags	No	5,363,772	114,266
,, cloth	yards	7,235,340	87,106

Trade with Austria-Hungary.

Some of the Principal articles of merchandise imported from Austria-Hungary into India during the year 1913-14

Articles.		Quantity.	Value.
			£
Glass and Glassware (total)		..	582,541
Matches, safety and others Gross of boxes		1,376,762	64,446
Sugar	cwt.	1,480,218	922,460
Cotton manufactures (total)		...	225,152
Wool manufactures (total)		.. .	77,023

Some of the Principal articles of merchandise exported from India to Austria-Hungary during the year 1913-14.

Articles.		Quantity.	Value.
			£
Rice, not in the husk . ..	cwt.	4,228,847	1,370,032
Hides, raw ..	,,	237,829	1,229,392
Seeds (total) .	,,	864,146	580,240
Sesamum ..	,,	386,842	310,290
Groundnuts	,,	214,114	111,729
Linseed ..	,,	130,004	73,305
Rape	,,	109,446	65,665
Cotton, raw	,,	74,041	1,949,417
Jute, ,, .	tons	45,727	1,319,392
Gunny bags .	No	112,700	2,067
,, cloth	yards	474,000	5,564

THE VICTORIA CROSS.

The announcement, made at the Delhi Durbar in 1911, that in future Indians would be eligible for the Victoria Cross gave satisfaction which was increased during the War by the award of that decoration to the following —

On the 31st October, in an action at Helleberke, No 4050 Sepoy Khudadad, of the 129th Duke of Connaught's Own Baluchis, was with one of the regimental machine guns The detachment was overwhelmed by numbers One gun had been put out of action by a shell and the three men remaining with it were ordered to retire. The British officer in charge of the detachment was wounded Sepoy Khudadad remained working the other gun until all the other five men of the detachment had been killed. He was wounded and has since been able to rejoin his corps.

In the action of the night of the 23rd and 24th November, near Fezthubert, No. 1909 Naik Durwan Singh Negi, B Company, 39th Garhwal Rifles, 1st Battalion, when the regiment was engaged in re-taking and clearing the enemy out of our trenches, was from first to last one of the first to push round each successive traverse taken in the face of severe fire from bombs and rifles at the closest range. Although wounded in two places, in the head and also in the arm, he continued fighting amongst the foremost and did not even report himself wounded till he met his Company Commander after the action was over. Naik Darwan Singh Negi was summoned on the 5th December to the General Headquarters to receive his V.C. at the hands of His Imperial Majesty the King.

Land Rewards for Services.

A Press *communique*, published at Lahore in December, states :—In the original scheme for the colonization of the area commended by the Lower Bari Doab Canal it was decided to reserve 103,000 acres to be allotted to the military authorities for distribution as rewards to pensioned Indian officers and men. In consequence of the participation of the Indian Army, which is so largely recruited from the Punjab, in the war, the number of cases in which the military authorities will desire to grant rewards of this nature for military services to both combatants and non-combatants who have distinguished themselves in the war or to their heirs, will, no doubt, be largely increased The Lieutenant-Governor has accordingly arranged with the sanction of the Government of India to reserve a further area of 75,000 acres to be placed at the disposal of the military authorities for this purpose. The allotment of the whole area now reserved, about 178,000 acres, will be held over till the close of the war when the military authorities will be in the best position to make the necessary selections. The grantees will be able to obtain occupancy rights in the land without any special payment five years after the commencement of the tenancy in each case, and after a further period of five years will be entitled to purchase full proprietary rights at half the market value of the land, subject to a maximum of Rs. 100 an acre. The payment of the purchase money will be spread over a period of 30 years, if the purchaser so desires. In

addition military pensioners, who may receive the grants, will also be eligible for selection as tenants of the official rectangles which will be allotted on horse-breeding conditions.

Territorial Troops in India.

The following is a complete list of the British units who arrived in India in 1914 in relief of the British troops who have gone to the front, together with the stations to which they have been posted —

Wessex Division

Commanding, Major-General Donald, C B

D. A A and Q. M G, Major Mudge, the Queen's Regiment

A D. C Lieut Merewether, Wiltshire Regt.

Devon and Cornwall Brigade

4th Duke of Cornwall's Light Infantry (Major Smith), Bareilly

4th Devonshire Regiment (Lt-Col Acland Troyte), Ferozepore

5th Devonshire Regiment (Lt-Col. Hawker), Multan.

6th Devonshire Regiment (Lt-Col. Radcliffe), Lahore

South-western Infantry Brigade

4th Somerset Light Infantry, (Lt-Col Cox), Madras

5th Somerset Light Infantry (Lt-Col. Cooke-Hurle,) Ambala.

4th Dorsetshire Regiment, (Lt-Col Bavter) Ambala

4th Wiltshire Regiment (Col-the Earl of Radnor), Delhi.

Hampshire Infantry Brigade

4th Hampshire Regiment, (Lt-Col. Bowker), Poona.

5th Hampshire Regiment (Lt-Col. Burford Hancock), Allahabad.

6th Hampshire Regiment (Lt.-Col. Playfair), Agra.

7th Hampshire Regiment, (Lt.-Col. Parke), Bombay.

Field Artillery of Wessex Division.

First Wessex Brigade

Commanding Lt-Col. Choke.

1st Hampshire Battery (Major Flowers), Lahore.

2nd Hampshire Battery (Major M. House), Peshawar.

3rd Hampshire Battery (Major P. House), Lahore.

Second Wessex Brigade.

Commanding Lt-Col Powell.

4th Hampshire Battery (Major Malcolmson), Lucknow.

5th Hampshire Battery (Major Thompson), Lucknow.

Third Wessex Brigade.

Commanding Lt-Col Bedford Pim.

6th Hampshire Battery (Captain Carrell), Ambala

Wiltshire Battery, (Major the Earl of Suffolk), Delhi.

Dorsetshire Battery (Major Livingstone Learmonth), Bareilly.

Fourth Wessex Brigade.

Commanding Lt-Col Talbot.

1st Devonshire Battery (Lt-Col Perowne), Allahabad

2nd Devonshire Battery (Major Vickers), Dinapore.

3rd Devonshire Battery (Major Arden), Barrackpore

Surrey Infantry Brigade

4th Royal West Surrey Regiment, Secunderabad.

5th Royal West Surrey Regiment, Lucknow.

5th East Surrey Regiment, Cawnpore

6th East Surrey Regiment, Fyzabad.

Kent Infantry Brigade

4th East Kent Regiment, Mhow.

5th East Kent Regiment, Kamptee

4sh Royal West Kent Regiment, Jubbulpore.

5th Royal West Kent Regiment, Jhansi.

Middlesex Infantry Brigade.

9th Middlesex Regiment, Dinapore

10th Middlesex Regiment, Fort William

4th Shropshire Light Infantry, Rangoon.

4th Border Regiment, Maymyo.

1st Home Counties Brigade, R F.A.

1st Sussex Battery, Kamptee.

2nd Sussex Battery, Mhow.

3rd Sussex Battery, Mhow.

2nd Home Counties Brigade, R F.A.

4th Sussex Battery, Ambala.

5th Sussex Battery, Multan.

6th Sussex Battery, Ferozepore.

3rd Home Counties Brigade, R F.A.

1st Kent Battery, Jubbulpore.

2nd Kent Battery, Jubbulpore.

3rd Kent Battery, Jubbulpore.

Racing in India.

Calcutta.

The King-Emperor's Cup Distance 1 mile —

Mr. Goculdas' Arthur B (8st 1 3 lbs), Ruiz 1
Mr. T. Scott's Cider (9st) A Khun 2
H H The Kour Saheb of Patiala's Le Soleil (9st 3lbs) Templeman . .. 3
Mr. R S Kempion (9st 3lbs) . . 4

The Viceroy's Cup Distance 1¾ mile —

Mr. R R S 's Bachelor's Wedding (9st) P Brown . .. 1
Mr. Goculdass' Arthur B (8st 7lbs) Ruiz 2
Mr. Galstaun's Shimingway (9st 3 lbs), J. Trenoweth . . 3
Mr Thaddeus' Spicy Bit (9st 3lbs) A Ferguson . .. 4

The Governor's Cup Distance R C (1 mile 5 furlong 58 yards) —

Mr Goculdas' Matchlock (8st 7lbs), A Hoyt . 1
Mr Chowdhury's Millner (8st 6lbs), Ames. 2
Mr Galstaun's Shining Way (8st 2lbs), A Ferguson } Dead heat
Mr Gussy's Valerius (7st 13lbs), Bullock }

The Metropolitan Distance 6 furlongs —

Mr Goculdas' Primrose Morn (9st 3lbs) Ruiz 1
Mr Thaddeus' Watchtower (8st 11lb) J Trenoweth 2
Mr Goculdas' Soultine (7st 7lbs), A Hoyt 3
Mr R R S' s Criton (8st 12lbs), P Brown . 4

The Macpherson Cup Distance St Leger Course (1 minute 6 furlong 132 yards) —

Mr R R S's Mayfowl (9st 9lbs), P Brown . . 1
Mr Gussy's Valerius (8st), A Ferguson . 2
Mr Goculdas' Matchlock (7st 11lbs) A Hoyt . .. 3
Mr. Harrison's Vancouver (7st), Harrison 4

Prince of Wales' Plate —

Mr Galstaun's Shining Way (7st 13lbs, carried 8st 1lb), J Trenoweth .. 1
Mr R R S' s Criton (8st 12lbs), P Brown 2
Mr Garda's Lumination (9st) W Southall 3
Mr Thaddeus' Watch Tower (8st)

The Merchants' Plate Distance 1½ miles —

Mr Galstaun's Shining Way (8st 12lbs), J. Trenoweth . 1
Mr Chowdhury's Millner (9st 2lbs) Ames 2
Mr Thaddeus' Wayward and Wild (7st 12lbs) A Ferguson . 3
Mr. Bartlet's St Andrews (6st 12lbs. carried 7st 3lbs) Smyth . 4

Burdwan Cup Distance R C and a distance over seven flights —

Mr Goculdas' Picnic (11st 3lbs), A Hoyt 1
Mr Ray Chowdhary's Jemima (9st 10lbs.), Williamson 2
Mr Thaddeus' Wayward and Wild (9st 10lbs), T. Ferguson .. . 3

International Pony Plate.—

Mr Goculdass' Refresher (9st 13lbs), Ruiz 1
Major Holden and Mr. J D. Scott's Lad Marchmint (9st 7lbs), P Brown . 2
Mr Gussy's Spring Daisy (9st 7lbs), Templemar } Dead heat 3
Mr Powell's The Flapper (late Blue Duck) (9st 3lbs), Murdison. }

TOLLYGUNGE GYMKHANA.

Governor's Cup Distance—1 mile —

Mr C N Donetil's Larkspur (11 st 3 lbs), Mr Roddick 1
Mr E C Davi's Bioscope (11 st 2 lbs), Mr Evers .. 2
Mr C Kinnimouth's Prince Charlie (11 st 3 lbs), Mr Radmore 3
Mr A C Sayer's Cigarette (9 st 7 lbs), Mr E H Sayers 4

Club Stakes Distance—5 furlongs —

Mr Donetil's Blackwell (11 st 5 lbs) Mr. Sayers 1
Mr D Hunter's Gipsy King (10 st 8 lbs), .. 2
Money Down (10 st 7 lbs), Owner .. 3
r Tanner's Cartridge (10 st 11 lbs), Owner 4

Ballygunge Cup Distance about one and a half miles —

Mr L Edward's Ahduk (10 st 3 lbs), Mr. Walker 1
Mr R Hasluck's Stirling (9 st. 7 bs, carried 10 st. 6 lbs), Owner .. 2

TOLLYGUNGE STEEPLECHASES.

Indian Grand National Distance 3 miles —

Mr Samond Walker's Tommy Daw (9st carried 9st 4lbs), Northmore . . 1
Captain Astor's Sidbrook (12st 4lbs) Mr. Hillhard .. . 2
Mr. J. D Scott's Sea Lad (11 st) Mr Evers.. 3
Doctor Taylor's Aconalad (9st 7lbs), Macneilage 4

Tollygunge Plate —

Captain Astor's Sidbrooke (12st. 7lbs) Hillhard 1
Mr Walker's Tommy Daw (9st. 13lbs) Mr. Roddick 2
Dr Taylor's Acona Lad (9st), McNeilage .. 3
Mr J Scott's Sea Lad (10st. 4lbs), Mr. Evers 4

Bombay.

The Byculla Club Cup Distance 1½ miles —

Mr M Goculdass' Pretty Good Short (7st 3 lbs), Purtoo Singh 1
Mr J C Galstaun's Shining Way (8st 11lbs), Ruiz . 2
H H Kour Sahib's Hamara (6st 7lbs), Harrison . . 3

The Turf Club Cup Distance 1½ miles —

Messrs M Goculdass and P Mathuradass' Mexico (7st carried 7st 2lbs) Hoyt . 1
Mr Ali bin Talib's Gowahajmer (7st 5lbs), Duller . 2
Messrs M Goculdass and N Mathuradass' Nakib (9st 8lbs), Ruiz 3

The Grand Western Handicap Distance about 1 mile, 1 furlong —

Mr. M Goculdass' Soultine (7st 2lbs), Purtoo Singh 1
Mr R R S's Mayfowl, (9st 10lbs), Brown 2
Mr M Goculdass' Matchlock (8st 5lbs), Ruiz 3

The Bombay Derby Distance 1½ miles —

Nawab Najaf Ali Khan's Sir Knight (8st 3lbs), A Ferguson 1
Major F B Prideaux's Young Hyderi (6st 10lbs), Kaikhosroo 2
Mr Ali bin Talib's Black Malik (8st), Zammil . 3

The Bombay City Plate Distance 1½ miles —

Mr R R S's Kempion (9st 10lbs), Brown 1
Mr J C Galstaun's Shining Way (9st 3lbs) Ruiz . 2
Mr Kelso's Hilarity (9st 3lbs), Sampson 3

The Mansfield Plate Distance 6 furlongs —

Messrs Goculdass and Mathuradass' Forfeit (7st 3lbs), Purtoo Singh . 1
Mr. R R S 's Criton (8st 9lbs), Brown 2
Mr T M. Thaddeus' Watch Tower (7st 9lbs), Ferguson . . . 3

The Willingdon Plate Distance about 7 furlongs —

Mr R R S 's Kempion (10st. 7lbs), Brown 1
Mr M Goculdass' Refresher (6st 10lbs), Purtoo Singh 2
Mr Goculdass' Soultine (7st 8lbs), Hoyt .. 3

The Malabar Hill Plate Distance 6 furlongs —

Mr R R S's Kempion (9st 10lbs), Brown 1
Mr M Goculdass' Primrose Morn (9st. 3lbs), Ruiz 2
Mr M Goculdass' Polish (9st 3lbs), A. Hoyt 3

Poona.

The Governor's Cup Distance—R C and Distance —

Genl Nawabzada Obaidulla Khan's Purity (8 st 2 lbs), Bowley . .. 1
Genl Nawabzada Obaidulla Khan's Haify (6 st carried 6 st. 8 lbs), Japhet . 2
Messrs Goculdass and Mathuradass' Mexico (8 st 2 lbs, carried 8 st 4 lbs), Ruiz. . 3

The Western India Stakes. Distance—1¼ mile —

Mr Goculdass' Refresher (7 st 4 lbs), Purtoosingh . . 1
Mr Goculdass' Matchlock (8 st), Sardar Singh . .. 2
Mr Oomer's Dalmatia (9 st 2 lbs), Hill . 3

The Turf Club Cup Distance—1½ miles —

Genl Nawabzada Obaidulla Khan's Singer (8 st 3 lbs), Bowley 1
Mr Ali bin Talib's Gowahajmer (7 st 7 lbs carried 7 st 10 lbs) Zammil 2
Capt Egerton's Longboat (6 st), Kamad . 3

The St Ledger Plate Distance—R C and Distance —

H H the Kour Saheb of Patiala's Mil (6 st 7 lbs), Japeth . 1
H H the Kour Saheb of Patiala's Hamara (7 st 7 lbs), Purtoosingh . 2
Mr Kelso's Cherrywood (8 st 9 lbs), Brown 3

The Aga Khan's Cup —Distance 1½ miles —

Mr Galstaun's Shining Way (9 st 3 lbs), A Ferguson . 1
H H the Kour Saheb of Patiala's Jacamar (8st 1 lb), Pratt . 2
Mr Kelso's Cherrywood (8st 1 lb) W Sampson . . . 3

The Poona Derby Distance—1½ miles —

Mr Mahomed's Beyrut (9 st), Brown .. 1
Mr Ali bin Talib's Black Malik (8 st 3 lbs), Pratt 2
Mr R R S 's Kayid (6 st carried 6 st. 6 lbs), Purtoosingh 3

The Tria Plate Distance—1 mile —

Mr R R S 's Kempion (9 st 3 lbs), Brown 1
H H the Kour Sahib of Patiala's Jacamar (8 st 1 lb), Pratt . . . 2
Mr Garda's Lumination (8 st 10 lbs), Ruiz 3
Mr Galstaun's Shining Way (9 st 3lbs), A Ferguson 4

Lucknow.

Great Oudh Handicap Distance—6 furlongs —

Sirdar Jewan Singh's Hyrem (9 st 3 lbs), Quinn .. 1
Mr Rosco's Rupert II. (8 st 10 lbs), Ruiz. 2
Messrs Lion and Skimmer's Brandy II (7 st 10 lbs), A. Hoyt . . } Dead heat. 3
Major Hebal Mahomed Khan's Salisbury (7 st, carried 7 st. 4 lbs), Andrews . }

Military Handicap Chase. Distance—2¼ miles —

Mr Thomas' Councillor (9 st 10 lbs) Major Kearns .. } Dead heat 1
Mr. Campbell's Mimicry (9 st. carried 9 st 2 lbs), Thursby .. .. .. }

Capt. Kenworthy's Sholto (12 st 1 lb), Owner 3
Mr. Fleming's Simson (12 st) Capt. Hilliard 4

Civil Service Cup. Distance—6 furlongs.—
Mr Goculdass' Kiora (9 st 3 lbs), Ruiz . 1
Mr Alec's Village Girl (10 st. 5 lbs), Bowley 2
The Kour Sahib of Patiala's Alice (10 st. 2 lbs.), Murdison 3
Mr. Goculdass' Beryl (10 st 7 lbs) A. Hoyt 4

Army Cup.—Abandoned owing to the war.

Delhi.

Indian Cavalry Grand Annual Chase. Distance—2½ miles —
Mr W. Coventry's Bayard (12 st 4 lbs), Owner 1
Capt A M Daniel's Flying Hackle (10 st. 12 lbs carried 11st 10 lbs), Owner .. 2
Capt Caldwell's Caradof (late Gus) (11 st 4 lbs. carried 11 st 8 lbs), Capt. Bradley 3
Mr G Fellowe's Murgha (9 st 8 lbs. carried 10 st. 8 lbs.), Owner 4

Matheran.

Willingdon Plate Distance—6 furlongs —
Mr Ebrahim Mana's Ready Money (9 st. 3 lbs), Mujeed 1
Mr Shaikh Esmail's Malayeb (9 st 8 lbs), Syed 2
Mr Ahmed Azami's Crisis (9 st. 13 lbs), Nama 3

Lahore.

Lieutenant-Governor's Cup.—
Mr. Kennedy's Kader Beg (9st 11 lbs) .. 1
Capt. White's Lazim (10st. 11lbs.) Owner . 2
Mr. Muller's Narin (10st 10 lbs), Mr. Bernard 3

Lahore St. Leger Distance—1¼ miles —
Mr Flemming's Sabona (11 st. 7 lbs), Thursby 1
Mr Sydney Smith's Adalina (8 st. 5 lbs carried 8 st 6 lbs), Sackville . .. 2
Capt. Lee's Ringette (7 st 9 lbs), Jaffir .. 3

Rawalpindi.

Punjab Army Cup Distance—2 miles —
Mr McGregor's Arram (11 st 7 lbs), Capt. Filcher 1
Major McGown's Peter Doody (11 st 2 lbs), Coventry 2
Major McGown's Alexius (11 st 8 lbs.), Capt Doyle . .. 3

Great Northern Plate Distance—7 furlongs —
Kour Sahib of Patiala's Housemaid (12 st. 1 lb.), Thursby 1
Kour Saheb of Patiala's Vigour (11 st. 11 lbs), Capt. Holmes 2
Capt. Odlum's Bit-O'-Sugar (10 st 3 lbs), Crowden 3
Capt. Lee's Interest (10 st. 3 lbs), Coventry 4

Mahableshwar.

The Governor's Cup. Distance—1 mile.—
Sheik Ismail's Malayeb, Coaker 1
Mr. Desuza's Boxer, Majeed .. . 2
Maharaja of Bhavnagar's Grey Middleton, Meynell 3

The Civil Service Purse. Distance—5 furlongs —
Horner's Denver, Willet 1
Maharaja of Bhavnagar's Just, Meynell .. 2
Captain Goldie's Lal, Mujeed 3

Barrackpore.

Cooch Behar Cup Distance—1 mile (Presented by H. H. the Maharajah of Cooch Behar) —
Mr Galstaun's, Convent Girl, (10 st. 5 lbs), Ferguson 1
Mr Johnstone's, Zara (8 st. 11 lbs), Drew ..
Mr. Ghose's, Healoya (7 st. 10 lbs), Mitchell 3

Bareilly.

The Bareilly Gold Cup —
Messrs. Cheape and Wienholt's Needles (8 st 5 lbs), Trahan 1
Major Holme's Shamrock (8 st 12 lbs), Northmore 2
Mr Sydney Smith's Sirenia (8 st 4 lbs), Durga 3

The Bareilly Grand National —
Mr. Fleming's Red Lucifer (12 st), Northmore 1
Mr Fagan's Terra Firma (10 st 12 lbs), Mr. Thursby .. 2
Major Barnard's Bright Metal (11 st 4 lbs), Mr. Doyle 3

Meerut.

Meerut Gold Cup. Distance—6 furlongs —
Mr. Binning's, Sahana (7 st. 7 lbs), Melsom 1
Sirdar Jiwan Singh's, Ormy (10 st 7 lbs), Northmore . . . 2
Captain Weinholt's, Needles, (7 st 2 lbs), Japeth 3

Jodhpur Cup. Distance—2½ miles —
Major Walter's, Kesmeldon, (11 st. 7 lbs), Mr. Cray 1
Capt. Daniel's Flying Hackle (11 st.) Owner 2

Royal Calcutta Turf Club Steeplechase Distance—2½ miles —
Major Walter's, Kesmelden, (10 st. 5 lbs.), Williamson 1
Sirdar Jiwan Singh's, Glenlyon, (11 st), Northmore 3

Mysore.

The Maharajah of Mysore Cup. Distance—1¼ miles —
Mr Kelso's Cherrywood (8 st 3 lbs), Kaikooshroo 1
The Yuvaraja of Mysore's Little Speed (7 st) Purtoo Singh 2
The Kour Sahib of Patiala's Hamara (8 st. 9 lbs), Pratt 3
Col J. Desaraj Urs' Five Crown (8 st 5 lbs.), Melsom .. ..

The Yuvaraja's Cup. Distance—7 furlongs —
Mr. Ali Mahomed Saith's Aubrey (10 st. 7 lbs), Pratt 1
Mr. A Sattar's Ismailia (10 st 3 lbs), Ferguson 2
Col Aubrey Jones' R G (7 st 7 lbs), Melsom 3

Rangoon.

Rangoon Derby.—
Mr Saik Kee's Sein Nyun (late Butcha) (8 st 1 lb), Vincent 1
Hon Chintrong's Golden Fly (8st. 3 lbs), Mr. Gabell 2
Mr Chintrong's That One (9 st 2 lbs), Mr Billett 3
Mr Burjorjee's Outlaw (8 st. 10 lbs), Trenoweth 4
Won by two lengths Time—1 min, 43 1-5secs.

Ambala.

Royal Calcutta Turf Club Handicap. Distance—7 furlongs —
Mr Manmohan's Lady Spring (9 st 5 lbs), Ruiz 1
Mr Hajee Ali Mahomed Saith's Aubrey (7 st 7), Harrison 2
Mr. Rossco's Rococo (10 st 9 lbs), Trahan 3
Capt. Makintosh's Rosy Guard (8 st 11 lbs), Northmore 4

Simla.

The Hardinge Cup. Distance 7 furlongs.—
Mr Rossco's Uslan (9 st. 7 lbs), Colonel Mussenden } Dead heat. 1
Mr Bosworth Smith's Indore (8 st 7 lbs), Trahan }
Mr Ford Sackville's Kashmir (9 st 10 lbs), Mr. Mulliner 2
Mr Rossco's Rupert (11 st. 3 lbs), Captain De Pass 3
The Duff Cup. Distance—6½ furlongs —
H. H the Kour Sahib's Lucky Maid (11 st), Colonel Mussenden 1
Captain Lee's Winkey (10 st. 3 lbs.), Jaffer Sirdar 2
Jewan Singh's Fortunate Lady (10 st. 12 lbs), Captain Holmes 3
The Staff Cup. Distance—6 furlongs —
H. H the Kour Sahib's Alice (11 st. 5 lbs), Col. Mussenden 1
Sirdar Jewan Singh's Birthday (12 st.), Captain Holmes 2
Col Beville's Mavourneen (11 st. 3 lbs.) Abdul 3

Secunderabad.

The Grand Annual Hurdle Handicap. Distance—1½ miles.—
Major J G Rotton's Astrologer (10 st 2 lbs), Capt. Cairnes 1
Mr H H. Buckley's the Ghost (11 st), Capt. Denning 2
Mr S A. Sandford's Paddy (10 st. 2 lbs), Owner 3

Bangalore.

Maharajah of Mysore's Cup Distance—1 mile and 640 yards —
The Kour Sahib of Patiala's Hamara (9 st), Pratt 1
Mr M. Yunis' Glendook (7 st. 9 lbs), Crowden 2
Mr A. Sattar's Vavasor (8 st. 2 lbs), Ferguson 3
Mr D B. Captain's Sugar Loaf (9 st. 7 lbs), W Southall 4
The Bangalore Cup Distance—1¼ miles —
Mr Kelso's Cherrywood (9 st 9 lbs.), Pratt.. 1
Mr D B Captain's Sugar Loaf (9 st), W. Southall 2
Mr R R S 's Criton (9 st 12 lbs), Kaikooshroo 3

Karachi.

The Sind Club Cup Distance—1 mile.—
Mr. Woodward's, Sunspot (10 st. 7 lbs.) Hill 1
Mr. Deverteiul's,, Tahib, (7 st), Gumai .. 2
Captain Meynell's, Good Success (8 st 10 lbs), Southall 3
The I. C S. Cup. Distance—11 furlongs —
Mr. Brigstocke's Maidie, (10 st 2 lbs), Hill . 1
Capt Meynell's, Miller's Daughter, (10 st. 7 lbs), Hoyt 2
Mr. Muller's, All's well, (8 st 10 lbs), Barossa 3
The Karachi Cesarewitch Distance—11 furlongs —
Capt Meynell's, Silver Memory, (9 st. 3 lbs), Hoyt 1
Mr Manmohan's, Lady Spring, (10 st 7 lbs), Morrison 2
Mr Woodward's Lady Anne, (10 st. 6 lbs), Hill 3

PIGSTICKING.

The Muttra Cup.—
Capt. R. W. Manderson, Capt. H E Medlecott, and Mr. G C. G. Gray (3rd Skinner's Horse).

The Kadir Cup.—
Captain Medlecott (3rd Skinner's Horse).

Gujarat Cup —
Mr. Gray (3rd Skinner's Horse).

Salmon Cup.—
Mr. Gray (3rd Skinner's Horse).

HOCKEY.

All-India Tournament (Allahabad) —
North-Western Railway 5 goals
1st Bn, Royal Scots . . 1 goal

Beighton Tournament (Calcutta) —
Aligarh College 3 goals
Jamalpore (E I Ry) . 2 goals

Aga Khan Tournament (Bombay) —
Grant Medical College 2 goals
2nd Dorsets . *Nil*

Junior Aga Khan Tournament (Bombay) —
St Xavier's High School 1 goal
Byculla E S School *Nil*

Inter-Garrison Tournament (Bombay) —
79th Coy, R G A 1 goal
E Coy (Cyclists) B V R *Nil*

Elton Tournament (Bombay) —
Byculla E S School 5 goals
St Mary's School .. *Nil*

Madras Tournament —
13th Brigade, R F A . 5 goals
Madras Vol Artillery .. *Nil*

Lawford Challenge Cup (Burma) —
Royal Munster Fusiliers . 2 goals
4th Worcestershire Regiment . *Nil*

Bechtler Tournament (Cawnpore) —
Oudh and Rohilkhand Ry 4 goals
Cawnpore Sports Club . 3 goals

Bangalore Tournament —
7th Hussars . .. 3 goals
St Joseph's College . 1 goal

Ajmere Tournament —
Loco Department (R M Ry) 6 goals
44th Infantry 2 goals

Alderson Tournament (British Troops) —
2nd Dorsets .. . 1 goal
R F A (Kirkee) . *Nil*

Alderson Tournament (Indian Troops) —
95th Russell's Infantry 1 goal
105th Mahrattas . . *Nil*

Divisional Tournament (Poona) —
95th Russell's Infantry .. 1 goal
105th Mahrattas . *Nil*

Indian Army (Eastern Command) Tournament —
93rd Burma Infantry. . . 4 goals
13th Rajputs . . 2 goals

Laver Tournament (Secunderabad) —
King's Light Infantry .. .. 3 goals
7th Dragoon Guards .. . . *Nil*

Coonoor Tournament —
St Joseph's College . 2 goals
"F" Coy "The Buffs" . *Nil*

FOOTBALL.

(*Association*)

I F A Shield (Calcutta) —
King's Own Regiment . .. 1 goal
Calcutta Football Club . . *Nil*

Rover's Tournament (Bombay) —
Abandoned owing to the War.

Madras Tournament —
Loyal North Lancs. . .. . 1 goa
Norfolk Regiment . . *Nil*

Punjab Tournament (Ambala) —
Connaught Rangers . 1 goal
King's Royal Rifles . .. *Nil*

Murray Tournament (Lucknow) —
Seaforth Highlanders . . 1 goal
Royal Scots . . *Nil*

Harwood League (Bombay) —
Senior—Sherwood Foresters
Junior—Bombay Gymkhana "A"

LAWN TENNIS.

Punjab.

Men's Singles —
Atkinson beat Mahomed Naqi (6-0) (6-2) (6-3)

Ladies' Singles —
Mrs Gracey beat Bibi Amrit Kaur (6-2) (6-2).

Mixed Doubles.—
Mrs Macintyre and Crawford beat Mrs. Gracey and Deane (6-4) (8-6)

Men's Doubles —
Deane and Atkinson beat Crawford and Vickery (6-1) (4-6) (6-2) (6-2).

Ladies' Doubles —
Mrs Gracey and Mrs Muspratt Williams beat Mrs Leslie Jokes and Bibi Amrit Kaur (6-2) (4-6) (6-2)

Marker's Tournament
Juma (Lahore) beat Moula] Bux (Kapurthala (6-0) (6-1) (6-1).

Allahabad.

Gentlemen's Open Singles —
The Balrampur Challenge Cup and a Cup value Rs 100 and Prize Cup value Rs. 75 — 1st, Atkinson, 2nd, Crawford.

Gentlemen's Open Doubles —
1st, Atkinson and Gamble, 2nd, Graham and Bean

Open Mixed Doubles —
1st, Mrs Leslie Jones and Atkinson; 2nd Mrs Macmillan and Dillon

Ladies' Open Singles —
1st, Mrs Leslie Jones, 2nd, Mrs Fremantle

Ladies' Open Doubles —
1st, Mrs Macintyre and Mrs Leslie Jones, 2nd, Mrs Gale and Miss Hugh Jones

Gentlemen's Handicap Singles —
1st Condon (—15), 2nd S K Mukerji (Scr)

Gentlemen's Handicap Doubles —
1st, Wright and Leapingwell, 2nd, Crawford and Vickery

Mixed Doubles Handicap —
1st, Mrs Macmullen and Dillon; 2nd, Mrs Ingram and Jusber Singh

Cup, value Rs 45, presented by Messrs. Bechtler and Co —
D J M Campion, R A

Prize presented by the Committee —
W T M Wright, I C S

Bombay.

Marryatt Cup —
Nicholson beat England

Western India Tournament —
Singles —Fyzee beat Rangarao

Gentlemen's Doubles —England and Kidd beat Naoroji and Engineer

Mixed Doubles —England and Mrs Reynolds beat Fyzee and Lady Tata

Gymkhana Handicaps —
Singles—Kilby (Scr) beat England (—40)
Doubles—Clayton and Latimer (Scr) beat Simms and May (+2-6)

Bengal.

Championship Tournament —
Mixed Doubles—Shallow and Mrs Maynard beat Doury Davies and Mrs Allisan
Gentlemen's Doubles—Kingscote and Deane beat A W Shallow and D S Shallow.
Singles—Kingscote beat Shunedzu

Matheran.

Gentlemen's Singles —Mr W Reid
Mixed Doubles —Lady Tata and Bottliwalla
Ladies' Doubles —Mrs Scott and Miss Gordon

Simla.

Men's Singles —
Captain Rendall

Men's Doubles —
Messrs Gamble and Vickery

Ladies' Singles —
Mrs Gracey

Mixed Doubles —
Mrs Gracey and Mr Moore

Coonoor.

Men's Doubles, open —
Sambasiva Rao and Singarvelu beat Mouatt and Bolton

Ladies' Singles, open —
Mrs Molesworth beat Miss Cardew

Men's Singles, open —
Mouatt beat Bolton

Poona.

Ladies' Singles —
Miss Gordon

Men's Doubles —
Captains Lucas and Dudley

Mixed Doubles —
Mrs Mangin and Capt Lucas

Ladies' Doubles —
Mrs Pratt and Miss Gordon

POLO.

Indian Polo Championship (Calcutta) —

Viceroy's Staff	8 goals
The Travellers	4 goals

The Ezra Tournament (Calcutta) —

12th Cavalry	5 goals
17th Cavalry	3 goals

Jarmichael Tournament (Calcutta) —

The Ditchers	5 goals
The Spiders	3 goals

Punjab Tournament —

Rifle Brigade	5 goals
21st Lancers	4 goals

Raja Venugopal Tournament (Madras) —

26th Cavalry	6 goals
Government House Team	*Nil*

Connell Cup (Allahabad) —

17th Cavalry	16 goals
Cheshire Regiment	2 goals

Secunderabad (January) Tournament —

7th Dragoon Guards	6 goals
Futteh Maidan Gymkhana	4 goals

Secunderabad (February) Tournament.—

61st Pioneers	6 goals
110th Mahrattas	1 goal

15th Hussars' Cup (Lucknow) —
The Tigers .. . 5 goals
The Inniskilling Dragoons . 1 goal

Lucknow Monsoon Tournament —
King's Dragoon Guards . 9 goals
K. O. S Borderers . . 4 goals

Infantry Tournament (Bareilly) —
2nd Gurkhas .. . .. . 4 goals
2nd Rifle Brigade . 3 goals

Indian Cavalry Tournament (Delhi) —
9th Hodson's Horse . . .. 4 goals
3rd Skinner's Horse . . 2 goals

Cawnpore Tournament —
Jacob's Horse . 5 goals
2nd Lancers .. 3 goals

Rajputana Tournament (Ajmere) —
Kishengarh 14 goals
Ajmere Gymkhana (+6) 8 goals

Idar Cup (Bombay) —
20th Lancers . . . 3 goals
Royal Artillery . *Nil*

Hyderabad (Deccan) Junior —
Golconda "B" Team 7 goals
20th Deccan Horse . . 5 goals

Inter-Regimental Tournament (Meerut) —
17th Lancers .. . . 7 goals
Inniskilling Dragoons . 3 goals

Meerut Autumn Tournament —
18th Lancers .. ..12 goals
3rd Skinner's Horse . .. 2 goals

Subalterns' Tournament (Meerut) —
17th Lancers .. .. .. 6 goals
King's Dragoon Guards . .. *Nil*

Ambala Tournament —
8th Hussars .. . .. 8 goals
9th Hodson's Horse . . .. 3 goals

Rawalpindi Tournament —
21st Lancers .. . . 8 goals
19th Lancers .. *Nil*

Beresford Tournament (Simla) —
Viceroy's Staff 9 goals
The Magpies .. 8 goals

Mysore Birthday Tournament —
7th Hussars . . 16 goals
Bangalore Gymkhana 2 goals

Bangalore Tournament —
7th Hussars .. 3 goals
26th Cavalry .. .. . 2 goals

PAPERCHASING.

Ladies' Paperchase Cup (Calcutta) —
Miss Dods 1, Mrs Godfrey 2, Mr Lamont Walker 3

Ladies' Paperchase Cup (Bombay)—Mrs. Turner

POINT-TO-POINT RACES.

Bombay.

The Bombay Hunt Cup. Distance about 4 miles—
Mr. A. K. Graham's Swivveller . .. 1
Mr M. Rommel's Better Luck 2
Mr. R C Lowndes' Kitty .. 3

The Bombay Pony Hunt Cup Distance about 4 miles —
Mr. E. C. Reid's Flyaway 1
Hon. Mr. W L Graham's Blotting Kagaz 2
Mr. A. Kirke-Smith's Sir Tom .. 3

The Jackal Club Point-to-Point Race. Distance about 4 miles —
Mr T. D. Moore's Tapu, Mr. M Rommel . 1
Mr. A. K. Graham's Ayrshire, Owner .. 2

Delhi.

Hunt Point-to-Point Race—
Mr. Macdonald's (11th Lancers) Lazzat 1
11th Lancer's Cup. Mr Princep's Vladivostock 2

Lahore.

Race for Horses—
Mr. Penny's Pilgrims' Progress 1
Mr Heath's Lops Lars 2
Mr Field's Ugly 3

Race for Ponies—
Capt. Steel's Gleam 1
Capt St Hill's, The Ancient . 2
Mr Watki's Arabi 3

Ladies' Race—
Mrs. Watkhen's, Diker . . 1
Mrs. Morton's, Amber 2
Mrs. Steel's Suzanne . . . 3

Open Race (Horses or Ponies) —
Capt Allen's Kirkland 1
Mr. Harrison's William the Silent 2

RACQUETS.

Bombay.

Professional Finals (Handicap).—
Jamsetji (—3) beat Hormusji (scr.)
Singles—
Capt. Slogett beat Mr. Gull.
Doubles—
Slogett and Gull beat Birch and Macbeth
Mixed Doubles—
Macbeth and Hormusji.

GOLF.

Bombay.

Wimbledon Cup—

E. E. Coombs (85)	1
J. L Hamilton (86)	2

Macdonald Cup—

E Hargreaves	1
T N Begbie	2

Golfer's Cup—

Margoliouth	1
Coombs	2

Poona.

Governor's Cup—
F. W Bain (153) A. Stranger Leathes (156).
Lady Willingdon's Cup—
Mrs Kelly (128); Mrs Stranger Leathes (131).

Calcutta.

Captain's Prize—

J H. K Dremmie	1
I C McLuse	2

Gulmarg (Kashmir).

Gulmarg Tournament—

Captain Cook	1
Colonel Trydell	2

CRICKET.

Lansdowne Shield (Calcutta)—
Scottish Churches College beat the Metropolitan College by a wicket
Quadrangular Contest (Bombay)—
Final abandoned owing to heavy rains.
Lord Northcote Shields (Bombay)—
St. Xavier's College
Gaikwar Cup—
Gujarat College

Chronicle of the year 1914.

JANUARY.

1st —Indian New Year Honours List published There were created two K C S I. (the Hon Mr. Saiyid Ali Imam and the Hon Mr D. C. Bailhe), three C S I, nineteen C I E, eight Knights, two K C B, three C B Seven Gold Medals and twenty Silver Medals and one bar to a Silver Medal of the Kaiser-i-Hind were given.

The anniversary of the Proclamation of His Majesty the King-Emperor was celebrated with the usual ceremonial

Sir Benjamin Robertson sailed from Bombay in the R I M S *Hardinge* for Natal, to represent the Government of India at the inquiry into Indian grievances there and the disturbances arising from them.

H E the Governor of Bombay and Lady Willingdon returned to Bombay on the conclusion of their Christmas tour in Idar and Palanpur

5th —An official communique announced the selection and appointment of twenty-four ladies to the Women's Medical Service for India, the service membership being fixed at 25 in number and these ladies to be selected "either on account of their previous good service under the Dufferin Fund or of their special qualifications and testimonials"

The Allahabad High Court confirmed the sentence of death passed upon a Hindu shoemaker convicted of murdering Miss Murphy, a young European lady, while travelling in the train

6th —The Royal Commission on Public Services resumed its sittings after the Christmas holidays, meeting again in Calcutta, Messrs Ramsay MacDonald and Gokhale not being present

8th —Earl Brassey arrived in Bombay from England on board his yacht Sunbeam, on a visit to H. E the Governor of Bombay and Lady Willingdon, the latter being Earl Brassey's daughter.

Details were published of proposals submitted to the Bombay University by Sir Alfred Hopkinson as a result of his inquiry into the working of the University, with a view to advising the Senate in regard to its development

9th —Imperial Legislative Council at Delhi, the Hon. Sir Harcourt Butler presiding The Insect Pest Bill and Motor Vehicles Bill were referred to Select Committees.—The Hon Sir William Meyer introduced a Bill to Consolidate and Amend the Law relating to grant of Loans to Local Authorities —The Hon Mr. Surendranath Bannerji moved a resolution calling for extensive amendment of the Press Act. There was considerable debate. The Hon Sir Reginald Craddock showed that many of the opinions formed with regard to the Act were based on misapprehension. The resolution was rejected by 40 votes to 17.

12th —The Royal Commission on the Public Services sitting in Calcutta, heard witnesses representing the medical service in Bengal

The formation of a committee to start an Indian school in Calcutta to be run on the lines of the English Public Schools was announced

The newly formed Bombay A D C gave their first performance, presenting Mr G B. Shaw's "You Never can Tell"

13th —Imperial Legislative Council —The Bill further to amend the Indian Penal Code, for the protection of Minor Girls, was referred to Select Committee —The Bill further to amend the Code of Civil Procedure was regarded as a non-contentious measure and passed —The Hon Raja Kushal Pal Singh moved that in all future settlements of land revenue any increase of assets due to the construction (otherwise than at the expense of the state) of wells, tanks and other artificial sources of irrigation be permanently exempted from assessment to revenue The resolution was lost by 35 votes to 17

Fire in Kidderpore docks Calcutta, causing damage estimated at fourteen lakhs of rupees

14th —Imperial Legislative Council —The Hon Sir Ali Imam moved that the Repealing and Amending Bill be referred to Select Committee and this was agreed to —The Hon. Mr. V R Rayaningar moved that that the report of the Nicholson Committee regarding the Army of India be laid on the table After a speech by the Hon General Birdwood, explaining the military difficulties of complying with the request, the resolution was withdrawn — The Hon Mr Rayaningar moved that the local Governments be consulted as to the desirability of the constitution of Advisory Boards to assist officials in income tax assessment. The pros and cons of the matter were discussed in a debate of considerable length and Government accepted the proposition, which was carried

15th —T. E the Viceroy and Lady Hardinge concluded a brief visit to Lucknow.

16th —Imperial Legislative Council —On the motion of the Hon Sir R Craddock, the Decentralisation Bill and the Local Authorities' Loan Bill were referred to Select Committee.—The Hon Sir R. Carlyle presented the Select Committee's report on the Insects Pests Bill.—A motion by the Hon. Sri Ram Bahadur, recommending the extension of chapter 6 of the Civil Regulations relating to acting allowances to members of the Provincial service, judicial and executive, was rejected by 40 to 14.—An important discussion took place on a motion by the Hon Sir Fazulbhoy Currimbhoy recommending the appointment of a committee with a view to the improvement of the mail service between Great Britain and India and the proposition was eventually withdrawn.—The Council was adjourned to February 3.

19th —All-India Sanitary Conference opened at Lucknow, the Hon Sir H Butler making an important inaugural speech upon the sanitary awakening of India and the proper lines of Sanitary progress

Death announced of Sir William Lee-Warner,

20th —Inspector Nripendranath Ghose, C I D, Calcutta, was shot with a revolver by an anarchist in the Chitpore Road, Calcutta Two passers-by were also shot by the murderer and one of them, a boy, was killed

21st —The trial of Jaffer Joosub, lately Manager of the Credit Bank of India, Bombay, charged before the Chief Presidency Magistrate with criminal breach of trust, commenced

22nd —The Sessions Judge of Barisal, in the Barisal Conspiracy Case, sentenced two men to 12 years' transportation, 3 men to 10 years' transportation, 2 to 7 years' transportation, 3 to 4 years' and 2 to 2 years', the sentence in the last two cases to run concurrently with previous sentences in the Comilla Case

23rd —The Calcutta Port Facilities Committee, under Sir William Duke, commenced its examination of witnesses

26th —The Public Services Commission opened its sittings in Madras, meeting in the Senate Hall in two sections under Lords Islington and Ronaldshay respectively

At a mass meeting of Indians at Durban, addressed by Mr Gandhi and other Indian leaders, it was decided to endorse the provisional agreement reached between Mr Gandhi and the South African Union Government Similar meetings at Pretoria and Johannesburg unanimously endorsed the agreement

28th —The Government of Bombay announced a gift of eight lakhs of rupees by Mr Mahomed Yusuf Ismail for the furtherance of Mahomedan education in the Presidency

H E the Governor and Lady Willingdon left Bombay by sea for a tour in Sind

Rai Damodar Das, District Judge, Multan, issued orders directing the winding up of the Hindustan Bank

29th —The Hon Sir Benjamin Robertson gave evidence on behalf of the Indian Government before the Commission of Inquiry investigating Indian grievances, at Durban

FEBRUARY.

3rd - Imperial Legislative Council, at Delhi The Hon Mr Clarke introduced the Companies Bill, which was referred to Select Committee - The Hon Sir R Carlyle presented the report of the Select Committee on the Bill to prevent the introduction into British India of any insect fungus or other pest which is or may be destructive to crops --Mr Clarke also presented the Select Committee's report on the Telegraph Bill —The Hon Sir William Meyer presented the Select Committee's report on the Negotiable Instruments and Local Authorities Loan Bills — A resolution by the Maharaja of Cossimbazar calling for the publication of correspondence on the local self-government question was negatived

4th —Imperial Legislative Council The Hon Mr L Porter presented the Select Committee's report on the Copyright Bill —The Hon Sir R Craddock presented the Select Committee's reports on the Bill to amend the Provincial Small Cause Court Act, 1888, and the Decentralisation Bill —The Hon Mr Wheeler presented the Select Committee's report on the Motor Vehicles Bill The Hon Sir Fazulbhoy Currimbhoy moved for the institution of Conciliation Boards for the purpose of conciliation and arbitration between the Hindu and Moslem communities The Hon Sir Reginald Craddock expressed Government's full sympathies with the desires of the Hon Sir Fazulbhoy Currimbhoy but pointed out that his proposition was impracticable and it was withdrawn

6th —Eight lives lost and damage to the extent of over one lakh of rupees caused by a fire in the bazaar at Bhuleshwar, in Bombay

Papers presented to Parliament by the Secretary of State for India relating to the recording of the confessions of persons accused of criminal charges were published in Simla

7th —T. E. the Viceroy and Lady Hardinge arrived at Jodhpur on tour.

Death announced of Mr Louis Pitman Russell, formerly Judge of the Bombay High Court

The British Medical Association, at the request of Lord Crewe, forwarded a statement on the Indian Medical Service, warning the India Office that the service was on the verge of a catastrophe owing to various causes, among which were the extensive absorption of private practice by the Indian practitioner, the great increase in the work, the reduction in allowances, the rise in the cost of living and the Government's interference with the right of private practice by limiting fees and encouraging abuse in hospitals, while it was believed, they said, that the present limitations were to be made still more stringent

8th —Death announced of Mr J G Lorimer, C I E, I C S, Political Resident in the Persian Gulf, as the result of the accidental discharge of a pistol

9th —The Public Services Commission opened its sittings in Bombay, Lord Islington presiding over one section and Lord Ronaldshay over another

H E the Governor and Lady Willingdon returned to Bombay on the conclusion of their tour in Sind

The case filed against Jaffer Joosub, lately manager, N R Mistry, auditor, and R C Aranha, accountant, of the Credit Bank of India, Bombay, by the Official Liquidator, for falsifying the balance sheets of the profit and loss account of the Bank, came on for hearing before the Chief Presidency Magistrate

10th —Death announced of Major-General Sir Stuart Brownlow-Beatson, of the Indian Army, in England.

16th —Quinquennial review by the Government of India of education in India (1907-1912) published It showed that the numbers under instruction had risen from 5¼ to 6¾ millions; the percentage of those of a school-going age

who are at school from 14 8 to 17 7, the total expenditure from nearly 3¾ millions sterling to 5¼ millions and the expenditure from public funds from over a crore of rupees to nearly £2,700,000, while the Imperial grants allocated during the period totalled over three millions sterling non-recurring, and over £766,000 annually recurring

H H Sir Harvey Adamson Lieutenant-Governor of Burma, opened the new river training works at Soikgyi, the headquarters of the works, two miles from Rangoon

17th —H E the Governor presided as the Chancellor at the Convocation of the Bombay University

Lord Gladstone, Governor-General South Africa, speaking at a lecture by the Rev C F Andrews at Capetown, on the subject of Rabindranath Tagore, appealed to South Africans to study India, with a view to learning to appreciate its civilisation and the aspirations of its peoples

22nd —An Indian Chamber of Commerce for the United Provinces founded at Cawnpur

23rd —Imperial Legislative Council —The Select Committee's reports on the following were presented —The Repealing and Amending Bill, the Companies Bill, and the Copyright Bill —The Copyright Bill, as amended, was passed —The Select Committee's report on the Decentralisation Bill was presented and discussed and the Bill passed —The Negotiable Instruments Bill was passed —The Hon Mr Rayaningar moved the appointment of a committee to inquire into jail administration The Government accepted the resolution, which was carried —The Hon Mr Acharial moved for the institution of Government inquiries with a view to the diminution of strikes on railways and to ascertain the comparative advantages of State and company railway management Both resolutions were lost —The Hon Mr Surendranath Banneji moved the appointment of a committee to consider the advisability of revising the system of Provincial Settlements now in vogue The discussion had not been concluded when the Council rose for the day

The Under Secretary of State for India stated in the House of Commons that according to engineers' and architects' estimates, the outlay on Government buildings in Delhi would amount to £2,800,000

24th —The new Indo-Ceylon railway and ferry route, *via* Dhanushkodi and Manaar, formally opened The Governors of Madras, Pondicherry and Ceylon met at Dhanushkodi as guests of the railway companies

25th —Annual Meeting of the Bombay Chamber of Commerce Sir Charles Armstrong presided and made an interesting speech on his retirement from Bombay after having been Chairman of the Chamber for 17 years Mr Marshall Reid was elected Chairman for the ensuing year

Imperial Legislative Council —The Hon Mr Surendranath Banneji's resolution regarding Provincial Settlements was rejected —The Hon Sir G M Chitnavis moved the appointment of a committee to inquire into the recent bank failures After a long discussion the resolution was withdrawn

Annual meeting of the Bombay Trades Association

26th —Sir Alfred Hopkinson, Adviser to the Bombay University, delivered an address before the University Senate which indicated directions in which the University could be extended and developed

27th —Imperial Legislative Council —Select Committees' reports on the Motor Vehicles Bill and Local Authorities Loans Bills presented and the Bills passed —The Hon Raja Kushal Pal Singh moved for the extension of the period of settlement of land revenue for twenty or thirty to fifty years The Resolution was negatived —The Hon Sir Ram Bahadur moved that the annual grant allowed by the Imperial Government to the Government of the United Provinces out of the heads of revenue by those Provinces for provincial expenditure be increased by a sum equivalent to one-eighth of their land revenue The motion was negatived —The Council adjourned to March 2nd

28th —A deputation of the Sikh community waited upon H E the Commander-in-Chief, Sir O'Moore Creagh at his residence at Delhi, and presented to him an address of farewell on his retirement Forty-eight Sikh gentlemen were present, representatives of the Chief Khalsa Divan and members of the Khalsa Panth appearing for the whole Sikh community

MARCH.

1st —Death announced of the Earl of Minto, late Viceroy of India

2nd —Imperial Legislative Council, Delhi, —The Hon Sir William Meyer, Finance Minister, presented the annual Budget and made an elaborate and important review of Indian financial policy

3rd —A Conference of Indian Chiefs on the proposed higher education college for chiefs' sons, met at Delhi H E the Viceroy opened the proceedings and there was a large gathering of Ruling Chiefs

Sir O'Moore Creagh issued an Army Order of farewell

5th —Report of the Royal Commission regarding Indian Finance and Currency issued in London

6th —General Sir Beauchamp Duff the new Commander-in-Chief in India, arrived at Bombay from England

7th —Sir O'Moore Creagh, on relinquishing the command of the army in India, sailed for England

8th —Imperial Legislative Council —The Hon Sir Harcourt Butler read a message of condolence which the Council had sent to Lady Minto regarding the death of the Earl of Minto and a telegram received from Lady Minto in

reply —The Council proceeded to the discussion of the Budget in committee

9th.—Imperial Legislative Council—Budget discussion continued —The Council adjourned till the 17th March

The subscriptions opened for the proposed higher college for Chiefs reached the sum of Rs 10,55,700, with additional recurring subscriptions, bringing the total capital value up to Rs 12,50,000

13th —Bombay Legislative Council, at Bombay —The proceedings opened with an expression of regret by H E the Governor, who presided, at the death of Earl Minto — The Hon Sir Richard Lamb presented the revised financial statement for 1914-15 and said that in the course of revision no change had been made in the Budget for the ensuing year —The Hon Mr Claude Hill moved the second reading of the Bill to amend the Karachi Port Trust Act, 1886 After considerable discussion in which two amendments were rejected, the Bill was finally passed into law

15th —Bombay Legislative Council — The Hon Sir Richard Lamb moved the first reading of the Bill to amend the Bombay Land Revenue Code, 18.) The Bill was agreed to and referred to Select Committee, with instructions to report by the 20th of June —The Hon Mr G M Bhurgri obtained permission to withdraw his Bill to provide for the levying of a cess from the Mahomedan landholders in Sind for the promotion of education in that community —The first reading of the Bill further to amend the Bombay Tramways Act was agreed to and the Bill referred to Select Committee, with instructions to report in six weeks —The Hon Mr Claude Hill moved the first reading of the Town Planning Bill, which was agreed to, and the Bill was referred to Select Committee, with directions to report by the 18th of May

16th —Bombay Legislative Council —It was agreed that the Bill for the amendment of the Bombay Improvement Trust Act, to provide additional revenue for the Board, should not be taken up at the present sessions, but should be adjourned to the next sessions, so as to allow the Council to give consideration to representations by the Bombay Municipal Corporation on the subject —The Hon Sir Richard Lamb moved the second reading of the Bill to amend the Irrigation Act of 1879 Discussion lasted throughout the day

H E Lady Hardinge laid the foundation stone of the Medical College and Hospital for Women, in new Delhi

Imperial Legislative Council —Select Committee's report on the Repealing and Amending Bill presented and the Bill passed —Select Committee's report on the Protection of Minor Girls Bill presented The report bore five minutes of dissent Select Committee's report on the Companies Bill taken into consideraton and the Bill passed —H E the Viceroy made an important speech on the South African question, outlining the report of the Commission of inquiry

17th —Bombay Legislative Council — The Irrigation Act Amendment Bill was finally passed —The Hon Mr P D Pattani moved the second reading of the Bill to amend the District Municipal Act The debate continued throughout the day.

18th —Imperial Legislative Council — The Hon Sir R Craddock introduced a Bill further to amend the Indian Penal Code and the Civil Procedure Code, 1898, (dealing with contempt of court by newspapers) giving an assurance that the Bill would be referred to the High Courts, legal profession and journalists for their opinions —A long debate took place on the Special Committee's report on the Bill for the Protection of Minor Girls, and a motion for republication, moved by the Hon Sir R Craddock, was carried The Hon Mr. Surendranath Bannerji moved for the adoption of various recommendations of the Decentralisation Commission in regard to provincial and local government

Bombay Legislative Council —First reading of the Bill to amend the District Municipal Act agreed to and the Bill referred to Select Committee —On the motion of the Hon Sir R Lamb, a Committee was appointed to inquire into the question of a Punchayat Bill on the lines of the Mysore Punchayat Regulations in regard to small irrigation works, the committee being directed to report by the 15th November —The Hon Mr Claude Hill made a statement of Government's policy with regard to the admission of students to the Poona Engineering College, from other provinces, promising to make further inquiries into the matter —The Council adopted a motion by the Hon Mr Patel recommending the Governor-in-Council to consider whether the time had not arrived to rescind certain notifications issued from time to time under Section 8 of the Bombay Local Boards Act, 1884, whereby an exceptional constitution had been given to the various local boards in the Panch Mahal —The Council adopted a motion submitted by the Hon Mr J A D McBain recommending Government to appoint a committee to inquire into the prevalence of malaria in the compound of the St George's Hospital, Bombay

20th —Their Excellencies the Viceroy and Lady Hardinge arrived in Bombay on a visit His Excellency received an address of welcome from the Municipal Corporation at the Town Hall at noon, when there was a remarkable demonstration of popular enthusiasm, and H E the Governor of Bombay and Lady Willingdon gave a garden party in honour of their Excellencies at the Government House in the evening There was a large dinner party at Government House

21st —Their Excellencies the Viceroy and Lady Hardinge entered the new Alexandra Dock from the harbour in the British India S N Co's steamer Lhasa, thereby formally opening the docks The Viceroy read messages of congratulation from H M the King Emperor and H M Queen Alexandra, after whom the dock is named, and an address was presented to their Excellencies by the Port Trustees

Her Excellency Lady Hardinge sailed for England by the P & O steamer Macedonia in the afternoon, being conducted on board the steamer by H E the Viceroy

Addresses were presented to H E the Viceroy at Government House in the afternoon by the Bombay Chamber of Commerce and the Indian Merchants' Chamber and Bureau Lord Hardinge subsequently visited the bacteriological laboratory at Parel There was a dinner party at Government House in the afternoon and the Viceroy afterwards left for Delhi

22nd —Thirteen of the 14 Indians charged with public violence in connection with an affray at Esperanza (on the south coast of Natal) in the preceding November were sentenced at Umzinto to six months' hard labour The fourteenth Indian was acquitted

23rd —The most destructive cotton fire that had ever occurred in Bombay broke out on the Colaba Cotton Green in the early morning, the damage being estimated at 65 lakhs of rupees

24th —Imperial Legislative Council at Delhi The Budget for 1914-15 came under discussion and the Hon the Finance Member, Sir William Meyer, was the recipient of general congratulations upon both his statement of financial policy and his budget —H E the Viceroy, in winding up the Council made an important speech, reviewing the building proposals and project estimates regarding the new Delhi His Excellency stated that the latest estimate was for £5,113,620 for the cost of the new city, including parks, lighting, irrigation, and roads, but excluding military cantonments and railway developments He stated that Government would hold an additional one million in reserve for unforseen expenses and contingencies The Viceroy stated that the necessary buildings would cost 360 lakhs, the cost of Government House being half a million sterling and that of the Secretariat three-quarters of a million sterling The outlay would be spread over at least eight years, starting from 1912

H E the Governor laid the foundation stone of the Bombay Sanitary Institute which is intended to be the home of the Bombay sanitary association and the centre of progressive sanitary activity throughout the Presidency

Death announced of Sir Thomas Edward Gordon, an Indian mutiny veteran

25th —H E the Viceroy received an address from a large Mahomedan deputation, who waited on him at the Viceregal Lodge, Delhi, protesting the unimpeachable loyalty of the Indian Mahomedans and saying that all recent statements to the contrary should be treated as gross calumnies

The Calcutta Port Facilities Commission's report, stating their conclusions with regard to the development of the port, was published.

29th —It was announced that Lord Haldane had accepted the presidency of an unofficial committee of English people being formed in England to show hospitality to Indian students Sir Frederick Robertson, formerly Judge of the Chief Court of the Punjab, was elected Chairman of the Committee, which also included the Lord Chief Justice, Lord Inchcape, Lord Kinnaird, Mr Justice Vaughan Williams, Viscountess Churchill, the Vice-Chancellors of Oxford and Cambridge Universities, Sir J Dunlop-Smith and others

APRIL.

3rd —It was announced that a silver syndicate in London, headed by the Hongkong and Shanghai Bank, had completely disposed of the great silver holdings accumulated by the Indian Specie Bank, recently gone into liquidation

6th —Further outbreaks of fire on Colaba Cotton Green, Bombay, causing damage amounting to nearly fifteen lakhs of rupees

First report of the Official Liquidator of the Indian Specie Bank Ltd, issued The report showed that there had been losses of Rs 1,11,41,894 in silver speculation, Rs 36,43,195 in advances on pearls, Rs 14,31,167 in share badli operations, and Rs 4,48,237 on imprudent loans The total losses under these four heads amounted to Rs 1,66,64,494 The bank lost Rs 1,30,000 in 1913 by speculating in its own shares Although the annual balance showed that large profits were earned, as a matter of fact no profits were made after the beginning of 1909, and dividends amounting to Rs 22,87,500 had been paid out of capital The Liquidator showed that the immediate cause of the failure of the bank was "the stoppage of the People's Bank and the Credit Bank, with all their ugly disclosures, and the consequent panic in the commercial and financial world and entire loss of public credit and confidence" and that "the proximate cause was the frenzied speculation in which the Managing Director indulged and the imprudence recklessness with which loans were given by the Bank"

7th —Delivering judgment in the case in which Mr Channing Arnold, editor of the *Burma Critic*, appealed to the judicial committee of the Privy Council against his conviction for defaming Mr J P Andrew, District Magistrate of Mergue, Burma, and sentenced to one year's imprisonment, by the Chief Court of Lower Burma, Lord Shaw said that the Committee had listened to lengthy arguments and had gone into the entire history of the case so that nothing should interfere with the course of justice, and the appeal was dismissed

13th —The Government of Bombay appointed a special Committee of Inquiry regarding the Bombay Cotton Fires

A Mahsud servant of Major G Dodd, C I E, Political Agent, Waziristan, shot dead Lieutenant G W C Hickie, R A, of the 32nd Mountain Battery, and two men of the Frontier Constabulary, fatally wounded Major Dodd, Captain Brown, of the Waziristan Militia, another man of the constabulary and a chuprassi He was finally shot dead by the Frontier Constabulary. It appeared that the cause of the murder was the stoppage of a cheque for Rs 250 due to a cousin of the murderer, owing to the cousin being under suspicion of being concerned in a robbery

14th —Annual meeting of the Bombay Millowners Association Mr J. F Bradbury, Chairman, reviewing the year, stated there had been an increase in both looms, and spindles, in India The first half of the year was undiminished prosperity but the second half was un-

favourable, owing to the bad season in the United Provinces and to the collapse of credit consequent upon the Bank failures Credit seemed to be reviving slowly, but the overstocked condition of the piece-goods market afforded no signs of material reduction Mr Jehangir Petit urged the necessity for the development of the home market Mr D E Wacha urged that the millowners should find the means to improve the industry so as to compete more fully with the mills of other countries

17th —Sir Henry Belfield, Governor of the East African Protectorate, gazetted High Commissioner for Zanzibar in addition to his present appointment, Major Pearse, Deputy Governor of Nyassaland, being appointed Resident in Zanzibar

18th —Death announced of General Sir George Barker, an Indian mutiny veteran

19th —H M the King Emperor appointed the Sultan of Zanzibar honorary K C M G

20th.—Death announced of General Sir Henry Brackenbury, who was Private Secretary to Lord Lytton during the latter's Indian Viceroyalty and Military Member of the Council of the Viceroy of India from 1891 to 1896

24th —The Government of India published resolution concerning the success of the experimental amalgamation of the Post and Telegraphs services in the Bombay and central circles and announcing that they had decided to adopt it, subject, particularly in Burma, to certain modifications, with effect from April 1st 1914

28th —A tornado swept over Calcutta and part of Bengal and caused extensive damage The steamer Naira (2 627 tons) was blown ashore opposite the Kidderpore docks and two other steamers broke from their moorings

Four German and seven Indian employees in the steel furnace department of the Tata Iron & Steel Works Co at Sakchi were severely scalded as the result of an overflow of molten steel and one Indian and one German were fatally injured

MAY.

2nd —Sir T Wynne, President of the Indian Railway Board, left India on retirement

Seven water-colour drawings of the preliminary designs of the principal buildings, at New Delhi, including the Viceregal residence and the Council Chamber, placed on view at the Royal Academy

11th —Lord Curzon, in the House of Lords, drew attention to "the excessive expenditure" on new Delhi and moved for papers He criticised the policy embodied in the establishment of the new capital and the expenditure upon it The debate was chiefly noteworthy for the speech which Lord Crewe made in reply Lord Crewe declined to re-argue the question whether the change of capital was wise He emphasised the approval with which the change was regarded in India He stated that the Government of India intended to be in residence at Delhi seven months each year

17th.—The Oriental Studies Committee of the India Office, the London Chamber of Commerce and the Sir Montagu Turner's Committee issued a joint appeal on behalf of an Oriental Languages School, pointing out that in addition to the grants of £4,000 and £1,250 per annum promised by the Government and the India Office respectively and £2,000 per annum expected from the London County Council, a further sum of at least £ 6,700 a year was required They asked for an endowment fund of not less than £100,000

18th —A further cotton fire in Bombay destroyed 3,000 bales and the godown in which they were stored, the cotton bales being valued at Rs. 14 lakhs

19th —Madras Legislative Council meeting at Ootacamund There were 17 resolutions on the agenda An interesting discussion took place on a resolution for the appointment of a committee of officials and non-officials to investigate the question of arrears of work at the Madras High Court, the resolution eventually being withdrawn.

22nd —The Japanese steamer Komagata Maru arrived at Vancouver, having on board a large number of Indian passengers, chiefly Sikhs, whom a Sikh named Gurdit Singh, the owner of extensive timber forests in Western Canada, was endeavouring to introduce into the Dominions.

It was announced that the British Government was taking up £22,00,000 worth of shares in the Anglo-Persian Oil Co, in order to secure the maintenance of a large supply of oil for the Admiralty at reasonable prices

The Government of India issued an important resolution on the condition of sanitary development and progress of India The resolution laid down a number of principles on which sanitary work must proceed and was similar in its character to that previously issued on the subject of education

The amalgamation of the Peninsular and Oriental and British India Steam Navigation Companies was officially announced The agreement provided for the exchange of staff between the two companies and for the fusion of their Boards, so that the interests of both would be identical, though the companies would continue to work separately

25th —Lord Crewe formally introduced the Council of India Bill in the House of Lords and it was read the first time

Lord Lamington initiated a debate in the House of Lords on the proposed Trans-Persian Railway Lord Crewe, in an important speech, stated that the Government had made it quite clear that whatever railways were made, any continuation towards India remained an absolutely reserved question and that they had also made it quite clear that they were bound to exercise control in the ports of the Persian Gulf "The most vital factor in the whole situation is the necessity for ensuring the defence of India."

26th —Another serious fire occurred on the Bombay Cotton Green, causing damage estimated at Rs 15 lakhs, this fire was the 37th outbreak among cotton stored in Bombay during the season The total damage caused by all these fires up to date amounted to over Rs 82 lakhs

30th —Mr M C A Crump, in a letter to the press, announced that in the course of a tour through Behar and Orissa for the purpose of collecting mammals for the Bombay Natural Historical Society's Mammal Survey of India, Burma and Ceylon, he visited the Singar estate, in the Gaya district, and found that a commencement had been made for the mining of pitch blende, which is the chief source of radium He stated that the radio-activity of the sample of pitch-blende with which he experimented was surprising

JUNE.

4th —Death announced of Sir Douglas Straight, who was Judge of the Allahabad Court from 1879-1892

5th —H E the Governor of Bombay and Lady Willingdon arrived at Government House, Ootacamund, on a visit to H E the Governor of Madras and Lady Pentland

10th —The Governor of Bombay and Lady Willingdon left Ootacamund for Mysore, en route to Bombay

13th —The committee of the International Federation of Master Cotton Spinners' and Manufacturers' Associations has opened a series of meetings in Paris Sixteen countries, including India and Japan, were represented Sir Charles Macara emphasised that it was the duty of the members to continue their efforts until all the nations recognised the utility of international collaboration in cotton growing

It was announced that the Federation were promoting a special company, with a capital of £60,000, to work an estate of 7,500 acres in the Punjab, granted by the Government rent-free ' not on purely commercial lines, but in order to give an object lesson to Indian cotton cultivators,"

16th —The Government of Madras announced that they had decided to establish a Women's College at Madras as a temporary measure for one year

The Chief Presidency Magistrate, Bombay, bound over the fathers of three boys, namely, two Eurasians, aged 11 and 12½ respectively, and one Hindu, aged 11, found guilty of setting fire to bales of cotton on the Bombay Cotton Green on the 14th instant The damage done by the fire amounted to Rs 100 It was believed that the boys caused the fire for mischief and were not instigated to start them

18th —On the eve of H E the Viceroy's Birthday, a movement to petition H M the King Emperor, through the Secretary of State, to extend Lord Hardinge's term of office was simultaneously inaugurated in Lahore, Simla and Bombay by prominent non-official gentlemen

22nd —The Honour Lists issued in connection with H M the King Emperor's Birthday contained the following decorations of special interest to India —One Earldom (Lord Kitchener), 3 K C S I , 11 C S I , 22 C I E, 4 Knights (Mr Justice Milley of the Madras High Court, Mr F L Spratt, Chairman of the Bombay Port Trust, Mr Justice Batchelor of the Bombay High Court, and Lieut-Col R Rogers, I M S , Calcutta) 2 K C B and 6 C B , besides minor decorations

23rd —An International Conference on Tropical Agriculture was opened in London, thirty-three countries being represented It was announced that H M the King-Emperor had consented to be the patron of the congress The general point of interest was the discussion of a proposal for the institution of a college of Tropical Agriculture at Peradaniya in Ceylon There was general agreement in favour of the project, and it was stated that the funds required would be £50,000

28th —The Archduke Francis Ferdinand, heir-apparent to the Austro-Hungarian throne, and his wife were assassinated at Serajevo

30 —Lord Crewe moved the second reading of the India Council Bill in the House of Lords Lord Curzon moved the rejection of the Bill strongly criticising it in detail The debate was adjourned till July 6

JULY.

1st —Death announced of Major-General Serase-Dickins, an Indian mutiny veteran

The closing meeting of the International Congress of Tropical Agriculture passed a resolution to support the proposed establishment of an Imperial College of Agriculture in the British tropics

2nd —The delegates of the Indian National Congress in London issued a statement expressing regret at the motion in the House of Lords to reject the India Council Bill

6th —The Bombay High Court commenced hearing two charges against Jaffer Joosub, Patela Manager of the Credit Bank of India, of criminal breach of trust in respect of two sums of Rs 48,588 and Rs 16,000 respectively

The twenty-first annual conference of the United Planters' Association in Southern India opened at Bangalore

The trial of Bishen Dutt, a Brahmin, and Motichand, a Jain, for the murder of Bhagvandass, Mahunt at the Nimej temple, and of a boy Bansidhar, the mahunt's servant, and for robbery, was commenced by Mr T S Macpherson, Sessions Judge of Shahbad, with two Assessors, one Hindu and the other Mahomedan.

7th —Correspondence published between the Government of the Union of South Africa and Mr Gandhi, giving details of the Indian settlement in South Africa, showing that the Government promised to adopt all the recommendations enumerated at the end of their Commission's

report and not included in the Relief Bill Mr Gandhi, in a letter to the Government, stated that the passage of the Bill and the correspondence finally closed the Passive Resistance Struggle

Debate on the India Council Bill resumed in the House of Lords Lord Ampthill supported the rejection Lord Morley supported the Bill in a remarkable speech, which was chiefly distinguished by his assertion, with reference to Lord Ampthill's desire for the views of the Government of India, that the Bill did not directly concern the Government of India, and for his defence of the practice of private correspondence between the Secretary of State and the Viceroy arranging the control of Indian affairs The motion for the second reading was after further debate, rejected by 96 votes to 38

The Conference of British, Tibetan and Chinese representatives in Simla, concerning the settlement of the Tibetan and Chino-Tibetan questions, broke up, as the delegates were unable to agree on several points, including the Tibetan claim that the Kokonor district namely, the country south of the Kuen-lun Mountain, should be included in autonomous outer Tibet, against which the Chinese contended that Konkonor had always been a part of Kansu The status of Chiamdo was also disputed The Chinese pointed out that when the conference began they considered Chamda to be the limit of the Tibetan boundary but that they gave way six times, giving up 800 miles of territory, until at present they were willing to accept the Salween River

8th—H E Lady Hardinge underwent "a serious but successful operation" in London and her condition was reported to be satisfactory

9th—The British India steamer Dwarka, with mails from Karachi, arrived at Bombay under her own steam after being helpless at sea, off the Kathiawar coast, for four days, with a broken rudder The first officer, Mr Wilkinson, and second officer, Mr Hartford, with lascars assisting them, were reported to have performed a highly courageous feat in repairing the rudder

Sir Charles Macara, interviewed with regard to the situation of the cotton trade, said the outlook was gloomy owing to diverse circumstances in various parts of the world

10th—During a statement on foreign affairs in the House of Commons, Sir Edward Grey emphasised the satisfactory results of the agreement reached regarding the navigation of the Euphrates and the Tigris and further emphasised that the Agreement with the Anglo-Persion Oil Company and subscription for their shares in no way altered the political situation of Persia

11th—H E Lady Hardinge died without having recovered after her recent operation

Lord Crewe received a deputation nominated by the East India section of the London Chamber of Commerce, protesting against certain proposals in the new Finance Bill, particularly the double taxing (in India and in England) of incomes arising from English capital invested in India

14th—A Manchester telegram reported that it was anticipated there that the curtailment of working days in the United States cotton mills would be followed by a similar policy in Lancashire, and probably also on the Continent of Europe

The House of Commons discussed the Chancellor of the Exchequer's Finance Bill, in Committee Mr Worthington Evans moved an amendment exempting income re-invested in the Overseas Dominions from payment of British income-tax Sir John Rees dwelt upon the unfortunate effect of the Bill as regards India Sir John Simon, replying for the Government, stated that this double tax "hit the classes which most deserve to be hit" and the amendment was rejected by 268 votes to 197

15th—Funeral of late Lady Hardinge, at Penshurst A Memorial Service was held by permission of H M the King in the Chapel Royal, St James' Palace Queen Alexandra the Dowager Empress of Russia, Princess Victoria and other members of the Royal family were present Magnificent wreaths were sent to Penshurst by Queen Alexandra, the Empress-Dowager of Russia, the Queen of Norway and Princess Victoria

16th—An accident was reported to have occurred in the P & O. steamer Salsette en route from Aden to Bombay with the Home mails Water obtained ingress to the coal bunkers, with the result that many tons of small coal and water suddenly slid down into the stokehold and the pumps became choked with small coal

19th—The mail steamer Salsette reached Bombay

At a mass meeting at Manchester of the American spinning section of the International Federation of Master Cotton Spinners, the recommendation of the curtailment of production, made by the General Committee of the Federation, was approved, and it was decided to issue a circular to ascertain whether firms owing the necessary number of spindles were willing to curtail in accordance with the recommendation

One man was killed, Basanta Kumar Chatterjee Deputy Superintendent of Police, fired upon and a constable wounded by a political assassins at Dacca The man killed was described as "a political suspect connected with the Kedarpur dacoity, who is believed to have made disclosures to the police The crime was committed in the street by a party of five, several shots being fired Nine people, including six students were arrested the six students subsquently being discharged

20th—The Finance Member of the Government of India, the Hon Sir William Meyer, had informal discussions upon financial questions in Bombay with the Chamber of Commerce and the Indian Merchants' Chamber

22nd—A telegram from Vancouver reported that the difficulty regarding the Indians in the s s Komagata Maru had been solved, the Indians agreeing not further to resist deportation and the Canadian Government agreeing to pay their fares to the East and furnish provision their ship

24th —Austrian ultimatum presented to Servia

25th —The *Gazette of India* contained a Resolution from the Department of Commerce and Industry urging on all officers the necessity of maintaining the present attitude of vigilance and restriction and of safeguarding the interests of temperance and enclosing correspondence between the Secretary of State and the Government of India as the result of questions raised by Sir Herbert Roberts, Bart, M P, and other members of a temperance deputation that waited upon the Secretary of State on July 18, 1912

27th —Bombay Legislative Council meeting at Poona, H E the Governor presiding Lord Willingdon, Sir Pherozshah Mehta, Sir Ibrahim Rahimtulla and the Hon Mr Manmohandas Ramji made feeling references to the death of H E Lady Hardinge and a resolution expressing the Council's profound sorrow and their deep sympathy with H E the Viceroy was silently carried —The Hon Sir R Lamb presented a statement showing the revised budget proposals and the debate upon this continued throughout the day

28th —Austria declared war on Servia

Bombay Legislative Council —The Bill further to amend the Bombay Tramways Act, 1874, was read the second and third times and finally passed —The Hon Mr W D Sheppard moved the first reading of a Bill to amend the Aden Port Trust Act, 1888, and the measure being of a non-contentious nature was put through all its stages and passed —The Hon Mr P D Pattani moved the first reading of a Bill further to amend the Bombay Civil Courts Act, 1869, and the Standing Orders being suspended this Bill was also finally passed —The Hon Mr P D Pattani moved the second reading of the Bill further to amend the District Municipal Act, which was necessitated by the growing improvement of certain towns in the Presidency, the main feature of the Bill being a provision for the appointment of Municipal Commissioners Debate continued until the Council rose

29th —Bombay Legislative Council The whole day was occupied by discussion of the District Municipal Bill

30th —All leave to officers in the British Army in India and in the Indian Army stopped, owing to the situation in Europe

Bombay Legislative Council —The District Municipal Bill was discussed throughout the whole day and finally read the third time

31st —Bombay Legislative Council —The Hon Sir R Lamb moved the second reading of the Bill further to amend the Bombay Land Revenue Code, 1879, and the Bill passed through both second and third readings —The Hon Mr W D Sheppard introduced a Bill further to amend the Bombay Port Trust Act 1879, the main point of the amending measure being to provide for the addition of a military member to the Board of Trustees of the Port And the Bill was passed through all its stages — The Council proceeded to the discussion of resolutions moved by members, there being ten of them on the agenda paper

Correspondence between the Government of India and the Secretary of State on the subject of the restriction of the growth of Indian Medical Service and the employment of non-official medical practitioners in India was published in Simla

AUGUST.

1st —Germany presented an ultimatum to and declared war on Russia

2nd —Italy announced her neutrality

Germany invaded France at Cirey and marched troops through the independent State of Luxemburg, on the French frontier

3rd —Germany sent an ultimatum to Belgium, proposing an entente to facilitate German operations against France through Belgium Belgium rejected the ultimatum.

It was announced in Simla that H E the Viceroy had cabled to His Majesty's Secretary of State that the people of England could count on every man and every gun of the Army in India, whether British or Indian, if need arose, and that England might remain confident in the loyalty of the people of India to cope with any enemy that might arise

4th —Great Britain, after long previous negotiations, sent an ultimatum to Germany, allowing her until mid-night to give assurances that she would not infringe the neutrality of Belgium Germany having rejected the ultimatum, Great Britain declared war

5th —The Germans began the bombardment of Liege

7th —H E the Governor of Bombay announced his intention immediately to resume his residence in Bombay, owing to the situation arising from the war

8th —British Expeditionary Force began to arrive in France

12th —The Mediterranean Sea reported to be clear of the enemy

Great Britain declared war against Austria

13th —Great public meeting presided over by the Hon Sir Pherozeshah Mehta held in the Town Hall, Bombay, to pass resolutions supporting the Government in connection with the war The Chairman stated he had never taken part in the proceedings of a meeting of the citizens of Bombay with a stouter heart and more willing and impetuous soul than he was proud to do on the present occasion The Town Hall was crowded to overflowing and the meeting was one of the most remarkable demonstrations that has ever taken place in the city The meeting was typical of similar gatherings taking place in all parts of India.

16th —German cruiser Emden in the Bay of Bengal sank five British merchant ships.

17th —Japanese ultimatum to Germany, expiring on August 23rd

H. E. the Viceroy, in a letter, appealed for Indian Relief Fund in connection with the war.

H. E the Governor of Bombay, in a letter to the Press, inaugurated a Relief Fund for the Presidency in connection with the war

21st —Meeting of the women of Bombay, representative of all communities, in the Town Hall, presided over by Lady Willingdon, to inaugurate a Women's Branch of the Indian Relief Fund for the purpose of contributing comforts and necessaries for British and Indian troops at the front

26th —Provincial Co-operative Conference opened at Poona

A German force from German East Africa attempted to cut the railway line in British East Africa and was repulsed

SEPTEMBER.

3rd —The Germans made a second attempt to cut the railway line in British East Africa One African soldier of the British side was killed, and all the camp equipment, dynamite, and three revolvers and ammunition belonging to the enemy were captured

4th —A German force of three hundred infantry with two pompoms and three maxims was encountered fifteen miles from Tsavo, in British East Africa, and retired after receiving a severe handling The British losses were one native officer and one man killed, and nine men wounded

Ninetieth birthday of Mr Dadabhoy Nowroji

6th —The Indian Imperial Relief Fund reached a total of £9 lakhs

The Bombay Branch War Relief Fund reached a total exceeding 10 lakhs

8th —Imperial Legislative Council meeting at Simla, H E the Viceroy presiding —His Excellency read a message to India from H M the King-Emperor in reference to the war His Majesty emphasised the earnest efforts of his Ministers to preserve peace and his obligation to enter the war because of that paramount regard for the treaty faith and pledged word of rulers and peoples which is the common heritage of England and India His Majesty declared his heart touched by the prodigious loyal offers of support and assistance made by the Princes and peoples of India —H E the Viceroy addressed his Council on the subject of the war and announced that an Indian Contingent was being sent to the front, His Excellency further made an important speech on the question of Indian emigration to other parts of the British Empire and advocated the adoption of a policy of co-operation, as between India and the Dominions, leading to negotiation with the Colonies on a basis of complete reciprocity —The Hon Sir G M Chitnavis asked for and obtained suspension of the rules of business and moved a resolution expressing on behalf of the members of the Council, as voicing the feeling that animates the whole of the people of India, feelings of unswerving loyalty and enthusiastic devotion to the King-Emperor, and giving an assurance of unflinching support to the Government and expressing the opinion that the people of India, in addition to the military assistance being afforded to the Empire, "would wish to share in the heavy financial burden now imposed by the war on the United Kingdom." Non-official members representing all communities unanimously spoke in terms of firm loyalty and support The resolution was carried and H E the Viceroy, in responding, announced that India was sending a military force of over 70,000 combatants to the front and that several of the Ruling Chiefs, whom he mentioned, had, in accordance with their desire, been selected to accompany it His Excellency stated that in pursuance of the terms of the resolution the Government of India felt disposed to recommend to the Secretary of State that India should accept such portion of the cost of the Expeditionary Force as would have fallen upon India had the troops continued to be employed in this country under normal circumstances So far as a rough estimate can be formed at present, said His Excellency, the net amount which the Government of India would in this way contribute to His Majesty's Government, assuming that the war lasted till the end of the current financial year, would be about one million sterling His Excellency expressed his confidence in the Indian troops and his feeling that as a sequence of their participation in the war, better relations would be promoted amongst the component parts of the British Empire The resolution was put and accepted.

9th —In the House of Lords, the Secretary of State for India read an important statement from H E the Viceroy describing the great outburst of loyalty in India in connection with the war and describing the practical manner in which the Indian Empire was giving effect to this feeling Lord Crewe, Lord Lansdowne representing the Unionist Lords, and other Peers, expressed their grateful admiration and their Lordships unanimously passed a resolution expressive of their thanks to India The Under-Secretary of State read the Vice-regal message in the House of Commons, where it was received with the greatest enthusiasm, the scene in the House being described as the most remarkable in its history

10th —The Secretary of State for the Colonies issued an account of a heroic affair in Nyassaland, where a small British force drove off a body of 400 German invaders, while subsequently one British officer and 50 men of the South Africa Rifles, with eight civilians, resisted for three hours a German attack in the early morning and eventually, by repeated bayonet charges, dislodged the Germans, captured two field guns and two machine guns The enemy fled.

20th —British light cruiser Pegasus disabled at Zanzibar by German cruiser Koenigsberg.

21st —German cruiser Emden bombarded Madras

26th —Passengers in the s s Komagata Maru, who were being repatriated by the Government of India, arrived in the Hugli

30th —The passengers in the s s. Komagata Maru were landed at Budge Budge, Government having arranged for special trains to meet them there to take them to the Punjab. A

party of 60 entrained and left for the Punjab The remainder, who proved to be armed with revolvers, swords, knives and staves, began marching to Calcutta Eventually, they came into conflict with the police, upon whom they made a sudden attack Mr Lonax, Assistant Traffic Superintendent, E B S Ry, was fatally shot, Sir Frederick Halliday, Commissioner of Police, Calcutta, was wounded in the foot and two other officers and several serjeants were wounded The Punjab police had one killed and six wounded Troops fired on the mob, of whom 16 were killed and several wounded The rest scattered among the surrounding villages and the police instituted measures for arresting them

OCTOBER.

2nd —It was officially announced in London that part of the Indian Expeditionary Force to Europe had landed in France It was unofficially reported that the landing place was Marseilles Lively accounts were published of the march of the Indian troops through the city where they landed, the people pelting the soldiers with flowers and giving them in many ways a warm welcome

5th —The Special Sessions Judge at Delhi delivered judgment in the Delhi conspiracy case, agreeing with the findings of the Assessors He sentenced Amirchand to twenty years' transportation for an offence under Section 4 of the Explosives Act and Abad Behari to twenty years' transportation for abetment In connection with the charges of conspiracy to murder, Basant Kumar was found guilty, but in consideration of his youth was only sentenced to transportation for life, Abad Behari, Amirchand and Balmokand were all found guilty and sentenced to death, Balraj was found guilty, but the Judge found some distinction between his case and that of the others and sentenced him to transportation for life Hanwant Sahai received a similar sentence Khusiram, Raghobai Sharma, Manulal and Ramlal were acquitted The approvers Dinanath and Sultanchand were discharged

The Sessions Judge at Ajmir delivered judgment in the Mahant murder case Both the two Assessors had found Motichand, a Jain guilty of the murder of the Mahant Bhagwandass and of his servant, and Bishen Dutt, a Brahmin, guilty of robbery Motichand was sentenced to death for murder and Bishen Dutt to ten years' transportation for abetment of robbery The judgment occupied 135 typed pages of foolscap and showed that the crime was committed to obtain funds for the promotion of "swaraj"

16th —An official communique issued in Simla stated that H E the Viceroy had learnt with great regret of the serious affray at Budge Budge on 29th September and had decided, in view of the regrettable loss of life and of the fact that matters were involved which concerned the two local Governments of Bengal and the Punjab, to appoint a committee to inquire into the circumstances connected with the voyage of the Komagata Maru to British Columbia, its return to India, the riot at Budge-Budge and the subsequent arrest of those concerned, the Committee to consist of the Hon Sir W Vincent (President), the Hon Maharaja Dhiraja of Burdwan, the Hon Mr Fagan (Punjab), Sirdar Daljit Singh and Mr H Walmsey (Bengal), and to assemble in Calcutta at once

Death announced of Sir William Markby, K C I E, who was Judge of the Calcutta High Court for 12 years and died in his 86th year

18th —Great Britain decided to maintain a gunboat at Mahommera

The Indian Troops' Comforts Fund in London reached £50,000

20th —Lord Crewe issued in London a long statement bringing to the notice of the public the steps being taken in England and India to utilize offers of assistance for the welfare and comfort of the Indian Expeditionary Force, the care of their dependants in India, and details of the working of the Indian Soldiers Fund and the Indian Imperial Relief Fund Lord Crewe mentioned that the Viceroy suggested to him that in view of the warm feelings with which the public at Home welcomed the despatch of the Indian force, the latter fund should commend itself to the generosity of the British as well as the Indian public

Lord Crewe received the new appointees to the Indian public services and addressed them

21st —News received that the light cruiser Emden had sunk five steamers and a Government dredger (bound for Tasmania) about 100 miles east of Colombo and captured two Government colliers

22nd —A Mahratta and two Brahmins were placed before the Assistant Collector of Poona charged under Sec 124A, I P C with attempted publication of a "liberty" pamphlet of a seditious nature

Death announced of Lieut-Col K D Erskine, C I E, Resident at Baghdad, who was for many years in the Indian Political Department

25th —Death announced of General Sir Charles Douglas, G C B, K C B, Inspector General of the Forces He saw much service in Indian Frontier campaigns

26th —It was reported from Constantinople that with the increasingly favourable military situation of the Allies, combined with the Russian victory, the German pressure to induce Turkey to participate in the war was becoming greater The Porte, however, continued to assure the Entente Ambassadors that Turkey would not abandon her neutrality

Unofficial reports from the battle-front in Belgium contained the first mention of the appearance of Indian troops in action The reports spoke of the Indians' workmanlike manner and their bravery and dash

29th —Turkish warships, including two German cruisers, bombarded open Russian Black Sea ports, no previous declaration of war by Turkey having been made

The Government of India issued a Press Note regarding Turkey showing that the Germans had insinuated themselves into a position of control of Turkish policy and that covert acts, with a view to hostilities against England and Russia, had long been taking place in the Turkish Empire

NOVEMBER

1st —The Turkish authorities summarily intercepted telegraphic communication with the British Embassy in Constantinople

2nd —It was officially notified by the British authorities that war had broken out between Great Britain and Turkey

H H the Nizam issued a farman exhorting Indian Musalmans to remain firm and wholehearted in their loyalty and obedience to the British Government, this being their bounden duty "especially when there is no Moslem or non-Moslem Power in the world under which they enjoy such personal and religious liberty as they do in India"

H E the Viceroy was authorised by His Majesty's Government to issue a proclamation announcing that the Moslem Holy Places and Shrines in Arabia and Mesopotamia, and also Jedda, would be immune from attack or molestation by the British naval and military forces, so long as there was no interference with pilgrims from India to the Holy Places and Shrines in question The same proclamation announced that at the request of His Majesty's Government the Governments of France and Russia had given similar assurances

Expressions of loyal support of the British Government were received from Mahomedans in all parts of India

4th —Publication was given to a message from H H the Aga Khan exhorting all Mahomedans "to remain loyal, faithful and obedient to our temporal and secular allegiance" to the British Government, pointing out that no Islamic interest was threatened by the war between Great Britain and her Allies and Turkey, whereas Germany had long been plotting to become the suzerain of Asia Minor and Mesopotamia and that "if Germany succeeds, which Heaven forbid, Turkey will become a vassal of Germany and the Kaiser's Resident will be the real ruler of Turkey and will control the Holy City"

It was officially reported that H M S Minerva had bombarded Akaba, at the head of the Gulf of Akaba, and driven out the Turkish military force which was there, accompanied by German officers

5th —It was announced that the Indian Fund in London was making itself responsible for a supplementary hospital of five hundred beds in the New Forest, together with the equipment and maintenance for the first six months at a cost of £35,000 sterling It would be possible to convey the wounded from the ship to the hospital in motor cars A number of wounded were already at Netley, attended by the Indian Ambulance Corps

It was reported that a military force from India and a naval brigade had occupied Fao, at the mouth of the Shat-el-Arab, at the head of the Persian Gulf, after an hour's resistance

6th —Official reports were received of a strong Russian advance across the Caucasian frontier into Asiatic Turkey

7th —The German fortress of Tsing-tau, protecting their port of Kiau-Chao, surrendered to a British, Indian and Japanese force

9th —A large body of Territorial troops arrived in Bombay for duty in India

The German cruiser Emden was caught off the Cocos Islands by the Australian cruiser Sydney The Sydney's third shot set her on fire and she ran ashore The Sydney then did all that was possible to rescue their officers and crew The Captain of the Emden and Lieut Prince Franz Joseph of Hohenzollern were both taken prisoners unwounded, and it was unofficially stated that the Emden's total losses were 200 killed and 30 wounded The Emden had attempted to reach the Cocos Islands wireless station in disguise, but was detected by the islanders, who sent a wireless message to the Sydney

10th —A White Paper of seventy-seven pages was issued by the British Government dealing with the events leading to the war with Turkey and exposing an amazing record of efforts by Germany to corrupt the loyalty of Moslems and the neutrality of Turkey

11th —It was announced from Delhi that the principal officers commanding the Indian Expeditionary Force under Sir James Wilcocks were as follows —Brigadier-General Havelock Hudson, Chief of Staff, Major-Generals C A Anderson, H B Watkins, P M Carnegy, Brig-Gen R G Egerton, Major-Generals F Macbean, J M S Brunker, H D U Keary and F E Johnson all infantry commanders, with Brigadier-Generals F W G Wadeson, H D Fanshawe, Major-General G A Cookson, Brigadier-General S P W Pitie, Lieut -Colonel S M Edwardes, Brigadier-General H P Leader and Major-General C G M Fasken as cavalry commanders

14th —Death of Field-Marshal Earl Roberts Lord Roberts went to France on the 12th to greet his "dear Indian troops," saying "I cannot remain quietly at Home when my old comrades are fighting for our existence" Lord Roberts refused to wear an overcoat while inspecting the Indians on the 12th and insisted on seeing the fighting on the 13th from the top of an exposed hill, in spite of heavy rain and bitter wind He was seized with illness a few minutes after his return to Headquarters, developed pneumonia and passed away peacefully in his sleep on the evening of the 14th

17th —H R H the Prince of Wales went to the front in Belgium, being appointed to Field-Marshall Sir John French's Staff

Eloquent tributes were paid to the memory of Earl Roberts in both Houses of Parliament and the House of Commons, on the motion of the Premier, voting funds for the erection of a monument in his honour

The Chancellor of the Exchequer presented a financial statement regarding the war in the House of Commons and showed that the cost of the war for a full year would be at least 450 millions sterling

19th —The Madras hospital ship "Madras" sailed from Madras to proceed West

The mortal remains of the late Earl Roberts were buried in St Paul's Cathedral H M. the King-Emperor attended and the funeral was conducted with full military ceremonial,

soldiers from all parts of the Empire, including India, being present in the procession and in the Cathedral

20th —The Bikaner Camel Corps fought a successful action with Bedouins in the desert country eastwards of the Suez Canal and 70 Bedouins were killed, including three important Sheikhs, one of whom was the brother of the Turkish Commander, Sinfi Pasha

22nd —A British Indian force operating in Mesopotamia, under Lt-General A Barrett, drove the Turks out of Basra and occupied that place.

26th —Warm appreciation on the co-operation of India in the war was expressed in both Houses of Parliament when resolutions sanctioning payment from the Indian revenues of the cost of the troops despatched to Europe were presented and passed.

27th — It was announced that the Committee of the Bombay Presidency Branch of the Imperial Indian War Relief Fund had offered to the Military authorities, through His Excellency the Viceroy, to provide a 500 bed hospital for Indian troops engaged in the war and that the offer had been accepted, the hospital to be called "the Bombay Presidency Hospital," equipped by, and staffed by men from the Bombay Presidency, including Sind, and located probably at some convenient place in Egypt The Bombay Government appealed for volunteers for the hospital staff

29th —The hospital ship "Loyalty," presented by a number of Indian Ruling Chiefs, was inspected by H E the Governor and Lady Willingdon in dock at Bombay and afterwards sailed for the Persian Gulf

30th —A memorial to Lieut H R Bowers, R I M, who lost his life with Captain Scott and his comrades in the Antarctic, having been provided by his fellow officers in the Royal Indian Marine, was unveiled by H E the Governor in Bombay Cathedral

H M the King-Emperor landed in France on a visit to the troops at the front

DECEMBER.

2nd —Celebrations of the centenary of the landing in Calcutta of Bishop Middleton, the first Anglican Catholic Bishop to come to India, were held in the Anglican Churches throughout India

3rd —Dr S B Sarvadhikary, President of the Bengal Medical Association, received from medical authorities of the Government of India a communication acknowledging the receipt from the Association of 25 names of medical men willing to fill temporary vacancies in the I M S cadre, and stating that Lieutenant's commissions had been given to eight of the nominees The communication also offered to accept the formation of a united corps of medical men and ambulance bearers

5th —The *Frankfurter Zeitung*, a semi-official German newspaper, published a communication from the front stating that at first the Germans spoke with contempt of the Indian troops, but that they had learnt to respect them, the writer expressing his appreciation of their fighting qualities by saying "The devil knows what the English have put into these fellows they stormed our lines, as though they possessed an evil spirit"

H M. the King-Emperor handed the V C to Naik Darwan Singh Negi, of the 1st battalion, 39th Garwal Rifles, and it was announced that Sepoy Khudadad, of the 129th Duke of Connaught's Own Baluchis, then in hospital had also been awarded the V C, these being the first two Indian soldiers to receive the coveted decoration

7th —An official account of H M the King-Emperor's visit to the front was published It showed that His Majesty's tour began with a visit to the Indian troops, with the General Officer Commanding, who presented the Indian Princes at the front and the officers of his staff During the week's visit, the King visited all the troops at the front, visited the hospitals, including those accommodating German wounded, and exchanged State visits with the President of the French Republic and H M the King of the Belgians His Majesty conferred the Order of Merit upon Field-Marshal Sir John French and bestowed upon King Albert the Order of the Garter, the most ancient order of knighthood in existence

8th —The Bombay Legislative Council met at Bombay, H E the Governor presiding The Hon Moulvie Rafiuddin Ahmad, at the outset, moved "That this Council begs to express its deep conviction of the righteousness of the cause of Great Britain in its participation in the present war and assures His Majesty's Government of the unswerving loyalty and devotion of all communities and classes to the British Throne and offers its humble service to Government during the crisis, and prays that the Governor in Council will be pleased to convey this expression of opinion to His Majesty's Government" The Hon Moulvie, the Hon Shaikh Ghulam Hussain Hidayat Allah, the Hon Syed El Edroos and thirteen other non-official members, representing all communities, in all parts of the Presidency, spoke in terms of cordial support of the resolution, which was carried, H E the Governor making a speech in response The Hon Mr Claude Hill moved the second reading of the Bombay Town Planning Bill and the debate upon this measure continued throughout the day

9th —Bombay Legislative Council The debate on the Town Planning Bill was continued and the Bill passed through its final stages The Hon Sir Richard Lamb moved the first reading of a Bill to provide for the survey of the Town and Island of Bombay and the first reading was passed and the Bill referred to Select Committee The Hon Mr P D Pattani moved the first reading of a Bill to Decentralise and otherwise to facilitate the administration of certain enactments in force in the Presidency of Bombay, and the first reading was carried and the Bill referred to Select Committee. The Hon Mr Hill moved the first reading of a Bill to authorise the levying of dues on vessels for the provision of Lights on the Coast of the

Province of Sind This also was carried and the Bill referred to Select Committee This concluded the business of the Council.

10th.—An official announcement was made that, in addition to the 103,000 acres already reserved in the Lower Bari Doab Canal area, for distribution by the Military authorities as rewards to pensioned Indian officers and men, a further 75,000 acres would be reserved for the same purpose, in view of the war and of the large proportion of officers and men from the Punjab in the Indian Army

15th —The Government of India issued a press *communique* detailing special measures taken to repatriate Indian pilgrims at Jeddah and to patrol the routes with warships to ensure their safety.

17th —The portrait of Surgeon-General H W Stevenson who lately retired from the Surgeon-Generalship to the Government of Bombay was unveiled by His Excellency Lord Willingdon in the hall of the College of Physicians and Surgeons, Bombay

19th.—Reception by Their Excellencies the Governor and Lady Willingdon at Government House, Bombay, this owing to the war, being the only one of the usually numerous public functions at Government House to be held this year

21st —The King and Queen inspected in London the motor ambulances presented by the Maharajah of Gwalior

22nd —The Bombay Municipal Corporation passed a resolution of profound sorrow at the death of Lieutenant the Hon'ble Edward Charles Hardinge, the gallant son of His Excellency the Viceroy, whose death from blood-poisoning after being wounded in battle had just been reported, and requested the President to send a suitable message of condolence to His Excellency expressive of the universal feeling of grief evoked by the sad event and conveying to him the heartfelt sympathy of the Corporation in his bereavement This resolution is given in this chronicle as a type of thousands of expressions of feelings of the same character which were received by His Excellency the Viceroy from all parts of the Indian Empire

25th —The Tenth Indian Industrial Conference met at Madras under the presidency of the Hon'ble Mr Munmohandas Ramji. Among the resolutions passed was one conveying loyalty of the people to the throne and their willingness to serve the Empire.

Seven naval seaplanes escorted by a large cruiser and destroyer force with submarines raided Cuxhaven

26th —The Governor-General-in-Council sanctioned the admission of five Indian soldiers into the Indian Order of Merit, and the award of the Indian distinguished service medal to a sepoy of the Bikaner Camel Corps

27th —The official report on the accident on the Ghat Section of the G I P Railway on October 15 was published The Senior Government Inspector stated —"The accident in my opinion was entirely due to the action of the pointsman in wrongly manipulating the spring cross over the points"

The s s Syria arrived in Bombay from Southampton bringing about 320 wounded and sick Indian soldiers.

The 28th session of the Indian National Social Conference met at Madras under the Presidency of the Yuvaraja of Mysore

The All-India Mahomedan Educational Conference began at Rawalpindi when the Commissioner of Rawalpindi made a speech expressing sympathy with the Mahomedans in their present difficulties

28th —About 1,300 prisoners of war arrived in Bombay from Basra

The 30th Session of the Indian National Congress opened in Madras, Sir Subrahmanya Iyer being the Chairman of the Reception Committee and Mr Bhupendranath Basu, the President Loyal resolutions were passed and the meeting of the Congress was, for a short time, attended by the Governor of Madras

The first All India Conference of Indian Christians was held at Bishop's College, Calcutta

Under-trial convicts in the Belgaum Jail attempted to escape and were fired upon by the armed police guard Eighteen were killed and six wounded

29th —The Governor of Madras unveiled the statue of the late Lord Ripon in Madras

INTEREST TABLE.

FROM 5 TO 12 PER CENT ON RUPEES 100

Calculated for 1 *Year* 1 *Month* (*Calendar*), 1 *Week*, *and* 1 *Day* (365 *Days to Year*) *the Decimal Fraction of a Pie for the Day being shown for the Day*

Per cent	1 *Day*	1 *Week*	1 *Month*	1 *Year*
	Rs A P	Rs A P	Rs A P	Rs A P
5	0 0 2 630	0 1 6	0 6 8	5 0 0
6	0 0 3 156	0 1 10	0 8 0	6 0 0
7	0 0 3 682	0 2 1	0 9 4	7 0 0
8	0 0 4 208	0 2 5	0 10 8	8 0 0
9	0 0 4 734	0 2 9	0 12 0	9 0 0
10	0 0 5 260	0 3 0	0 13 4	10 0 0
11	0 0 5 786	0 3 4	0 14 8	11 0 0
12	0 0 6 312	0 3 8	1 0 0	12 0 0

Table of Exchange, No. 1—Rupees into Pounds Sterling.

For values of Rupees from 1s 3 1/32d *to* 1s 3 31/32d

Rupees	1s 3 1/32d	1s 3 1/16d	1s 3 3/32d	1s 3 1/8d	1s 3 5/32d	1s 3 3/16d
	£ s d	£ s d	£ s d	£ s d	£ s d	£ s d
1	0 1 3 1/32	0 1 3 1/16	0 1 3 3/32	0 1 3 1/8	0 1 3 5/32	0 1 3 3/16
3	0 3 10 3/32	0 3 10 1/16	0 3 10 3/32	0 3 10 1/8	0 3 11 5/32	0 3 11 3/16
5	0 6 5 1/32	0 6 5 1/16	0 6 6	0 6 6 1/8	0 6 6 5/32	0 6 6 3/16
10	0 12 11 1/16	0 12 11 1/8	0 13 0 1/32	0 13 0 1/16	0 13 0 1/8	0 13 0 3/16
20	1 5 10 1/8	1 5 11 1/32	1 6 0 1/16	1 6 0 1/8	1 6 0 3/16	1 6 0 1/4
30	1 18 9 1/32	1 18 10 1/16	1 19 0 1/32	1 19 0 1/16	1 19 0 3/32	1 19 0 1/8
40	2 11 8 1/16	2 11 10 1/32	2 12 1	2 12 1 1/16	2 12 1 3/32	2 12 1 1/8
50	3 4 7	3 4 10	3 5 1 1/32	3 5 1 1/16	3 5 1 3/32	3 5 1 1/8
60	3 17 6	3 17 9 3/32	3 18 1 1/32	3 18 1 1/16	3 18 1 3/32	3 18 1 1/8
70	4 10 5	4 10 9 1/32	4 11 1 1/16	4 11 1 1/8	4 11 1 3/32	4 11 1 3/16
80	5 3 4	5 3 9	5 4 2	5 4 2 1/16	5 4 2 1/8	5 4 2 3/16
90	5 16 3	5 16 8 1/32	5 17 2 1/32	5 17 2 1/16	5 17 2 3/32	5 17 2 1/8
100	6 9 2	6 9 8 1/32	6 10 2 1/32	6 10 2 1/16	6 10 2 3/32	6 10 2 1/8
250	16 2 11	16 4 2 3/32	16 5 6 1/32	16 5 6 1/16	16 5 6 3/32	16 5 6 1/8
400	25 16 8	25 18 9	26 0 10	26 2 11	26 5 0	26 7 1
500	32 5 10	32 8 5 1/32	32 11 0 1/32	32 13 7 1/32	32 16 3	32 18 10 1/32
750	48 8 9	48 12 7 1/32	48 16 6 1/32	49 0 5 1/32	49 4 4 1/32	49 8 3 1/32
1,000	64 11 8	64 16 10 1/32	65 2 1	65 7 1 1/32	65 12 6	65 17 8 1/32

For values of Rupees from 1s 3 7/32d *to* 1s 4 1/32d

Rupees	1s 3 7/32d	1s 3 1/4d	1s 3 9/32d	1s 4d	1s 4 2/32d	1s 4 1/16d
	£ s d	£ s d	£ s d	£ s d	£ s d	£ s d
1	0 1 3 7/32	0 1 3 1/4	0 1 3 9/32	0 1 4	0 1 4	0 1 4
3	0 3 11 1/32	0 3 11 1/16	0 3 11 3/32	0 4 0	0 4 0	0 4 0
5	0 6 7 1/32	0 6 7 1/16	0 6 7 3/32	0 6 8	0 6 8	0 6 8 1/16
10	0 13 2 1/16	0 13 3 1/32	0 13 3 1/16	0 13 4	0 13 4 1/16	0 13 4 1/8
20	1 6 5 1/8	1 6 6 1/32	1 6 7 1/16	1 6 8	1 6 8 1/8	1 6 9 1/32
30	1 19 8 1/32	1 19 10	1 19 11	2 0 0	2 0 0 1/32	2 0 1 1/32
40	2 12 11	2 13 1 1/32	2 13 2 1/32	2 13 4	2 13 5 1/32	2 12 6 1/32
50	3 6 1 1/32	3 6 4 1/32	3 6 6 1/32	3 6 8	3 6 9 1/32	3 6 11
60	3 19 4 1/32	3 19 8 1/32	3 19 10	4 0 0	4 0 1 3/32	4 0 3 1/32
70	4 12 7 1/32	4 12 11 1/32	4 13 1 1/32	4 13 4	4 13 6	4 13 8 1/32
80	5 5 10	5 6 3	5 6 5 1/32	5 6 8	5 6 10 1/32	5 7 1
90	5 19 0 1/32	5 19 6 1/32	5 19 9	6 0 0	6 0 2 3/32	6 0 5 1/32
100	6 12 3 1/32	6 12 9 1/32	6 13 0 1/32	6 13 4	6 13 7	6 13 10 1/32
250	16 10 8 1/32	16 12 0 1/32	16 12 8	16 13 4	16 13 11 1/32	16 14 7 1/32
400	26 9 2	26 11 3	26 12 3 1/32	26 13 4	26 14 4 1/32	26 15 5
500	33 1 5 1/32	33 4 0 1/32	33 5 4 1/32	33 6 8	33 7 11 1/32	33 9 3 1/32
750	49 12 2 1/32	49 16 1	49 18 0 1/32	50 0 0	50 1 11 1/32	50 3 10 1/32
1,000	66 2 11	66 8 1 1/32	66 10 8 1/32	66 13 4	66 15 11 1/32	66 18 6 1/32

For values of Rupees from 1s 4 3/32d *to* 1s 4 15/32d

Rupees	1s 4 3/32d	1s 4 1/8d	1s 4 5/32d	1s 4 3/16d	1s 4 7/32d	1s 4 1/4d
	£ s d	£ s d	£ s d	£ s d	£ s d	£ s d
1	0 1 4	0 1 4	0 1 4	0 1 4	0 1 4	0 1 4 1/32
3	0 4 0 1/32	0 4 0 1/16	0 4 0 1/16	0 4 0 1/32	0 4 0 1/32	0 4 0 3/32
5	0 6 8 1/32	0 6 8 1/16	0 6 8 1/16	0 6 8 1/32	0 6 9	0 6 9 1/32
10	0 13 4 1/16	0 13 5 1/32	0 13 5 1/32	0 13 5 1/16	0 13 6	0 13 6 1/16
20	1 6 9 1/32	1 6 10 1/32	1 6 11	1 6 11 1/32	1 7 0 1/32	1 7 1
30	2 0 2 1/32	2 0 3 3/32	2 0 4 1/32	2 0 5 1/32	2 0 6 1/32	2 0 7 1/32
40	2 13 7	2 13 9 1/32	2 13 10 1/32	2 13 11 1/32	2 14 0 1/32	2 14 2
50	3 7 0 1/32	3 7 2 1/32	3 7 3 1/32	3 7 5 1/32	3 7 6 1/32	3 7 8 1/32
60	4 0 5 1/32	4 0 7 1/32	4 0 9 1/32	4 0 11 1/32	4 1 1	4 1 3
70	4 13 10 1/32	4 14 0 1/32	4 14 2 1/32	4 14 5	4 14 7 1/32	4 14 9 1/32
80	5 7 3 1/32	5 7 6	5 7 8 1/32	5 7 11	5 8 1 1/32	5 8 4
90	6 0 8 1/32	6 0 11 1/32	6 1 2	6 1 4 1/32	6 1 7 1/32	6 1 10 1/32
100	6 14 1 1/32	6 14 4 1/32	6 14 7 1/32	6 14 10 1/32	6 15 1 1/32	6 15 5
250	16 15 3 1/32	16 15 11 1/32	16 16 7	16 17 2 1/32	16 17 10 1/32	16 18 6
400	26 16 5 1/32	26 17 6	26 18 6 1/32	26 19 7	27 0 7 1/32	27 1 8
500	33 10 6 1/32	33 11 10 1/32	33 13 2	33 14 5 1/32	33 15 9 1/32	33 17 1
750	50 5 10 1/32	50 7 9 3/32	50 9 9	50 11 8 1/32	50 13 7 1/32	50 15 7 1/32
1,000	67 1 1 1/32	67 3 9	67 6 4 1/32	67 8 11 1/32	67 11 6 1/32	67 14 2

Table of Exchange, No. 2—Pounds Sterling into Rupees.

For values of Rupees from 1s 3½*d to* 1s 3¾*d*

Sterling	at 1s 3½d	at 1s 3 5/16d	at 1s 3⅜d	at 1s 3 7/16d	at 1s 3½d	at 1s 3 9/16d
£ s d	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p
0 0 1	0 1 0	0 1 0	0 1 0	0 1 0	0 1 0	0 1 0
0 0 4	0 1 1	0 4 1	0 4 1	0 4 0	0 4 0	0 4 0
0 0 6	0 6 2	0 6 2	0 6 1	0 6 1	0 6 1	0 6 0
0 0 9	0 9 3	0 9 3	0 9 2	0 9 2	0 9 1	0 9 1
0 1 0	0 12 4	0 12 4	0 12 3	0 12 2	0 12 2	0 12 1
0 2 6	1 14 11	1 14 10	1 14 7	1 14 6	1 14 5	1 14 3
0 5 0	3 13 11	3 13 8	3 13 5	3 13 2	3 12 11	3 12 8
0 7 6	5 12 10	5 12 6	5 12 1	5 11 9	5 11 5	5 10 11
0 10 0	7 11 10	7 11 4	7 10 10	7 10 4	7 9 10	7 9 5
1 0 0	15 7 8	15 6 8	15 5 9	15 4 9	15 3 9	15 2 10
5 0 0	77 6 8	77 1 8	76 12 9	76 7 10	76 3 0	75 14 0
10 0 0	154 13 5	154 3 5	153 9 7	152 15 9	152 6 1	151 12 5
25 0 0	387 1 6	385 8 7	383 15 11	382 7 5	380 15 2	379 7 1
30 0 0	464 8 3	462 10 4	460 12 9	458 15 5	457 2 3	455 5 4
50 0 0	774 3 1	771 1 4	768 0 0	764 15 0	761 14 5	758 14 6
75 0 0	1,161 4 7	1 156 9 11	1,151 15 11	1,147 6 5	1,142 13 8	1,138 5 4
100 0 0	1,548 6 2	1 542 2 8	1,536 0 0	1 529 14 1	1,523 12 11	1,517 12 7

For values of Rupees from 1s 3¾*d to* 1s 4 1/16*d*

Sterling	at 1s 3¾d	at 1s 3 11/16d	at 1s 3 12/16d	at 1s 1d	at 1s 4 1/16d	at 1s 4 2/16d
£ s d	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p
0 0 1	0 1 0	0 1 0	0 1 0	0 1 0	0 0 11	0 0 11
0 0 4	0 4 0	0 4 0	0 4 0	0 4 0	0 3 11	0 3 11
0 0 6	0 6 0	0 6 0	0 6 0	0 6 0	0 5 11	0 5 11
0 0 9	0 9 0	0 9 0	0 9 0	0 9 0	0 8 11	0 8 11
0 1 0	0 12 1	0 12 0	0 12 0	0 12 0	0 11 11	0 11 11
0 2 6	1 14 2	1 14 1	1 14 0	1 14 0	1 13 10	1 13 9
0 5 0	3 12 5	3 12 2	3 12 1	3 12 0	3 11 10	3 11 9
0 7 6	5 10 7	5 10 3	5 10 1	5 10 0	5 9 9	5 9 7
0 10 0	7 8 11	7 8 5	7 8 2	7 8 0	7 7 9	7 7 6
1 0 0	15 1 10	15 0 11	15 0 5	15 0 0	14 15 6	14 15 0
5 0 0	75 9 5	75 4 8	75 2 4	75 0 0	74 13 7	74 11 3
10 0 0	151 2 10	150 9 4	150 4 8	150 0 0	149 11 3	149 6 7
25 0 0	377 15 2	376 7 5	375 11 8	375 0 0	374 4 2	373 8 6
30 0 0	453 8 8	451 12 2	450 14 1	450 0 0	449 1 11	448 3 11
50 0 0	755 14 5	752 15 0	751 7 5	750 0 0	748 8 7	747 1 3
75 0 0	1,133 13 8	1,129 6 6	1,127 3 2	1,125 0 0	1,122 12 10	1,120 9 10
100 0 0	1,511 12 11	1,505 14 1	1,502 14 11	1,500 0 0	1,497 1 2	1,494 2 7

For values of Rupees from 1s 4 3/16*d to* 1s 4½*d*

Sterling	at 1s 4 3/16d	at 1s 4⅜d	at 1s 4 5/16d	at 1s 4 6/16d	at 1s 4 7/16d	at 1s 4½d
£ s d	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p
0 0 1	0 0 11	0 0 11	0 0 11	0 0 11	0 0 11	0 0 11
0 0 4	0 3 11	0 3 11	0 3 11	0 3 11	0 3 11	0 3 11
0 0 6	0 5 11	0 5 11	0 5 11	0 5 11	0 5 11	0 5 10
0 0 9	0 8 11	0 8 11	0 8 10	0 8 10	0 8 10	0 8 10
0 1 0	0 11 11	0 11 10	0 11 10	0 11 10	0 11 10	0 11 9
0 2 6	1 13 9	1 13 8	1 13 8	1 13 7	1 13 7	1 13 5
0 5 0	3 11 7	3 11 6	3 11 5	3 11 3	3 11 2	3 11 0
0 7 6	5 9 5	5 9 3	5 9 1	5 8 11	5 8 9	5 8 6
0 10 0	7 7 3	7 7 0	7 6 10	7 6 7	7 6 4	7 6 1
1 0 0	14 14 7	14 14 1	14 13 8	14 13 2	14 12 9	14 12 3
5 0 0	74 9 0	74 6 8	74 4 4	74 2 1	73 15 9	73 13 6
10 0 0	149 2 0	148 13 4	148 8 9	148 4 2	147 15 7	147 11 0
25 0 0	372 13 0	372 1 5	371 5 10	370 10 5	369 15 0	369 3 7
30 0 0	447 6 0	446 8 2	445 10 4	444 12 7	443 14 10	443 1 2
50 0 0	745 10 1	744 2 11	742 11 11	741 5 0	739 14 1	738 7 4
75 0 0	1,118 7 1	1,116 4 5	1,114 1 10	1,111 15 5	1,109 13 1	1,107 11 0
100 0 0	1,491 4 2	1 488 5 11	1,485 7 10	1 482 10 0	1,479 12 3	1,476 14 9

Indian Stamp Duties.

	Rs	a
Acknowledgment of Debt ex Rs 20	0	1
Affidavit or Declaration	1	0
Agreement or Memo of Agreement, (a) If relating to the sale of a bill of exchange	0	2
(b) If relating to sale of a Government security, or share in an incorporated company or other body corporate—Subject to a maximum of Rs 10 a 1 for every Rs 10,000 or part		
(c) If not otherwise provided for	0	8
Appointment in execution of a power	15	0
Articles of Association of Company	25	0
Articles of Clerkship	250	0
Award any decision in writing by an Arbitrator, other than by an Order of the Court Where the value does not exceed Rs 1,000, same duty as a Bond		
In any other case	5	0
Bill of Exchange or Promissory Note payable on demand	0	1
Where payable otherwise than on demand, but not more than one year after date or sight—Not exc Rs 200, a 3, exc Rs 200, not exc Rs 400, a 6, exc Rs 400, not exc Rs 600, a 9, exc Rs 600 not exc Rs 800 a 12, exc Rs 800, not exc Rs 1 000, a 15 exc Rs 1,000, not exc Rs 1,200, R 1 a 2, exc Rs 1,200, not exc Rs 1,600 R 1 a 8, exc Rs 1,600, not exc Rs 2,500, Rs 2, a 4, exc Rs 2,500 not exc Rs 5,000, Rs 4 a 8, exc Rs 5,000, not exc Rs 7,500, Rs 6 a 12, exc Rs 7,500, not exc Rs 10,000 Rs 9, exc Rs 10,000, not exc Rs 15,000 Rs 13 a 8, exc Rs 15,000, not exc Rs 20,000, Rs 18, exc Rs 20,000, not exc Rs 25,000, Rs 22 a 8, exc Rs 25,000, not exc Rs 30,000, Rs 27, and for every add Rs 10,000, or part thereof, in excess of Rs 30 000, Rs 9		
Where payable at more than one year after date or sight, same duty as a Bond		
Bill of Lading	0	4
Bond (not otherwise provided for)—		
Not exc Rs 10	0	2
Exc Rs 10, but not exc Rs 50	0	4
Exc Rs 50, but not exc Rs 100	0	8
Up to Rs 1,000, every Rs 100	0	8
For every Rs 500 or part, beyond Rs 1,000	2	8
Bond, Administration, Customs, Security or Mortgage Deed—For amount not exceeding Rs 1 000 same duty as a Bond		
In any other case	5	0
Cancellation	5	0
Certificate or other Document relating to Shares	0	1
Charter Party	1	0
Cheque	0	1
Composition—Deed	10	0
Conveyance, not being a Transfer—		
Not exceeding Rs 50	0	8
Exceeding Rs 50, not exceeding Rs. 100	1	0
For every Rs 100 in excess of Rs 100 up to Rs 1,000	1	0
For every Rs 500, or part thereof, in excess of Rs 1,000	5	0
Copy or Extract—If the original was not chargeable with duty, or if duty with which it was chargeable does not exceed 1 Rupee	0	8
In any other case	1	0
Counterpart or Duplicate—If the duty with which the original instrument is chargeable does not exceed one rupee—The same duty as is payable on the original In any other case	1	0
Delivery Order	0	1
Entry in any High Court or an Advocate or Vakil	500	0
In the case of an Attorney	250	0
Instrument—Apprenticeship	5	0
Divorce	1	0
Other than Will, recording an adoption or conferring or purporting to confer Authority to adopt	10	0
Lease—Where rent is fixed and no premium is paid, for less than 1 year same duty as Bond for whole amount, not more than 3 years, same as Bond for average annual rent reserved, over, 3 years, same as Conveyance for consideration equal to amount or value of the average annual rent reserved, for indefinite term, same as Conveyance for amount equal to 10 years' rent, in perpetuity, same as Conveyance for consideration equal to one-fifth of rents paid in respect of first 50 years Where there is premium and no rent, same as Conveyance for amount of premium, premium with rent, same as Conveyance for amount of premium, and same duty as Lease without premium		
Letter—Allotment of Shares	0	1
Credit	0	1
License	10	0
Memo of Association of Company—If accompanied by Articles of Association	15	0
If not so accompanied	40	0
Notarial Act	1	0
Note or Memo, intimating the purchase or sale—		
(a) Of any Goods exceeding in value Rs 20	0	2
(b) Of any Stock or marketable Security exceeding in value Rs 20—Subject to a maximum of Rs 10 a 1 for every Rs 10,000, or part		
Note of Protest by a Ship's Master	0	8
Partnership—Where the capital does not exceed Rs 500	2	8
In any other case	10	0
Dissolution of	5	0
Policy of Insurance—		
(1) *Sea*—Where premium does not exceed rate of 2a, or $\frac{1}{8}$ per cent of amount insured	0	1
In any other case for Rs 1,000 or part thereof	0	2
(2) *For time*—For every Rs 1,000 or part insured, not exc 6 months	0	2
Exceeding 6 and not exceeding 12 months	0	4

	Rs	a.
If drawn in duplicate, for each part:—Half the above rates, for Sea and Time.		
(3). *Fire*—When the sum insured does not exceed Rs. 5,000	0	8
In any other case	1	0
(4) *Accident and Sickness*—Against Railway accident, valid for a single journey only	0	1
In any other case—for the maximum amount which may become payable in the case of any single accident or sickness where such amount does not exc. Rs 1,000, and also where amount exc Rs. 1,000, for every Rs 1,000 or part	0	2
(5). *Life or other Insurance, not specifically provided for*, per Rs. 1,000 .	0	6
In case of a re-insurance by one Company with another—¼ of duty payable in respect of the original insurance, but not less than 1 anna, or more than 1 R.		
Power of Attorney—		
For the sole purpose of procuring the registration of one or more documents in relation to a single transaction or for admitting execution of one or more such documents ..	0	8
Authorising 1 person or more to act in a single transaction other than that mentioned above	1	0
Authorising not more than 5 persons to act jointly and severally in more than 1 transaction, or generally	5	0
Authorising more than 5 but not more than 10 persons to act ..	10	0

	Rs.	a.
When given for consideration and authorising the Attorney to sell any immovable property—The same duty as a *Conveyance* for the amount of the consideration		
In any other case, for each person authorised	1	0
Protest of Bill or Note	1	0
Proxy ..	0	1
Receipt for value exc Rs 20 .. .	0	1
Shipping Order	0	1
Surrender of Lease—When duty with which lease is chargeable does not exceed Rs 5 —The duty with which such Lease is chargeable.		
In any other case	5	0
Transfer of Shares—One Half of the duty payable on a Conveyance for a consideration equal to the value of the share		
Transfer of any Interest secured by a Bond, Mortgage-deed, or Policy of Insurance—If duty on such does not exceed Rs 5—The duty with which such Bond, &c, is chargeable		
In any other case . .	5	0
Transfer of Lease by way of assignment and not by way of under-lease—The same duty as a conveyance for a consideration equal to the amount of the consideration for the transfer		
Trust, Declaration of—Same duty as a Bond for a sum equal to the amount or value of the property concerned, but not exceeding	15	0
Revocation of—Ditto, but not exceeding . .	10	0
Warrant for Goods	0	4

FOREIGN MONEYS, AND THEIR ENGLISH EQUIVALENTS.

FULL EXCHANGE VALUES

	£	s	d
America—(United States) Eagle	2	1	1
Dollar of 100 Cents	0	4	2
Cent . ..	0	0	0½
Argentine.—Peso ..	0	3	11½
Austria—Silver Crown	0	0	10
10 Kreutzers or 20 Hellers	0	0	2
Belgium—Gold Ten-Franc Piece	0	7	11½
Silver Five Franc ..	0	3	11½
,, Franc	0	0	9½
Chilian—Peso .	0	1	6
Denmark, Norway and Sweden—Krone 100 Ore—1 Krone	0	1	1½
Egypt—£E of 100 Piastres . .	1	0	3¾
One Piastre . (about) .	0	0	2½
France—Gold Twenty-Franc Piece	0	15	10½
Silver Five-Franc Piece ..	0	3	11½
Franc	0	0	9½
Germany—(New Coinage)—			
Gold 20-Mark Piece .	0	19	7
,, 10 ,, ,, .	0	9	9½
Silver 5 ,, ,,	0	4	10¾
,, 1 ,, ,,	0	0	11¾
,, ½ ,, ,, .	0	0	5⅞
2 Thaler Pieces	0	5	10½
1 ,, Piece . .	0	2	11½
Greece—Twenty-Drachmai Gold Piece	0	15	10
One Drachma (silver)	0	0	9½
Holland—Ten Florins (Gulden)	0	16	8
Florin (Gulden) .. .	0	1	8

	£.	s.	d.
India—1 Rupee (varying in value)	0	1	4
½ ,, ,, . ..	0	0	8
¼ ,, ,, .	0	0	4
Since 1899 the Sovereign has been legal tender at the ratio of 15 rupees to the £ sterling (=⅓ the rupee)			
Italy—Gold 20-Lire Piece .. .	0	15	10
,, 5 ,, ,, ..	0	3	11½
One Lira (Silver) . . .	0	0	9½
Japan—Gold 20 Yen Pieces .	2	0	11½
Silver 50 Sen Pieces .. .	0	1	0½
Value in exchange—1 Yen=100 Sen=	2	0	0½
Peru—Sol, Silver	0	2	0
Portugal—Gold Milreis .	0	4	5½
Silver Half Milreis .	0	2	2¾
100 Reis	0	0	5½
Russia—Half Imperial . ..	0	15	9⅞
Silver Rouble .. .	0	2	1½
Ten Kopecks . .	0	0	2½
Spain—(Gold)—25 Pesetas	0	19	9¾
(Silver)—5 Pesetas ..	0	3	11½
2 ,, .	0	1	6¼
1 Pesta . .	0	0	9½
The Peseta=100 Centimos. (*Centimes*)			
Switzerland—Gold 20-Franc Piece ..	0	15	10½
Silver 5-Franc Piece ..	0	3	11½
,, Franc ..	0	0	9½
Turkey—Gold Medjidié	0	18	0¾
Silver Mejidié	0	.	7
Piastre	0	0	2¼

The Calendars.

A full Calendar will be found at the beginning of this book Below are given details of the other Calendars in use in India

The *Jewish* Calendar is in accordance with the system arranged A D 358 The Calendar dates from the Creation, which is fixed as 3,760 years and 3 months before the beginning of the Christian Era, the year is Lunı-solar

The *Mohammedan*, or era of the Hejira, dates from the day after Mahomet's flight from Mecca, which occurred on the night of July 15, 622 A D The months are Lunar

The *Fasli* year was derived from a combination of the Hejira and Samvat years by the order of Akbar, it is Lunı-solar The *Bengali* year seems also to have been related at one time to the Hejira, but the fact of its being Solar made it lose 11 days each year

The *Samvat* era dates from 57 B C, and is Lunı-solar The months are divided into two fortnights—*sudi*, or bright, and *badi*, or dark Each fortnight contains 15 tithis, which furnish the dates of the civil days given in our calendars

Jewish Calendar.

1915			5675	
Jan	16		Sebat	1
Feb	15		Adar	1
,,	25	Fast of Esther		11
,,	28	Purim		14
Mar	1	Shushan Purim	,,	15
,,	16		Nisan	1
,,	30	Fest of Passover	,,	15
,,	31	,, ,, 2nd Day	,,	16
April	5	,, ,, 7th ,,	,,	21
,,	6	,, ,, 8th ,,	,,	22
,,	15		Yiar	1
May	2	Fest 33rd of Omer	,,	18
,,	14		Sivan	1
,,	19	Pentecost, 1st Day	,,	6
,,	20	,, 2nd ,,	,,	7
June	13		Tamuz	1
,,	29	Fast of Tamuz		17
July	12		Ab	1
,,	20	Fast of Ab		9
Aug	11		Elul	1
			5676	
Sept	9	New Year 5676	Tisri	1
,,	10	,, ,, 2nd Day	,,	2
,,	12	Fast of Guedaliah	,,	4
,,	18	Day of Atonement		10
,,	23	Feast of Tabernacles	,,	15
,,	24	,, ,, 2nd Day	,,	16
,,	29	Hosana Raba	,,	21
,,	30	Feast of 8th Day	,,	22
Oct	1	Rejoicing of the Law	,,	23
,,	9		Hesvan	1
Nov	8		Kislev	1
Dec	2	Dedication of Temple	Kislev	25
,,	8		Tebet	1
,,	17	Fast, Siege of Jeru	,,	10

Mohamedan Calender.

1915		1333	
January	17	Rabia I	1
February	16	Rabia II	1
March	17	Jomada I	1
April	16	Jomada II	1
May	15	Rajab	1
June	14	Shaaban	1
July	13	Ramadan	1
August	12	Shawall	1
September	10	Dulkaada	1
October	10	Dulheggia	1
		1334	
November	9	Muharram	1
December	9	Saphar	1

Fasli (N. W. India).

1915		1322	
January	1	Pausa	30
,,	2	Magha	1
February	1	Phalguna	1
March	2	Chaitra	1
April	1	Vaisakha	1
,,	30	Jyaistha Ad	1
May	29	,,	1
June	28	Ashada	1
July	27	Sravana	1
August	25	Bhadra	1
		1323.	
September	24	Asvina	1
October	23	Karttika	1
November	22	Marga	1
December	22	Pausha	1

Bengali.

1915		1321	
January	1	Pous	17
,,	14	Magha	1
February	13	Phalguna	1
March	15	Chaitra	1
		1322	
April	14	Vaisakha	1
May	15	Jyaistha	1
June	16	Ashada	1
July	17	Sravana	1
August	18	Bhadra	1
September	18	Asvina	1
October	18	Karttika	1
November	17	Marga,	1
December	17	Pous	1

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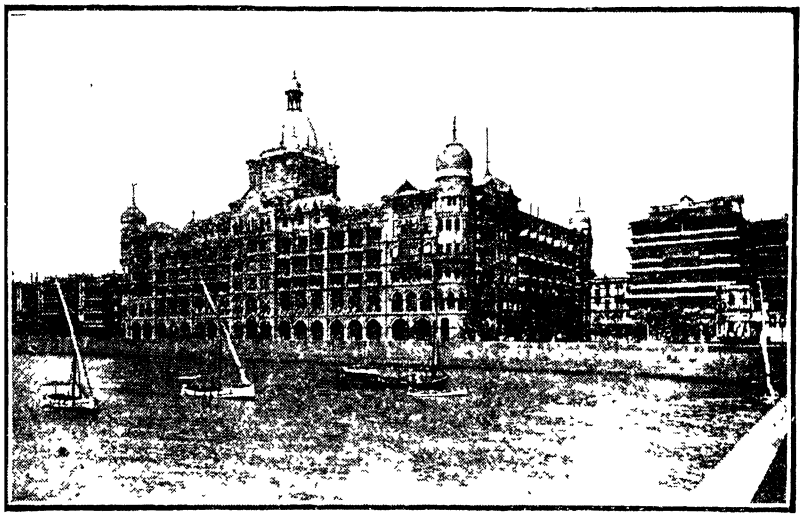

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