

GOVERNMENT OF INDIA
RAILWAY DEPARTMENT
(RAILWAY BOARD)

REPORT
BY THE
RAILWAY BOARD
ON
INDIAN RAILWAYS

1934-35

Volume I



DELHI: MANAGER OF PUBLICATIONS
1936

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CONTENTS.

CHAPTER I.—GENERAL REVIEW.

	PAGE.
Introduction	1
Monsoon conditions and agricultural results	1
Mileage	2
Railways and the Legislature	2
Railway Budget	4
Standing Finance Committee for Railways	4
Meetings with Agents of Railways and Local Governments	4
Central Advisory Council for Railways	5
Local Railway Advisory Committees	5
Railway Rates Advisory Committee	6
Mr. Pope's Investigations	7

CHAPTER II.—FINANCIAL RESULTS.

I.—Trade Review—	
Exports	9
Imports	9
Balance of trade	10
II.—Financial Results of State Railways—	
Financial results of working	10
Gross receipts	13
Working expenses	15
Net receipts	15
Losses and gains	16
Capital at charge	16
Works expenditure	17
Stores balances	18
Contribution to General Revenues	18
Depreciation Fund	19
Analysis of financial results of working	19
III.—General Results of working of all Indian Railways—	
Traffic and mileage	23
Analysis of earnings	23
Passenger earnings	23
Goods earnings	25
Alterations in rates and fares	25
Compensation claims for goods	26

CHAPTER III.—NEW CONSTRUCTION AND ENGINEERING WORKS.

Capital expenditure	28
Lines opened during 1934-35	29
Lines sanctioned in 1934-35	29
Lines under active construction on 31st March 1935	29
Surveys	30
Important lines under construction	30
Important lines opened during 1934-35	31
Important new works	31
Open line improvements	31
Hardinge Bridge, Eastern Bengal Railway	34
Quarters for subordinates	34

CHAPTER IV.—TRANSPORTATION AND WORKING.

	PAGE.
Statistics	35
Speed of goods trains	36
Loads of goods trains	36
Wagon usage	36
Punctuality of passenger trains	38
System of ticket checking	38
Road motor competition	41
Mela Traffic	44
Wagon position	45
Neutral examination of interchanged wagon stock	45
Railway Collieries	45

CHAPTER V.—ROLLING STOCK AND MATERIALS.

Additions to equipment	49
Supply of rails and fish-plates from indigenous sources	49
Development of the use of indigenous timbers for carriage building	49
Wooden Sleeper Purchase Organisation	50
Value of railway materials purchased	51
Value of indigenous stores purchased by the State-owned Railways and the value of stores purchased by all railways through the Indian Stores Department	51
Purchase of stores by Railways through the Indian Stores Department	51
Cost of maintenance and supply of locomotive power and cost of maintenance and operation of Carriage and Wagon Stock	52
Central Standards Office	52
Locomotive Standards Committee	53
Carriage and Wagon Standards Committee	54
Bridge Standards Committee	54
Track Standards Committee	54
Signalling and Interlocking Standards Committee	54

CHAPTER VI.—STAFF.

Number of staff	56
Cost of staff	56
Indianisation—	
Recruitment of superior officers—	
State-managed Railways	58
Company-managed Railways	59
Review of the progress made since 1925	61
Representation of minority communities in Railway Services	64
Training of staff—	
Area Schools	66
Improvements in the service conditions of the staff—	
Hours of Employment Regulations	67
Welfare—	
Assistance from railway funds to railway employees for the education of their children	67
Staff Benefit Fund	67
Railway Sports	68
Report of the Royal Commission on Labour	68
Emergency cut in pay	68
Revision of the scales of pay of future entrants into the superior and subordinate services	68
Security of service—Rules regarding the discharge and dismissal of State Railway non-gazetted Government servants	68
Meetings with the All-India Railwaymen's Federation	69

CHAPTER VII.—AMENITIES FOR PASSENGERS.

	PAGE.
Booking Offices	70
Waiting rooms and waiting halls	71
Covered and raised platforms	72
Refreshment rooms for Hindus and Mohammedans	73
Vendors' stalls in waiting halls and on platforms	73
Water supply for passengers	75
Restaurant or buffet car services	77
Improvements carried out in existing lower class carriages	79
Improvements carried out in the latrines of third class carriages	79
Arrangements to ensure cleanliness of latrines in passenger trains	80
Reserved lower class compartments for women—Arrangements made to distinguish women's compartments at night	82
Overcrowding in third class carriages	82

CHAPTER VIII.—MISCELLANEOUS.

Accidents	83
Damage by earthquakes, floods and cyclones	87
Publicity	87
Anti-malarial measures	90

APPENDICES.

A.—List of Railways in India	93
B.—Relations of the Government to Railways in India	98
C.—Organisation for Government control	103
D.—Separation of Railway finance from General finance	109
E.—Financing of branch lines of Railways	111
F.—Statement of—	
(i) Gazetted officers	115
(ii) Senior subordinates	119
G.—Statement of appointments created and vacancies filled—	
State-managed Railways	123
Company-managed Railways	123
H.—Officers of the Railway Department (Railway Board) and attached offices	126

LIST OF PHOTOGRAPHS.

	Facing page
1. Nerbudda bridge at Broach. North end-track laid to camber of spans [<i>B. B. & C. I.</i>]	1
2. Dry dock at Mandapam [<i>S. I.</i>]	6
3. Nerbudda bridge at Broach. Flotation of span No. 10 [<i>B. B. & C. I.</i>]	16
4. New Chambal bridge superstructure. Standard H. M. Loading, 1934 [<i>G. I. P.</i>]	31
5. Type of Senior Scale Officer's Bungalow built at Jamalpur to replace those destroyed in the earthquake, 1934 [<i>E. I.</i>]	34
6. Restoration of the breach of September 1933 of the right guide bund of Hardinge Bridge [<i>E. B.</i>]	35
7. All-electric power signal interlocking lever frame with illuminated signal and track diagram and Block Signalman's table at Bandra Station [<i>B. B. & C. I.</i>]	38
8. "Y. B." Class Engine built in the Ajmer Shops [<i>B. B. & C. I.</i>]	55
9. General view of the B. R. Singh Hospital, Sealdah [<i>E. B.</i>]	67
10. New Chambal bridge superstructure. Standard H. M. Loading, 1934 [<i>G. I. P.</i>]	72
11. III Class Diesel Rail Car [<i>M. & S. M.</i>]	79
12. Washout of Ranthali Bridge on Chaparmukh Silghat Railway [<i>A. B.</i>]	87
13. Pujah Bazar Special, 1934 [<i>E. B.</i>]	88

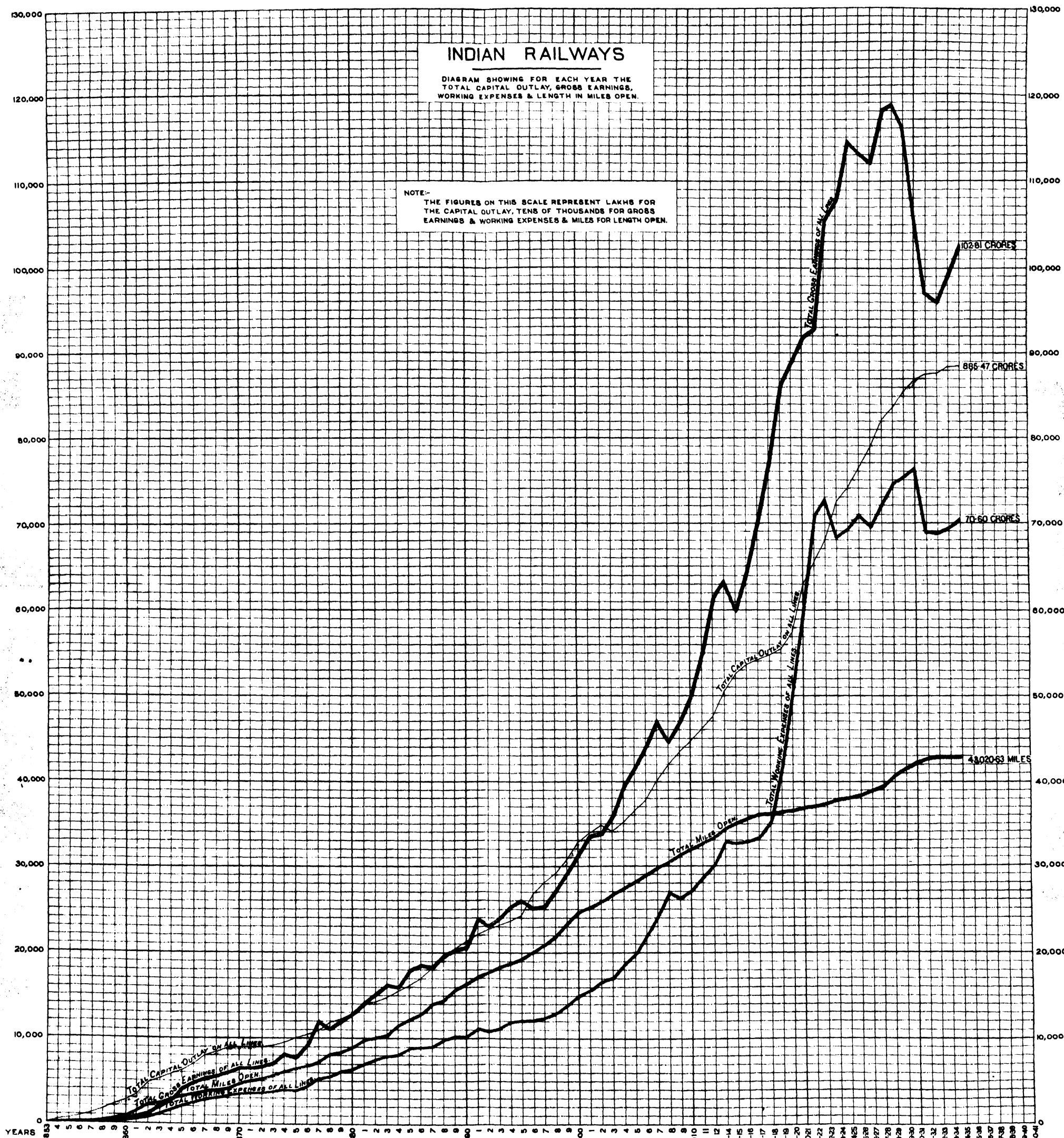
DIAGRAMS AND MAP.

	Facing page
1. Diagram showing total Capital outlay, gross earnings, working expenses and length in miles	1
2. Graphs showing receipts and expenditure of State-owned Railways including worked lines 1934-35	10
3. Graphs showing number of passengers carried and passenger miles	24
4. Graphs showing number of locomotives, boilers, carriages and wagons provided for in programme of Class I Railways	49
5. Diagrams showing (i) percentage of value of indigenous stores purchased by State Railways to total since 1927-28 and (ii) total value of orders placed by State Railways through the Indian Stores Department since 1927-28	51
6. Graphs showing cost of maintenance and supply of locomotive power per 1,000 gross ton miles and cost of maintenance and operation of carriage and wagon stock per 1,000 gross ton miles	52
Map of India showing railways open and under construction on 31st March 1935	In the pocket of the back cover.

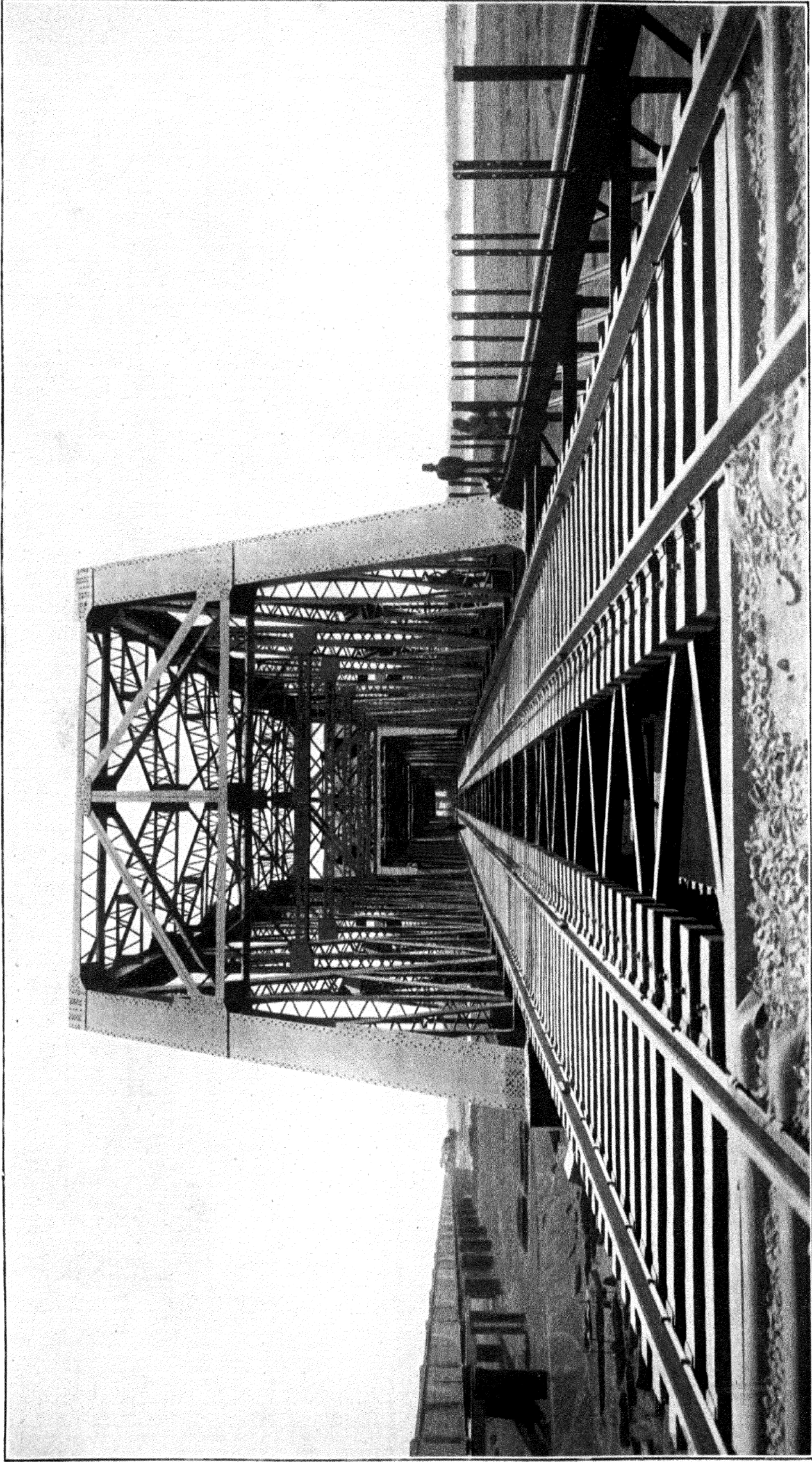
INDIAN RAILWAYS

DIAGRAM SHOWING FOR EACH YEAR THE
TOTAL CAPITAL OUTLAY, GROSS EARNINGS,
WORKING EXPENSES & LENGTH IN MILES OPEN.

NOTE:-
THE FIGURES ON THIS SCALE REPRESENT LAKHS FOR
THE CAPITAL OUTLAY, TENS OF THOUSANDS FOR GROSS
EARNINGS & WORKING EXPENSES & MILES FOR LENGTH OPEN.



BOMBAY, BARODA AND CENTRAL INDIA RAILWAY.



Nerbudda Bridge at Broach. North end-track laid to camber of spans. Existing Bridge on left.

CHAPTER I.

GENERAL REVIEW.

1. Introduction.—The Railway Board's annual Report on Indian Railways is published in two volumes. Volume I reviews the general administration and financial results of working of railways and also comments upon items of outstanding interest that occurred during the year. It makes particular reference to any new construction of lines, improvements or additions to rolling stock, the recruitment, training and welfare of staff and such other matters as have an important bearing on railway management and operation. Volume II is a compilation of financial and statistical statements and summaries covering the main heads of the capital and revenue accounts, and embracing the complete range of railway working.

The period for which the report is prepared is from the 1st April of one year to the 31st March of the following year.

2. Monsoon conditions and agricultural results.—India being primarily an agricultural country, the welfare and general prosperity of the people are very largely dependent on the incidence and effectiveness of the monsoon rainfall. This indirectly affects the railways, which are the main carriers of the exportable surplus of agricultural products. A few remarks on this important subject may therefore serve to call to mind the conditions obtaining during the year. The monsoon of 1934 was on the whole, fairly well distributed, the rainfall being within 10 per cent. of the normal, except in Rajputana, Central India and Central Provinces where it was in excess, and in Mysore and Madras where it was in defect. During the latter part of the monsoon period, rainfall was normal in Burma, Mysore and the Bombay Presidency (excluding Sind) and in excess in Assam and Bengal. It was defective elsewhere, particularly in the United Provinces. The total rainfall for the year was within 20 per cent. of the normal over most of the country.

The season was not, on the whole, very favourable from the agricultural standpoint. The total outturn of rice decreased by 3 per cent. as compared with the previous year; Burma recording a fall of 12 per cent. Prospects of a very good sugarcane crop were marred by a cold spell in January. The outturn of jute was nearly the same as in the preceding season, but the yield of cotton decreased by 5 per cent. Unfavourable seasonal conditions were responsible for decreases in the production of groundnut, sesamum and castor seed crops to the extent of 44, 25 and 24 per cent. respectively. The wheat crop of 1933-34 which was mostly moved during the year under review, was about the same as in the previous season, but the outturn of rape and mustard and linseed (winter oilseeds) recorded a decline of 10 and 7 per cent. respectively.

3. Once again the earnings of State-owned lines showed an increase rising from Rs. 86 crores in 1933-34 to Rs. 90 crores in 1934-35 but even so the net result of the year's working was a loss of about five crores. No contribution could therefore be made to general revenues.

Goods traffic was mainly responsible for the improvement; the total weight carried having increased from 76·5 million tons in the previous year to 84·5 million tons in 1934-35 and the earnings from Rs. 61·58 crores to Rs. 64·35 crores. The net ton miles also increased from 18,707 millions to 20,352 millions. The average rate earned per ton per mile for all commodities however showed a slight decrease, being 6·07 pies as against 6·32 pies in 1933-34.

Passenger traffic showed a slight improvement, 7 million more passengers being carried, with a resultant rise in earnings from Rs. 30·1 to Rs. 30·3 crores.

4. Mileage.—The new mileage opened for traffic during the year was 71 which was entirely located within Indian States and at their cost, but due to realignment the net addition to the mileage of railways during the year was 67. The total route mileage at the end of the year was 43,021. In addition, there were 139 miles under construction on 31st March 1935.

5. Railways and the Legislature.—As in past years the members of the Legislative Assembly and the Council of State continued to take an increasing interest in the working of the Railway Department. Out of a total number of 3,550 questions asked in both Houses during the year 1934-35, 1,072 or 30·2 per cent. were answered by the Railway Department as compared with 29·4 per cent. during the previous year.

In addition to this large number of questions, four resolutions also came up for discussion—two in the Legislative Assembly and two in the Council of State.

Resolution No. 1.—A resolution on catering contracts was moved in the Legislative Assembly on the 26th July 1934 suggesting the appointment of a Committee to consider the system of giving contracts for the supply of food at stations. In the course of the debate on this resolution reference was made to the system of giving large contracts to one man and generally to the desirability of arranging for the supervision of contractors by a committee on which non-railwaymen might be associated. The resolution was withdrawn on the Honourable Member for Railways giving an undertaking that the matter would be examined to see what steps it was possible to take and what arrangements could be made to ensure the provision at stations of good and wholesome food at reasonable rates. Information was called for from the principal railways with a view to considering the policy that should generally be followed in this matter.

Resolution No. 2.—On the 9th August 1934, Mr. A. H. Ghuznayi moved the following Resolution in the Legislative Assembly :—

“ That this Assembly recommends to the Governor General in Council that immediate steps be taken to appoint a Committee to inquire as to how far the present abnormal depression in the Indian Coal Industry is due to the working of the State-owned Railway collieries and the present surcharge of railway freight on coal and other causes and to suggest ways and means for its improvement ”.

The mover advocated the closing down of all Railway collieries and the purchase from the market of all coal required by the railways; the removal of the surcharge on coal freights and reduction in the rates on the transport of coal.

In opposing the Resolution, the Financial Commissioner of Railways stated, that the Railways in India were forced to acquire collieries, as a measure of self-defence against the abnormally high prices that were charged by the coal trade during years immediately following the war. He pointed out that even when railways contracted for coal at high prices, they had no guarantee that they would get the coal. The policy of railways acquiring their own collieries has been found to be completely successful. Not only have Railways been able to obtain from their own collieries coal at cheaper rates, but the existence of these collieries and the knowledge that if they were worked to their capacity Government could obtain all or practically all their requirements have had a most salutary effect on the prices at which the coal trade tendered coal to railways.

It was further stated that the capital invested in railway collieries amounted to Rs. 4 crores, and the maximum annual capacity of these collieries was six million tons. Taking the State-managed Railway collieries alone, the total capital invested was 2 crores of rupees, and their annual estimated capacity was two and three-quarter million tons. Notwithstanding this, the raisings from these collieries, during the last three years, were limited to 1,150,000 tons only. This represented only one-third of their requirements, and less than half of their capacity. The rest was purchased from the market in order to assist the coal trade.

The Financial Commissioner of Railways pointed out that the expenditure which would continue to be incurred, if all railway collieries were closed down, would be in the neighbourhood of Rs. 41 lakhs a year, which loss would have to be borne by the tax-payer, and stated that Government were convinced that the closing down of railway collieries was not in the public interest.

Referring to the question of surcharge on coal freights the Financial Commissioner of Railways stated that statistics did not support the view that the surcharge had a serious effect on the traffic. He also stated that in the present financial position of railways it was impossible to sacrifice the revenue derived from the surcharge and that he could not hold out hopes of any abolition or considerable modification of the surcharge in the immediate future—apart from any modification in the long distance rates that may be decided upon after the investigation that was being made.

Resolution No. 3.—The third Resolution was moved, in the Council of State, by the Honourable Mr. Mahmood Suhrawardy, on the 25th February 1935, recommending the appointment of a mixed committee of officials and non-officials to enquire into the working of the Government of India and State Railway presses in regard to certain alleged grievances of press workers regarding leave, holidays, pay, pensions, etc. The Resolution dealt mainly with grievances relating to press workers in the Government of India presses but certain grievances regarding workers of the East Indian and Eastern Bengal Railways combined press were also mentioned.

In moving the Resolution, the Honourable Mr. Mahmood Suhrawardy referred to an assurance given by the Honourable Sir Joseph Bhole, in the Legislative Assembly, on the 24th February 1934, promising to enquire into the working of the East Indian and Eastern Bengal Railways combined press and complained that the workers of this press were not allowed by the Agent, East Indian Railway, to represent their case to the committee of enquiry through the representatives of their own choice, *viz.*, the General Secretary of their Union and added that even Mr. S. C. Mitra, an *ex-M.L.A.*, who wanted to represent the case of the press workers was informed by the Agent, East Indian Railway, that the Committee had already completed its enquiry. The Honourable mover of the Resolution next dealt, in detail, with the grievances of the workers in the Government of India presses and the Honourable Mr. G. S. Khaparde, the Honourable Saiyed Mohammed Padshah Sahib Bahadur and the Honourable Mr. Hossain Imam spoke generally in support of the Resolution while the Honourable Saiyed Mohammed Padshah Sahib Bahadur also echoed the complaint made by the Honourable the mover of the Resolution that the Agent, East Indian Railway, had refused to allow the workers of the East Indian and Eastern Bengal Railways combined press to allow their representatives to represent their case before the Committee of enquiry.

In replying to the debate the Honourable Mr. D. G. Mitchell generally pointed out to the House that no case had been made out, by the Honourable the mover of the Resolution and the other Honourable members who spoke in favour of the Resolution, for the appointment of a Committee in the manner proposed in the Resolution. As regards the grievance made by the Honourable the mover of the Resolution and another Honourable member concerning the refusal by the Agent, East Indian Railway, to allow the workers' representative before the Committee of enquiry, the Honourable Mr. Mitchell pointed out that the policy of the Government of India was that Unions of Government servants must consist of a definite class of Government servants, and of Government servants only and that Government cannot recognise or have any dealings with a Union which consisted partly of Government servants and partly of outsiders. He added that the Committee appointed to enquire into the grievances of the workers of the East Indian and Eastern Bengal Railways combined press had submitted their report and that this report was at that time receiving the very sympathetic consideration of the Railway Board and gave a general assurance that any grievances properly represented through the ordinary channels would receive the most sympathetic consideration.

The resolution was withdrawn.

Resolution No. 4.—A Resolution was moved in the Council of State by the Honourable Mr. Mohammad Yamin Khan on the 7th March 1935, recommending an extension of the period for which an import duty on wheat had been imposed and urging a reduction in the railway freight rates on wheat from the United Provinces and the Punjab to the ports of Karachi, Bombay and Calcutta. On the question of freight rates, the Chief Commissioner of Railways explained during the course of the debate that the Government realised the importance of cheap rates on wheat and other food products, both from the point of view of the agriculturist and of consumers generally. He also explained that Government had consistently deprecated the practice of giving veiled protection to an industry by the manipulation of railway freight rates. This part of the resolution was negatived.

6. Railway Budget.—The railway budget for 1935-36 was presented to both Houses of the Legislature on the 18th February 1935, after having been discussed in detail with the Standing Finance Committee for Railways at their meetings held on the 2nd and 13th February 1935. The budget was discussed generally in the Legislative Assembly on the 20th February 1935, and in the Council of State on the following day. The voting on the demands for grants in the Legislative Assembly took place on the 22nd, 23rd, 25th and 26th February 1935.

During the general discussion of the budget in the Assembly a number of points of varying importance were raised. Criticism was mainly directed to coal contracts for railways, competition between railways and shipping companies, reduction of rates and improvement of amenities for the travelling public and to securing further economies in working expenses.

Of the motions for reduction made during the debates on demands for grants, six were carried and one was negatived. The motions carried related to the railway administration in India, grievances of third class passengers, rational and economic administration of railways, Indianisation of railway services, labour grievances and excessive rates and insufficient facilities for transport of agricultural produce and live stock. The motion negatived was in respect of the manipulation of railway freight rates without due regard to all the relevant interest of the country.

7. Standing Finance Committee for Railways.—The committee met eight times during the year. They scrutinised the proposals for expenditure to be incurred during 1935-36 both on capital and revenue accounts and also examined the demands for grants for 1935-36 prior to their being placed before the Legislative Assembly. The committee also considered, and approved of, the proposals for the purchase of the Amritsar-Patti-Kasur Railway and the construction of the Jhudo-Pithoro Railway. They also examined proposals for the creation of certain superior posts on railways and approved of the Central Standardisation Office being made permanent. Among the other more important schemes approved by the Committee may be mentioned the re-modelling of the East Indian Railway Workshops at Jamalpur, the construction of quarters for staff at Jamalpur and other stations on the East Indian Railway affected by the earthquake of 1934, the construction of a bridge over the Megna river on the Assam Bengal Railway and the electrification of the section of the Bombay, Baroda and Central India Railway from Borivli to Virar. The Committee also examined with considerable interest and approved of the scheme of works carried out and proposed to be carried out in connection with the repairs to the damages to the Hardinge bridge on the Eastern Bengal Railway.

8. Meetings with Agents of Railways and Local Governments.—The Railway Board held two meetings with the Agents of principal railways, one in Simla on the 4th and 5th October 1934 and the second in New Delhi on the 22nd March 1935. The following subjects among others were discussed at the two meetings :—

- (i) co-ordination between internal air services and railways;
- (ii) elimination of undesirable competition between railways;

- (iii) rent to be charged to catering contractors for refreshment room accommodation;
- (iv) proposed design of the new third class carriages;
- (v) development of pilgrim traffic; and
- (vi) communal representation on railways.

During the year under review several visits were paid by the Chief Commissioner of Railways, the Financial Commissioner and the Member of the Railway Board to the headquarters of various railway administrations and local Governments. Copies of their tour programmes are sent in advance to press, local Governments and important mercantile Associations in order to give them an opportunity to place their views on railway problems before the Board.

9. Central Advisory Council for Railways.—During the year 1934-35, one meeting of the Central Advisory Council for Railways was convened at Simla on the 10th August 1934. As usual members of the Council were invited to submit subjects for discussion and the following formed the agenda :—

- (i) representation of minorities in the railway services;
- (ii) electrical fans in the lower class carriages;
- (iii) proposed revision of general classification of goods;
- (iv) the question of the lower gazetted services; and
- (v) provision for the reservation of third and intermediate class compartments on payment of a smaller number of fares than the carrying capacity as is done in the higher class compartments.

(i) The gist of the discussion was that practically all the Hindu members present were against bringing in communal representation in commercial departments like railways, and suggested that efficiency and educational qualifications should be sole test of recruitment. The Muslim members favoured communal representation and even urged that it should be taken into account when making promotions. The Chairman explained that it would not be fair as a whole to prescribe 25 per cent. representation of Muslims everywhere, the reason being that the Muslim population varied in different parts of the country. He also promised that the views of the members of the Council would be placed on record.

(ii) The proposal was not considered feasible by the majority of the members present on financial grounds. The Chairman, however, stated that the suggestion of providing fans in intermediate carriages would be examined.

(iii) The Chief Commissioner of Railways explained the development of the present classification of goods, and said that in making any change it was essential first to obtain statistics to see that it would not result in a large loss to railway revenues. The majority of members were in favour of reducing rates, especially for agricultural produce, in order to encourage export. The Chairman pointed out that the present classification was in some ways out of date and unscientific and it was desirable to effect greater rationalization of charges for commodities.

(iv) Lieutenant-Colonel Sir Henry Gidney delivered a speech on this subject and was asked by the Chairman to submit a memorandum in due course.

(v) It was pointed out that on the East Indian and Eastern Bengal Railways intermediate and third class compartments could be reserved at concessional rates but such facilities are not allowed on other railways. It was also suggested that facilities for reservations should be allowed from intermediate stations. The Chairman promised that these suggestions would be placed before the Indian Railway Conference Association.

10. Local Railway Advisory Committees.—These committees which continue to function on all Class I Railways (except the Jodhpur Railway) and on the Barsi Light Railway, afford to Railway administrations a valuable medium for contact with their clientele. Pamphlets summarising the

decisions arrived at on the various subjects discussed by these committees are published quarterly. A perusal of these pamphlets for the year under review shows that 105 meetings of the various committees were held and the wide variety of matters discussed can be appreciated from the following list of some of the more important items that came up for discussion :—

- Increase in accommodation for long distance third class passengers.
- Improvements in third class stock.
- Provision of alarm signals in ladies' intermediate class compartments.
- Consideration of present system of catering at stations and on trains.
- Construction of new lines.
- Construction of overbridges and raised platforms.
- Suggestions for improvement of booking facilities.
- Elimination of one of the four classes of accommodation for passengers.
- Special arrangements for festivals.
- Porterage rates.
- Representation of agriculturists and passenger associations on Local Advisory Committees.
- Speeding up of trains.
- Supply of drinking water to passengers.
- Supply of wagons.
- Re-introduction of coupon books and extension of concession tickets.
- Provision of waiting rooms at stations.

11. Railway Rates Advisory Committee.—The Railway Rates Advisory Committee continued to function with Sir Zahid Suhrawardy as its President.

During the year under review two cases were referred to the Committee for investigation :—

One had reference to a complaint from the Engineering and Building Products Company, Lahore, regarding the classification of Upson Board and Upson Insulating Board.

The other was a complaint from the Bengal Nagpur Cotton Mills Company, Calcutta, against the North Western, Great Indian Peninsula and Bengal Nagpur Railways regarding the rates charged for cotton from certain stations in the Punjab to Raj-Nandgaon.

The first case was under enquiry at the close of the year. As regards the second, the Committee were of the opinion that the rates were not unreasonable.

Of the seven cases which it was stated in the report for 1933-34 were under enquiry, the Committee reported on the following five :—

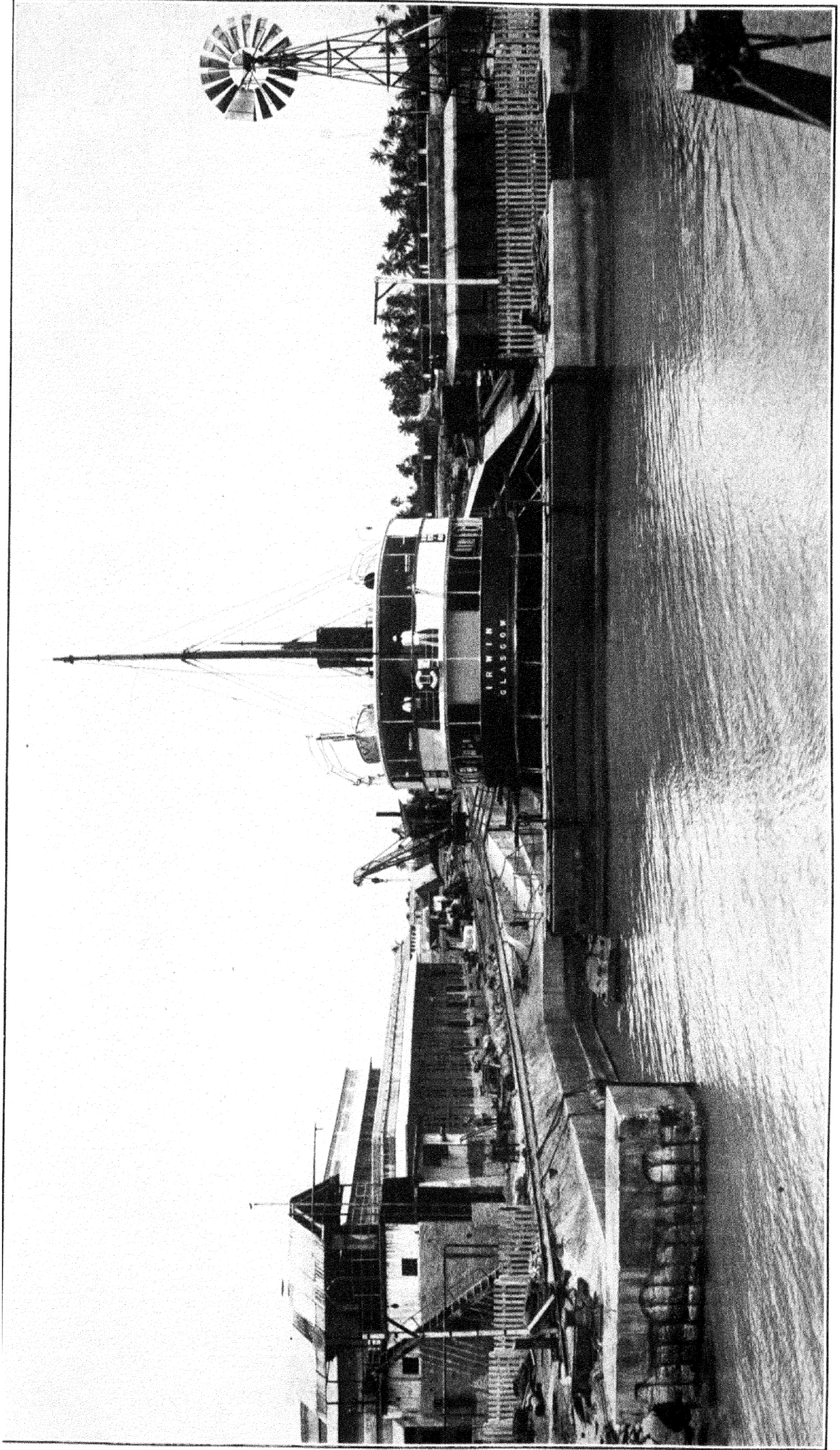
- (i) Complaint from Messrs. Radhakishen Mangatrai and Jeetmal Kanaudia regarding the rates for salt from Sambhar to stations on the Bengal and North-Western Railway.

The Government of India accepted the majority view that the rates were not unreasonable.

- (ii) Complaint from Messrs. Meghji Hirji and Company, Nagpur, alleging preferential rates being given by the Bengal Nagpur Railway for firewood from certain stations.

The Government of India accepted the view of the Committee that the rates from stations on the Tumsar Road-Tirodi branch in relation to the rates from Talodhi Road station to Itwari and Nagpur, gave undue preference. Action was taken by the Bengal Nagpur Railway Administration to remove the undue preference complained of.

SOUTH INDIAN RAILWAY.



Dry Dock at Mandapam.

- (iii) Complaint from West's Patent Press Company, Limited, Aligarh, alleging that the rates quoted by the East Indian Railway for unpressed cotton (kuppas) from Aligarh to Delhi, as compared with the rates for cotton full-pressed, constituted undue preference. As the East Indian Railway Administration agreed to withdraw the rates referred to, the complaint was withdrawn.
- (iv) Complaint from Mr. Dalchand Bahadur Singh, Calcutta, regarding the rates for coal from Korea coalfields to stations on the Bengal Nagpur, Great Indian Peninsula and Bombay, Baroda and Central India Railways, as compared with the rates from collieries on the Great Indian Peninsula Railway.
- (v) Complaint from Ballarpur collieries against the Bengal Nagpur, Great Indian Peninsula and Bombay, Baroda and Central India Railways, alleging that the rates for coal from the Chirmiri collieries (Korea) as compared with the rates from the collieries on the Great Indian Peninsula Railway were unreasonable.

Cases (iv) and (v) were taken up by the Committee together. The Committee were of the opinion that the rates from the collieries in question were not unreasonable in themselves.

As regards the remaining two cases out of the seven referred to, one was still under investigation by the Committee at the close of the year, while the other was withdrawn by the applicant, a compromise with the railway administration having been arrived at.

Six other representations for a reference to be made to the Railway Rates Advisory Committee were also received. These referred to:—

- (i) Rates for cotton seeds on the Great Indian Peninsula and Bombay, Baroda and Central India Railways.
- (ii) Surcharge on coal freights.
- (iii) Charges for reweighment of wagons at destination.
- (iv) Loading and unloading charges.
- (v) Supply of wagons.
- (vi) Wharfage charges at Akola.

These were not referred to the Committee for investigation as:—

- (i) to (iii) A *primâ facie* case for a reference to the Committee was not established.
- (iv) The matter was one for reference by the applicant direct to the railway administration.
- (v) It was not a matter referable to the Committee under the terms of the Railway Department (Railway Board) Resolution No. 606-T., dated 25th September 1930, constituting the Committee.
- (vi) The matter was settled by the administration and the complaint subsequently withdrawn.

12. Mr. Pope's investigations.—It was mentioned in the last year's report that the work of job analysis was still in hand on most of the railways and that the recommendations made by Mr. Pope in his second report were under the consideration of the Railway Board. The more important of the recommendations contained in the second report were on the following subjects:—

- (i) Intensive use of locomotives.
- (ii) Intensive use of coaching stock.
- (iii) Intensive use of machinery and plant.
- (iv) Uneconomical wagons.
- (v) Combining resources between railways.

- (vi) Handling and transport of small traffic and of traffic to be transhipped at break-of-gauge stations.
- (vii) Ticketless travel.
- (viii) Methods of increasing earnings.

The Railway Board and Railway administrations have already taken action in regard to some of the recommendations while others are under further detailed investigation. Job analysis was continued on most of the railways during the year under review and the following table shows the economies effected side by side with the cost of the organisations for the two years 1933-34 and 1934-35.

Railways.	1933-34.		1934-35.	
	Cost of job analysis organisation.	Savings effected.	Cost of job analysis organisation.	Savings effected.
	Rs.	Rs.	Rs.	Rs.
East Indian	77,691	7,01,128	92,884	18,14,544
Great Indian Peninsula	56,680	4,15,000	64,000	2,04,246
North Western	32,000	12,66,749	46,006	12,37,376
Eastern Bengal	63,000	2,14,864	65,995	1,29,508
Bombay, Baroda and Central India	58,789	3,52,862	35,300	11,41,596
Madras and Southern Mahratta	8,750	45,220	17,632	1,14,000
South Indian	19,580	27,400	2,180	25,000
Burma	7,500	25,871	26,615	73,352
Assam Bengal	12,825	1,31,755	8,208	12,659

The subject of the organisation required to conduct job analysis was discussed with the Agents of principal railways in October 1934 and the majority held that a special organisation was no longer necessary, and that it would be preferable to make a yearly allotment to railways to utilise as they might think fit for carrying out special investigations. This, accordingly is being done on certain railways.

CHAPTER II.

FINANCIAL RESULTS.

I.—*Trade Review.*

13. Exports.—During the year 1934-35 the total value of exports including re-exports amounted to Rs. 155 crores as compared with Rs. 150 crores in the previous year, an increase of Rs. 5 crores or 3 per cent. The increase was due mainly to heavy shipments of raw cotton which rose from 2,729,000 bales valued at Rs. 26.50 crores in 1933-34 to 3,446,000 bales valued at Rs. 34.50 crores in 1934-35. Despatches of Indian cotton piece-goods advanced from 56.5 to 57.7 million yards in quantity and from Rs. 1.66 to 1.77 crores in value. Shipments of jute bags improved from 402 to 423 millions in quantity and from Rs. 9.72 to 10.25 crores in value. Despatches of tea increased from 318 to 325 million lbs. in quantity and from Rs. 19.84 to 20.13 crores in value. Exports of raw rubber rose from 16 to 24 million lbs. in quantity and from Rs. 31 to 65 lakhs in value. Shipments of wheat increased from 2,100 tons to 11,000 tons in quantity and from Rs. 3.25 to 10.50 lakhs in value. Exports of barley rose from 142 tons valued at Rs. 0.11 lakhs to 14,000 tons valued at Rs. 9.25 lakhs. Under the metals group, 1,146,000 tons of metals and ores valued at Rs. 5.91 crores were exported in the year under review as against 976,000 tons valued at Rs. 5.49 crores in 1933-34. There were increases under teakwood (Rs. 32 lakhs), fodder, bran and pollards (Rs. 30.66 lakhs), wool carpets and rugs (Rs. 17 lakhs), raw hemp and coir (Rs. 3 lakhs each) and animals (Rs. 2.33 lakhs). Exports of lac, chiefly shellac, declined in quantity from 731,000 to 586,000 cwts., but owing to increased prices the value rose from Rs. 2.46 to 3.30 crores. Exports of food grains declined in quantity from 1,870,000 to 1,765,000 tons but the value showed a slight improvement from Rs. 11.75 to 11.84 crores.

Cotton manufactures (including twist and yarn), recorded a decline from Rs. 2.73 in 1933-34 to Rs. 2.65 crores in 1934-35. Shipments of cotton twist and yarn fell from 16.4 to 12.8 million lbs. in quantity and from Rs. 81.75 to 62.75 lakhs in value. Export of raw jute slightly increased from 4,190,000 to 4,214,000 bales in quantity but owing to reduced prices the value thereof fell from Rs. 10.93 to Rs. 10.87 crores. Shipments of jute cloth increased in quantity from 1,053 to 1,063 million yards but the value fell from Rs. 11.38 to Rs. 10.99 crores. Shipments of oil seeds fell from 1,124,000 to 875,000 tons and from Rs. 13.66 to 10.54 crores. Almost all descriptions of non-essential seeds showed decreases, linseed from 379,000 to 238,000 tons, groundnuts from 547,000 to 511,000 tons, rapeseed from 73,000 to 37,000 tons and castor seed from 82,000 to 69,000 tons. Shipments of rice declined in quantity from 1,744,000 to 1,607,000 tons and from Rs. 10.57 to 10.37 crores in value. Shipments of hides and skins fell from 61,400 to 57,600 tons in quantity and from Rs. 9.90 to Rs. 8.35 crores in value. Exports of coffee declined by 45,000 cwts. in quantity and by nearly Rs. 30 lakhs in value. Decreases were noticed under raw wool (Rs. 71 lakhs), opium (Rs. 66 lakhs), paraffin wax (Rs. 37 lakhs) and coal (Rs. 8 lakhs).

14. Imports.—The total value of imports of foreign merchandise into British India during 1934-35 amounted to Rs. 132 crores as compared with Rs. 115 crores in the previous year, an increase of Rs. 17 crores or 15 per cent. Under imports, there was a revival of demand for textile manufactures, the value of which rose from Rs. 26.4 in 1933-34 to Rs. 33.5 crores in 1934-35 or an increase of 27 per cent. over the figures of the preceding year. Compared with 1932-33, there was a decrease of 11 per cent. Imports of cotton piece-goods amounted to 944 million yards valued at Rs. 16.93 crores

as against 796 million yards valued at Rs. 13.49 crores in 1933-34. The total receipt of cotton twist and yarn rose by 2 million lbs. to 34 million lbs. with a corresponding increase in value by Rs. 52 lakhs to Rs. 3.10 crores. There were concurrent increases under some of the other important items included in the textile group—notably a rise of Rs. 1.32 crores under wool and woollens, of Rs. 85 lakhs under artificial silk (mainly yarn and piece-goods made entirely of artificial silk) and of Rs. 13 lakhs under haberdashery and millinery. Imports of raw cotton advanced from 43,000 to 61,000 tons in 1934-35 with a corresponding rise in value from Rs. 3.56 to 5.28 crores. Increases were also noticeable under the metals group, the value having risen by Rs. 1.88 crores. Imports of iron and steel rose from 329,000 to 370,000 tons and in value from Rs. 5.53 to Rs. 6.38 crores and those of metals other than iron and steel and manufactures thereof from 62,000 to 86,000 tons in quantity and from Rs. 3.95 to 4.99 crores in value. There was an improvement in the imports of motor vehicles, the arrivals being valued at Rs. 4.66 crores in 1934-35 as compared with 3.19 crores in 1933-34 and Rs. 2.43 crores in 1932-33. The number of motor cars imported increased from 6,201 in 1932-33 to 9,759 in 1933-34 and to 14,434 in 1934-35 and that of motor omnibuses from 2,676 in 1932-33 to 5,496 in 1933-34 and 9,974 in 1934-35. There was an improvement in the imports of rubber manufactures, the value having risen from Rs. 1.88 crores in 1933-34 to Rs. 2.06 crores in 1934-35. Consignments of rice, not in the husk, advanced considerably from 84,000 to 283,000 tons valued at Rs. 49 lakhs and Rs. 1.88 crores respectively. Imports of mineral oils increased from 186 to 199 million gallons and the value thereof rose from Rs. 5.83 to Rs. 6.07 crores. Kerosene oil advanced from 58 to 69 million gallons and fuel oils from 104 to 109 million gallons. The value of provisions imported rose from Rs. 2.72 to Rs. 2.89 crores and that of paper and paste board from Rs. 2.63 to Rs. 2.73 crores. There were noticeable increases in the value of imports of electrical instruments (Rs. 50 lakhs), coal tar dyes (Rs. 63 lakhs), chemicals (Rs. 22 lakhs), dried fruits (Rs. 26 lakhs) and hardware (Rs. 17 lakhs).

Imports of foreign sugar showed a heavy decline from 264,000 tons valued at Rs. 2.71 crores in 1933-34 to 223,000 tons valued at Rs. 2.11 crores in 1934-35. The value of machinery and millwork imported contracted from Rs. 12.77 to 12.64 crores mainly due to a falling off in the imports of sugar machinery. There were noticeable decreases in the value of the imports of silk piece-goods (Rs. 57 lakhs), precious stones and pearls, unset (Rs. 25 lakhs), cotton hosiery (Rs. 19 lakhs), soap (Rs. 15 lakhs), raw silks (Rs. 14 lakhs), boots and shoes (Rs. 13 lakhs) and wheat (Rs. 7 lakhs).

15. *Balance of trade.*—The visible balance of trade in merchandise and treasure for the year 1934-35 was in favour of India to the extent of Rs. 78 crores as compared with Rs. 92 crores in 1933-34.

II.—*Financial Results of State Railways.*

16. **Financial results of working.**—Stated briefly the position in 1934-35 was as follows:—

For the greater part of the year, Railways continued the improvement begun the previous year. In the last two months however, this progress was arrested; and, what is worse, the setback has continued in the first few months of the current financial year. In other words the monthly traffic earnings from February or March 1935 have been lower than the earnings of the corresponding months of 1934.

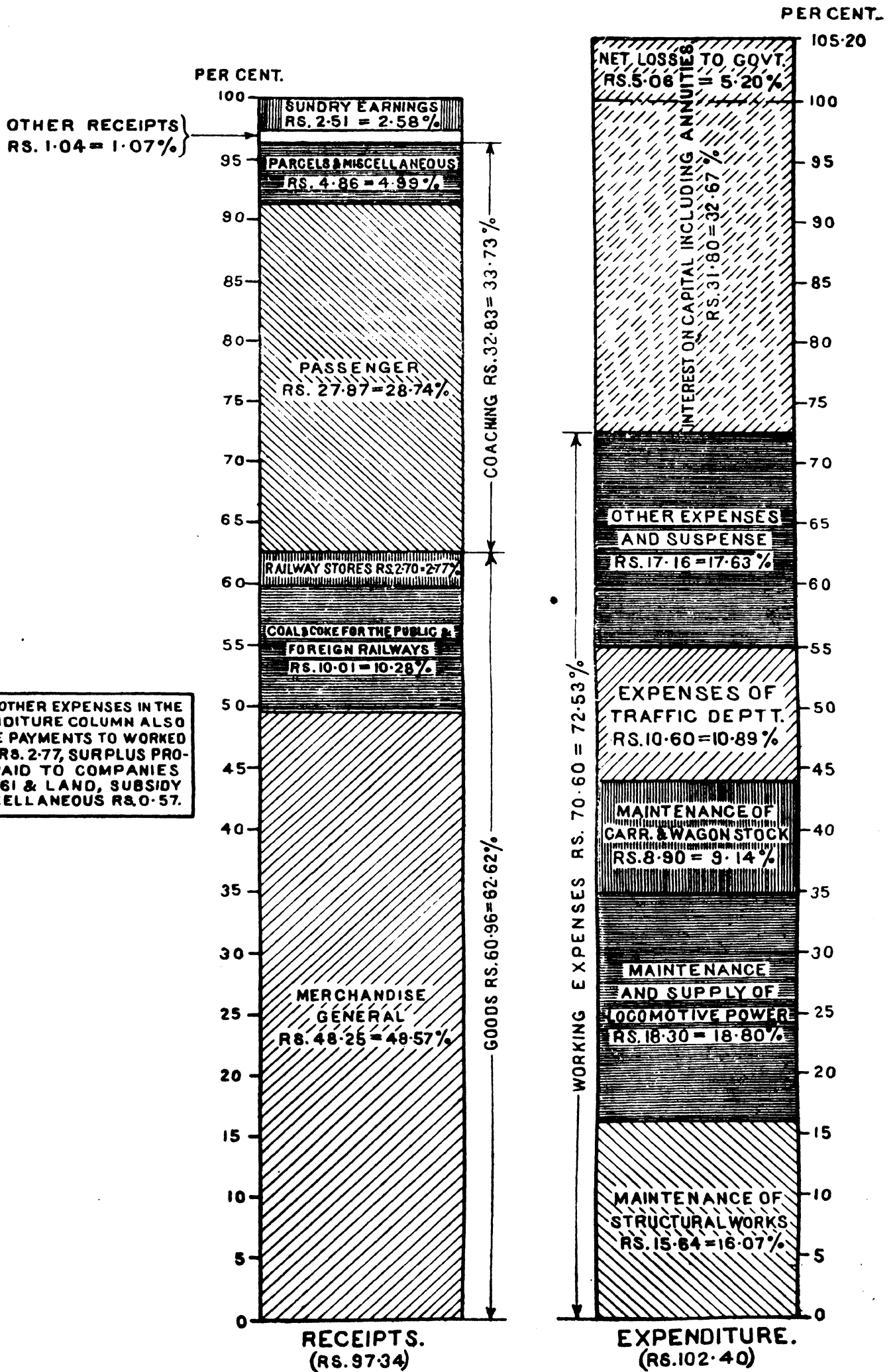
Gross traffic receipts of State-owned Railways for 1934-35 amounted to 90.20 crores, or $3\frac{1}{2}$ crores better than in the previous year.

Working expenses were $50\frac{1}{4}$ crores excluding depreciation, or 77 lakhs more than in 1933-34. Including depreciation, they amounted to 64 crores, or about a crore more than in the previous year. Net traffic receipts were 26.21 crores against 23.57 crores in 1933-34, an improvement of $2\frac{2}{3}$ crores.

Miscellaneous transaction resulted in a net addition of $\frac{1}{2}$ crore to receipts, and the total net revenue amounted to $26\frac{3}{4}$ crores as against interest

RECEIPTS AND EXPENDITURE OF STATE OWNED RAILWAYS IN INDIA INCLUDING WORKED LINES 1934-35.

FIGURES IN CRORES.



charges of 31½ crores. The deficit of 5 crores was 3 crores less than in 1933-34.

The appropriation to the depreciation fund was 13½ crores, and the withdrawals therefrom for renewals and replacements 8½ crores. The net accretion to the fund during the year was thus just over 5 crores and just enough to meet the year's deficit of net earnings as compared with interest. The actual balance at credit of the fund remained at 9½ crores; while the nominal balance amounted to 37 crores.

The total capital expenditure during the year was considerably reduced by large reductions of stores balances, amounting to nearly a crore, and by writing down capital on account of retired assets. The net addition to capital was only ¼ crore.

Stores balances amounted at the end of the year to just over 9½ crores which constitutes a fresh low record.

At the end of 1934-35, the liabilities of railways to be met in subsequent years amounted to 48½ crores, of which 27½ crores represent loans from the depreciation fund and 20¾ crores represent contributions due to general revenues from 1931-32 to 1934-35. The details are as follows:—

	(In crores of rupees.)			
	1931-32.	1932-33.	1933-34.	1934-35.
Loan from Depreciation Fund	4.25	10.23	8.05	5.06
Unpaid contribution to general revenues	5.36	5.23	5.21	5.04

In the following statement the results of 1934-35 are compared in a convenient form with those of past years since the separation of the railway budget from the general budget of the Government of India:—

Financial Statistics of Indian State-owned Railways.

(Figures in lakhs of rupees.)

	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
Mileage	26,985	27,090	27,664	28,086	29,111	30,878	31,197	31,640	31,642	31,644	31,636
Capital at charge (in crores) at end of year.	643	663	690	722	747	778	791	798	797	795	795
Gross traffic receipts	1,00,73	98,94	98,42	1,03,43	1,03,73	1,02,70	95,10	86,68	84,43	86,63	90,20
Operating expenses	51,65	52,99	52,89	53,06	54,22	55,59	54,39	49,31	49,08	49,50	50,27
Depreciation Fund	10,35	10,67	10,89	11,38	12,00	12,59	13,07	13,46	13,77	13,56	13,72
Net Traffic receipts	38,13	35,28	34,64	38,99	37,51	34,52	27,64	23,86	21,58	23,57	26,21
Net Miscellaneous receipts after deducting miscellaneous charges and surplus profits payable to companies.	-1,07	-1,19	-1,27	-87	-37	-2	-11	1	1,10	1,05	53
Net revenue	37,06	34,09	33,37	38,12	37,14	34,50	27,53	23,87	22,68	24,62	26,74
Interest charges	-23,90	24,81	25,87	27,27	29,33	30,46	32,72	33,07	32,91	32,58	31,80
Surplus	13,16	9,28	7,50	10,85	7,81	4,04	-5,19	-9,20	-10,23	-7,96	-5,06
Paid as contribution to general revenues	0,78	5,49	6,01	6,28	5,23	6,12	5,74	..	..	..	..
Transferred to railway reserve	6,38	3,70	1,49	4,57	2,58	-2,08	-10,93	-4,95	..	..	..
Ratio of working expenses (excluding Depreciation Fund) to Gross Traffic Receipts.	51.6%	53.6%	53.7%	51.3%	52.3%	54.1%	57.2%	56.9%	56.7%	55.8%	54.7%
Ratio of working expenses (including Depreciation Fund) to Gross Traffic Receipts.	61.9%	64.3%	64.8%	62.3%	63.8%	66.4%	70.9%	72.5%	73.0%	71.4%	69.9%
Ratio of Net Traffic Receipts to capital at charge.	5.9%	5.3%	5.0%	5.4%	5.0%	4.4%	3.5%	3.0%	2.9%	3.1%	3.3%

NOTE 1.—Credits for materials released from works not charged to revenue were taken in reduction of operating expenses up to 1931-32. Since then they have been added to receipts and are included in the above table under net miscellaneous receipts. The amounts involved in both the years 1932-33 and 1933-34 are 119 lakhs and 90 lakhs in 1934-35.

NOTE 2.—For purposes of proper comparison with past years the ratios in the last three lines of the statement with respect to 1932-33, 1933-34 and 1934-35 have been worked out as if the above sums of 110 lakhs and 90 lakhs were deducted from operating expenses.

The net traffic receipts of about 27 crores in 1934-35 amounted to 3.3 per cent. of the capital at charge. This result, though considerably worse than in the earlier years of the period, was better than in the three years immediately preceding.

(Figures in crores.)

	Net receipts.	Percentage of capital at charge.	Net profit or loss after paying interest charges.
	Rs.		Rs.
Average of 5 years, 1924-25 to 1928-29	36.91	5.4	9.72
1929-30	34.52	4.5	4.04
1930-31	27.64	3.5	-5.19
1931-32	23.86	3.0	-9.20
1932-33	22.77	2.9	-10.23
1933-34	24.76	3.1	-7.96
1934-35	27.11	3.3	-5.06

The operating ratio on all State-owned Railways (*i.e.*, the ratio of working expenses to gross earnings) amounted to 55 per cent. excluding depreciation and to 70 per cent. including depreciation. The ratio in 1934-35 is lower than in the past four years. In the table below the ratios of earlier years are given for purposes of comparison:—

	Percentage, excluding depreciation.	Percentage, including depreciation.
Average of 5 years, 1924-25 to 1928-29	52½	63½
1929-30	54	66
1930-31	59	73
1931-32	57	73
1932-33	57	73
1933-34	56	71
1934-35	55	70

For purposes of comparison we give below certain figures which are available for certain foreign railways.

The gross receipts of the 4 amalgamated British railways in 1934 amounted to £172 million, an increase of £7 million (4 per cent.) over the previous year, but £35½ million (17 per cent.) less than in 1929. Their working expenses amounted to £143 million, or £4 million more than in the previous year and £25 million (15 per cent.) less than in 1929. The operating ratio was 83 per cent. as against 84 per cent. in the previous year and 81 per cent. in 1929.

The Canadian Pacific Railway earned 125 million dollars in 1934, 11 million dollars (10 per cent.) more than in the previous year, and 85 million dollars (40 per cent.) less than in 1929. Their working expenses were 101 million dollars—6 million dollars (6 per cent.) more than in 1933 and 66 million dollars (40 per cent.) less than in 1929. The operating ratio, which

was 79½ per cent. in 1929 and 83 per cent. in 1933, stood at 80½ per cent. in 1934.

The Canadian National Railways realised 165 million dollars in 1934, 16 million dollars (11 per cent.) more than in 1933 and 103 million dollars (38 per cent.) less than in 1929. Their working expenses rose to 152 million dollars, which was higher by 9 million dollars (6·39 per cent.) than in 1933 but 69 million dollars (31 per cent.) below that of 1929. The operating ratio of 92 per cent. is less by 4 per cent. than in the previous year but 9½ per cent. higher than in 1929.

The receipts of the principal railways of the United States were 3,250 million dollars in 1934, which was 5 per cent. more than in 1933, but 38·5 less than in 1930. The working expenses, which were 2,440 million dollars, were 8·5 per cent. more than in the previous year but 37·9 per cent. less than in 1930. The operating ratio in 1934 was 75 per cent. against 72·7 per cent. in 1933 and 74·4 per cent. in 1930.

The gross receipts of the German State Railways for 1934 were Reichmarks 3,326 million, which showed an increase of Reichmarks 406 million (14 per cent.) over the previous year and of Reichmarks 392 millions (13 per cent.) as compared with 1932. Their working expenses came to Reichmarks 3,302 million, or Reichmarks 246 million (8 per cent.) more than in the previous year and Reichmarks 301 million (10 per cent.) than in 1932. The operating ratio was 99·28 per cent. against 104·66 per cent. in 1933 and 102·27 in 1932.

17. *Gross Receipts.*—The following table compares the receipts in detail with the previous years. For purposes of comparison, credits for materials released from works not charged to revenue, which are included in gross receipts from 1932-33 onwards have been excluded :—

(Crores of rupees.)

	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
Passenger earnings	31·68	28·96	28·94	27·65	27·92
Other coaching earnings	5·40	5·27	5·03	4·92	4·92
Goods earnings	60·69	55·41	53·76	58·20	61·05
Sundry earnings	1·97	1·82	1·63	1·59	1·62
Suspense	·46	·35	·04	—·49	·09
TOTAL	1,00·20	91·81	89·40	91·87	95·60
<i>Less—</i>					
Refunds	·11	·11	·11	·11	·12
Earnings of worked lines	4·99	5·07	4·86	5·13	5·28
NET	95·10	86·63	84·43	86·63	90·20

It will be observed that there is still a downward trend in passenger earnings, whereas goods earnings have recovered considerably from the depth that they reached in 1932-33: they are about 14 per cent. higher than in 1932-33 and 5 per cent. higher than in 1933-34.

The earnings in 1934-35 are Rs. 28,500 per open mile.

It is interesting to analyse the figures of earnings from goods traffic and compare them with the figures in previous years. Figures are not available separately for State-owned railways, but the figures that are available for

Class I Railways in general in respect of the more important commodities are given below :—

(Figures in lakhs.)

—	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
	Rs.	Rs.	Rs.	Rs.	Rs.
Cotton, raw and manufactured	6,31	4,76	5,19	5,96	5,87
Fuel for public and foreign railways	9,56	8,83	8,90	9,65	10,34
Metallie ores	93	58	45	64	95
Rice	3,67	3,71	3,45	3,89	4,19
Wheat	2,69	2,16	1,84	1,85	2,10
Gram, pulse and other grains	3,42	3,58	3,09	2,91	3,36
Iron and steel	2,07	1,81	2,00	2,21	2,34
Kerosene	1,50	1,62	1,38	1,46	1,52
Jute	1,36	99	1,12	1,29	1,24
Sugar	2,03	1,51	1,30	1,07	1,57
Oil seeds	4,01	3,52	2,88	3,64	2,99
Gur, jaggree and molasses	98	1,27	1,39	1,21	1,21

The figures indicate a recovery in almost all cases, practically the only exceptions being cotton, jute, sugar and oil seeds. The increases under wheat and gram, pulse and other grains amount to about 15 per cent. and under metallic ores to 48 per cent.

The statement below compares the receipts of individual railways in 1934-35 with previous years :—

(Figures in lakhs.)

Railways.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
	Rs.	Rs.	Rs.	Rs.	Rs.
Assam Bengal	1,96	1,84	1,56	1,60	1,80
Bengal Nagpur	8,17	7,24	6,91	7,39	7,94
Bombay, Baroda and Central India	10,90	10,30	10,17	10,61	11,07
Burma	4,28	3,74	3,33	3,57	3,72
Eastern Bengal	5,86	5,05	4,91	5,07	5,43
East Indian	18,24	17,36	17,27	17,63	18,71
Great Indian Peninsula	13,33	11,92	11,94	12,21	12,17
Madras and Southern Mahratta	7,98	7,15	6,66	6,84	6,72
North Western (Commercial)	14,98	13,34	12,74	13,23	13,87
North Western (Strategic)	1,48	1,21	1,23	1,23	1,23
South Indian	5,80	5,30	5,51	5,14	5,25
Other Railways	2,12	2,08	2,20	2,11	2,29

All the Railways except the Madras and Southern Mahratta and Great Indian Peninsula showed a considerable increase in receipts in 1934-35 as compared with the previous year. The Bengal Nagpur and Bombay, Baroda and Central India Railways each increased their earnings by about half a crore and the increase in North Western Railway amounted to nearly $\frac{3}{4}$ crore. The East Indian Railway was about a crore better than in the previous year.

18. Working expenses.—In making a comparison of working expenses with previous years, allowance has to be made for certain important special factors which are detailed in paragraph 17 *et seq* of the Report by the Railway Board on Indian Railways, Volume I, for 1932-33, and which it is unnecessary to reproduce here. Making allowance for all these factors the comparable figures of traffic receipts and working expenses from 1929-30 are as follows:—

	Traffic receipts.	(Crores of rupees.) Ordinary working expenses (including cut in pay).
1929-30	103.36	55.92
1930-31	94.66	55.81
1931-32	86.63	49.22
1932-33	84.11	47.42
1933-34	86.63	48.31
1934-35	90.20	49.37

The receipts were about 13 crores below 1929-30 whereas ordinary working expenses were about 6½ crores lower. The percentage of fall in receipts was 12½ per cent. and in working expenses about 11½ per cent.

From another point of view, Railways have saved in ordinary working expenses 50 per cent. of the fall in receipts.

A comparison of the working expenses of each railway with the previous years will be found below. There is an increase in most railways, with the exception of the Great Indian Peninsula and Bombay, Baroda and Central India Railways.

(Figures in lakhs.)

Railways.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
	Rs.	Rs.	Rs.	Rs.	Rs.
Assam Bengal	1,12	1,09	1,02	1,07	1,15
Bengal Nagpur	5,36	4,83	4,77	4,82	5,06
Bombay, Baroda and Central India	6,14	5,47	5,39	6,26	5,45
Burma	2,61	2,33	2,05	2,18	2,24
Eastern Bengal	3,74	3,29	3,17	3,33	3,39
East Indian	9,95	9,02	8,88	8,78	9,16
Great Indian Peninsula	8,57	7,13	7,07	6,99	6,75
Madras and Southern Mahratta	3,88	3,33	3,16	3,25	3,36
North Western (Commercial)	9,03	7,74	7,23	7,57	7,59
North Western (Strategic)	1,76	1,38	1,42	1,39	1,43
South Indian	2,87	2,63	2,79	2,67	2,72
Other Railways	1,02	98	94	1,00	1,07

19. Net receipts.—The details of net receipts (after meeting the appropriation to the Depreciation Fund, which represents expenditure not controllable by the railway administration) are given below. It will be noticed that all the railways are better than last year except the Madras and Southern Mahratta Railway.

(Figures in lakhs.)

Railways.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
	Rs.	Rs.	Rs.	Rs.	Rs.
Assam Bengal	54	44	22	22	32
Bengal Nagpur	1,49	1,07	75	1,19	1,50
Bombay, Baroda and Central India	3,43	3,45	3,40	3,97	4,24
Burma	1,15	88	75	84	94
Eastern Bengal	1,20	80	76	77	1,04
East Indian	6,00	5,99	6,05	6,46	7,11
Great Indian Peninsula	2,87	2,85	2,89	3,28	3,36
Madras and Southern Mahratta	3,22	2,92	2,60	2,60	2,45
North Western (Commercial)	3,69	3,27	3,02	3,37	3,91
North Western (Strategic)	-70	-50	-62	-59	-63
South Indian	2,23	1,92	1,99	1,69	1,74
Other Railways	86	86	1,02	90	1,00

20. *Losses and gains.*—Though the results of nearly every railway during 1934-35 show an improvement as compared with the previous year, there were only two of the bigger systems, *viz.*, the East Indian Railway and the Bombay, Baroda and Central India Railway, that showed an appreciable gain to the State. For the purpose of calculating these gains and losses, the figures shown in the Companies' accounts have been recast to accord with the Government accounts procedure, *i.e.*, the working expenses include the appropriation to the Depreciation Fund and not the actual expenditure on renewals and replacements, which are taken into account in the Companies' own accounts.

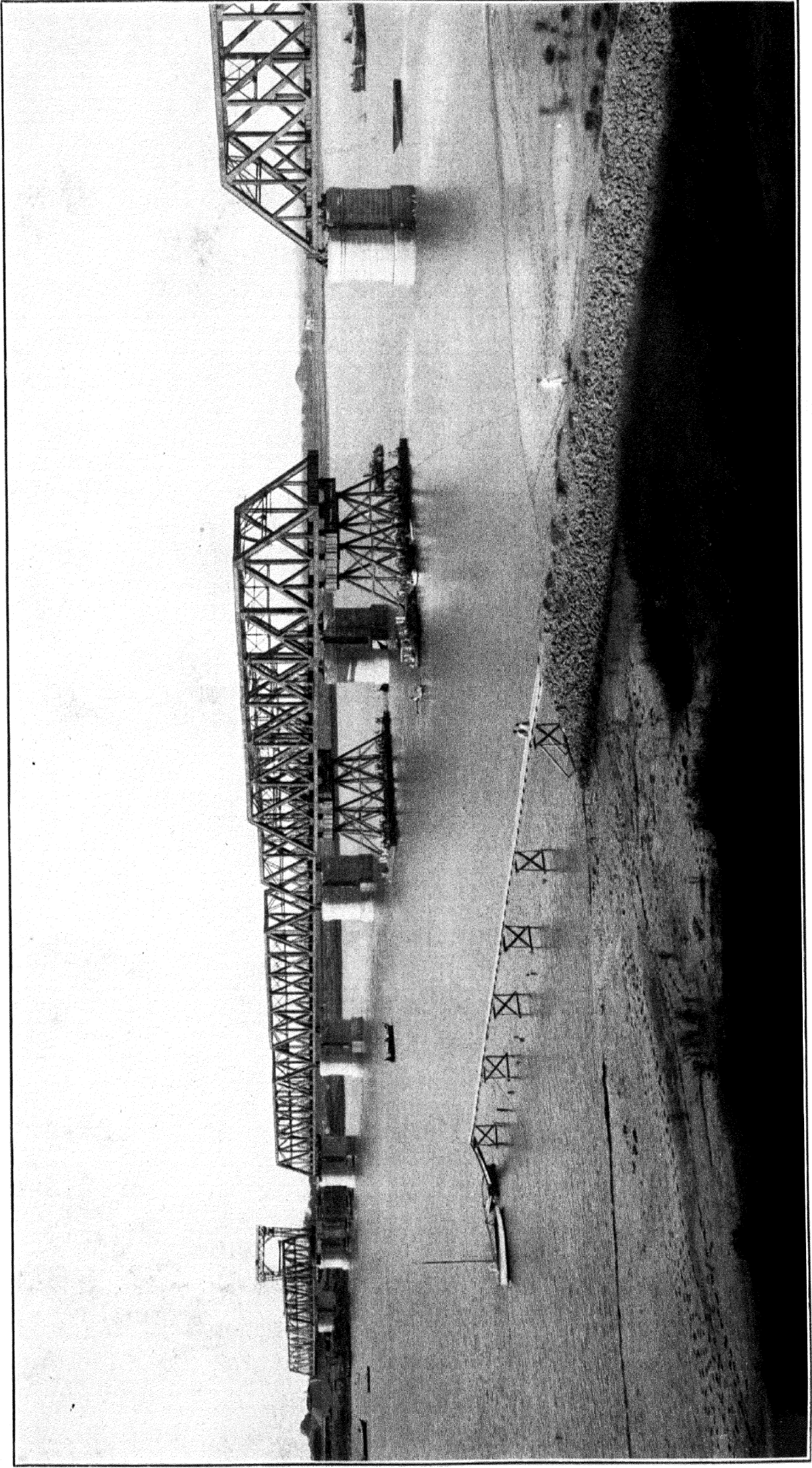
The net gain or loss of the various railways for the last 5 years is given below :—

(Figures in lakhs.)

	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
	Rs.	Rs.	Rs.	Rs.	Rs.
<i>State-managed Railways.</i>					
Burma	-44	-74	-75	-71	-56
Eastern Bengal	-80	-1,23	-1,28	-1,25	-93
East Indian	-18	-24	-13	+37	+1,14
Great Indian Peninsula	-1,72	-1,78	-1,68	-1,24	-1,04
North Western (Commercial)	-1,16	-1,58	-1,78	-1,36	-70
North Western (Strategic)	-2,18	-1,99	-2,09	-2,03	-2,03
TOTAL	-6,48	-7,56	-7,71	-6,22	-4,12
<i>Company-managed Railways.</i>					
Assam Bengal	-39	-52	-74	-73	-60
Bengal Nagpur	-1,99	-2,48	-2,80	-2,27	-1,93
Bombay, Baroda and Central India	+43	+45	+41	+98	+1,23
Madras and Southern Mahratta	+1	+14	-27	+1	-23
South Indian	+31	+1	+6	-21	-10
Other Railways	+20	+10	+26	+8	+13
TOTAL	-1,43	-2,21	-3,06	-2,14	-1,33

21. *Capital at charge.*—The statement below shows how the capital at charge on all railways in which the State has a financial interest has been

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY.



Nerbudda Bridge at Broach. Flotation of Span No. 10.—Fifth and last Flotation.
1934

growing. For purposes of comparison, sterling liabilities included in the capital at charge have throughout been converted into rupees according to the present procedure, *i.e.*, at the rate of exchange in force at the time the liabilities were assumed.

	(Crores of rupees.)
	Capital at charge at the end of the year.
1923-24	629
1924-25	643
1925-26	663
1926-27	690
1927-28	722
1928-29	747
1929-30	778
1930-31	791
1931-32	798
1932-33	797
1933-34	795
1934-35	795

The capital at charge has increased in 11 years by 166 crores. It increased rapidly in the first six prosperous years at an average rate of 25 crores per annum. During the next 5 years, the average has fallen to 3½ crores per annum. But in these years stores balances, which form part of our capital at charge, have been steadily falling, the balance at the end of 1934-35 being nearly 6 crores below that four years earlier. Moreover, there have been considerable decreases in the capital at charge as a result of retirement of assets without replacement when the original cost of the asset is credited to capital by debit to the Depreciation Fund. This would amount at a rough guess to about 6 crores. Finally, in 1932-33 the capital at charge was reduced by nearly a crore as representing the difference between the actual amount of rupees required for repayment of the share capital when the Burma Railways were purchased and the capital as it stood on the books of the Railway. Making full allowance for all these factors, the average increase in capital during the 5 years ending 1934-35 may be taken at about 6 crores per annum, which is about one-fourth of the average in the first 6 years.

Of the increase in the period of 166 crores, the expenditure on new lines amount to 48 crores; and 16 crores represent the price paid by the State for acquiring private interests in lines already in existence, for example, Delhi-Ambala-Kalka, Burma and Southern Punjab Railways. The balance of over 100 crores represents the expenditure incurred on the improvements of the open line.

22. Works expenditure.—The statement below gives the total expenditure on works year by year from 1924-25 and shows separately expenditure on new constructions, open line works—capital and depreciation fund separately—and amounts spent on the purchase of railways.

(In lakhs of rupees.)						
Years.	New constructions.	Open line works.	Purchase of railways and branch line shares.	Total capital.	Depreciation Fund.	Total works expenditure.
1924-25	3,20	10,07	19	13,46	7,29	20,75
1925-26	3,93	15,32	..	19,25	7,98	27,23
1926-27	6,77	16,13	4,33	27,23	8,05	35,28
1927-28	10,26	22,19	3	32,48	10,95	43,43
1928-29	9,28	15,77	4,30	29,35	9,60	38,95
1929-30	6,65	16,47	7,06	30,18	11,76	41,94
1930-31	4,28	8,92	1	13,21	9,74*	22,95*
1931-32	2,79	3,90	..	6,69	8,26	14,95
1932-33	57	—50	..	7	6,35	6,42
1933-34	22	—2,28	..	—2,06	8,08	6,02
1934-35	18	27	—20	25	8,66	8,91

* Excludes a debit of 1.66 lakhs for correction of past erroneous adjustments.

No new lines have been started since 1930-31 except the Jhudo-Pithoro Railway the construction of which has been considered necessary to afford facilities to the agriculturists for the transport of agricultural produce. The expenditure on this construction in 1934-35 was about Rs. 14 lakhs. The expenditure after 1930-31 which, as will be seen from the above statement, has been falling steadily and rapidly, is only on lines which had been started earlier. These are now all practically completed. Expenditure on open line works amounted to about 9 crores in the year 1934-35. This low figure is partly the result of reductions in stores balances, or in other words to eating up of stocks, but to a large extent it is due to the policy of postponing all but essential or directly and immediately remunerative works as far as possible.

23. Stores balances.—The total stores balances at the end of 1934-35 amounted to 9 crores, which constitutes a new low record. During the year a decrease of one crore was achieved. This reduction is to a certain extent due to the fall in prices and general decrease in volume of railway business.

The table below gives the figures of stores balances since 1921-22 :—

(In thousands.)

Railways.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Assam Bengal .	24,81	31,48	18,38	12,30	9,49	12,59	13,01	14,91	18,04	22,05	20,70	15,57	13,56	12,65
Bengal Nagpur .	1,40,26	1,61,88	1,48,09	1,49,44	1,27,64	1,17,17	1,07,87	1,32,69	1,36,28	1,21,17	1,06,76	1,01,74	97,08	1,01,00
Bombay, Baroda and Central India.	2,76,83	2,72,43	2,33,25	1,77,39	1,62,48	1,46,28	1,67,17	1,62,35	1,60,82	1,64,54	1,46,34	1,30,51	1,08,81	1,02,01
Burma . . .	66,62	84,85	98,71	84,62	75,00	44,82	59,41	61,25	55,25	52,55	50,83	43,21	40,00	41,66
Eastern Bengal .	2,51,63	1,76,20	1,57,85	1,21,99	1,12,27	84,07	84,39	79,53	77,21	76,33	68,70	55,47	40,23	43,42
East Indian (including Oudh and Rohilkhand).	3,92,50	4,39,19	4,10,66	3,14,19	2,81,46	2,48,17	2,98,92	3,14,89	3,03,84	2,48,39	2,27,47	2,08,64	1,60,12	1,38,49
Great Indian Peninsula.	4,66,49	3,88,35	3,97,77	2,89,49	2,38,67	2,23,13	2,53,49	2,41,88	2,62,01	2,51,73	2,18,32	1,79,58	1,51,14	1,26,92
Madras and Southern Mahratta.	1,50,52	1,66,09	1,50,91	1,02,86	84,31	76,75	93,91	83,29	82,60	79,29	76,03	71,80	53,00	49,62
North Western .	3,94,12	3,92,69	3,79,78	2,73,36	2,44,34	2,86,41	3,91,59	3,69,62	3,47,89	2,59,81	2,27,15	1,84,65	1,65,84	1,46,29
South Indian .	1,14,45	1,38,66	99,02	77,04	1,13,30	1,06,80	1,23,76	1,14,51	1,05,72	93,76	79,72	70,46	56,15	47,04
Other Railways .	31,08	41,01	42,63	42,59	36,87	39,33	40,55	43,75	52,69	57,14	52,42	46,81	42,44	48,30
Strategic lines .	57,76	57,68	72,10	63,38	82,62	83,53	92,34	90,17	92,45	93,76	90,89	1,01,90	93,25	81,60
TOTAL .	23,67,07	23,50,51	22,09,15	17,08,65	15,68,45	14,68,85	17,32,41	17,08,84	16,94,80	15,20,52	13,65,33	12,10,34	10,21,62	9,34,00

24. Contribution to General Revenues.—The contribution to General Revenues due for the year 1934-35 amounts to Rs. 504 lakhs or 17 lakhs less than in 1933-34. The statement below shows how the amount is arrived at :—

(Based on actuals of penultimate year 1932-33.)

(Figures in thousands.)

	Rs.	Rs.
1. 1 per cent. on capital of Rs. 7,22,45,01 at charge—commercial lines—to end of 1932-33		7,22,45
2. (i) Receipts (1932-33)—		
Gross traffic receipts—commercial lines	84,34,87	
Subsidized companies—share of surplus profits	21,48	
Interest on depreciation and reserve fund balances and dividends on investments in branch lines and miscellaneous receipts	74,08	
Total Receipts		85,30,43

(ii) Charges (1932-33)—		
Working expenses—commercial lines	Rs. 60,95,59	Rs.
Indian States and railway companies' share of surplus profits	65,21	
Land and subsidy	5,55	
Interest—		
On capital at charge—commercial lines	30,10,39	
On capital contributed by Indian States and companies	1,33,58	
Miscellaneous railway expenditure	40,84	
Contribution at 1 per cent. on capital at charge—commercial lines	7,22,45	
Total Charges		1,00,73,61
(iii) Deficit		15,43,18
(iv) Contribution of 1/5th of surplus		7,22,45
3. Total contribution from railway revenues 1 plus 2 (iv)		7,22,45
Deduct—Loss on strategic lines—		
(i) Interest on capital	1,46,55	
(ii) Miscellaneous railway expenditure	27	
(iii) Loss in working	55,38	
(iv) Interest on the amount of loss in working strategic lines met from Depreciation Reserve Fund balances of commercial lines	16,48	
4. Net payment due from railway to general revenues in 1934-35		2,18,68
		5,03,77

25. Depreciation Fund.—The amount appropriated to the depreciation fund by debit to the working expenses of State-owned railways and the amount drawn from the fund to meet the expenditure incurred on replacements and renewals actually carried out on those railways during 1933-34 and 1934-35 are given in the statement below :—

(Figures in thousands.)

Railways.	Credits to Depreciation Fund by debit to Revenue on account of depreciation in 1933-34.	Amount spent on Replacements and Renewals and charged to Depreciation Fund in 1933-34.	Credits to Depreciation Fund by debit to Revenue on account of depreciation in 1934-35.	Amount spent on Replacements and Renewals and charged to Depreciation Fund in 1934-35.
	Rs.	Rs.	Rs.	Rs.
<i>State Lines managed by State.</i>				
North Western	2,71,55	1,11,32	2,77,27	2,24,37
Eastern Bengal	97,43	80,77	96,86	93,26
East Indian	2,38,56	2,68,85	2,40,74	1,21,65
Great Indian Peninsula	1,94,26	1,19,21	2,02,39	1,22,44
Burma	55,28	28,37	53,36	35,90
<i>State Lines managed by Companies.</i>				
Bengal Nagpur	1,37,75	37,14	1,38,85	56,10
Bombay, Baroda and Central India	1,38,85	53,02	1,37,85	92,36
Madras and Southern Mahratta	89,80	56,37	90,40	59,14
South Indian	77,50	31,29	78,00	32,51
Other Railways	55,50	24,29	56,05	31,45
Adjustments :—				
1. Net result of adjustment of credits on account of released materials and expenditure on non-wasting assets of company-worked Railways under Repairs and Maintenance.	..	—3,10	..	—3,16
TOTAL	13,56,48	8,07,53	13,71,77	8,66,02

26. An analysis of the financial results of the working of the railways owned by the State is given in the following statement, for the last three years, by each railway :—

(Figures in thousands of rupees.)

Railways.	Year.	(b) Capital at charge.	Defect amount of capital contributed by Companies and Indian States.	Net Government Capital at charge.	Receipts.	Working Expenses including Depreciation.	Payment to worked lines.	Net Receipts.	Percentage of Net Receipts on Capital at charge.	CHARGE AGAINST NET REVENUE RECEIPTS.			Gain.	Loss.
										Payment on account of Surplus Profits.	Interest on Annuity of share of Fund charges.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
<i>State Lines managed by State.</i>														
North Western	1932-33	1,48,04,40	..	1,48,04,40	14,14,63	11,75,20	..	2,39,43	1.6	..	6,26,24	..	3,86,81	
	1933-34	1,47,87,12	..	1,47,87,12	14,63,88	11,85,48	..	2,78,40	1.9	..	6,17,73	..	3,39,33	
	1934-35	1,46,84,32	..	1,46,84,32	15,90,81	12,33,70	28,81	3,28,30	2.2	..	6,01,27	..	2,72,97	
Eastern Bengal	1932-33	51,38,86	..	51,38,86	4,98,11	4,21,81	..	76,30	1.5	..	2,03,84	..	1,27,54	
	1933-34	50,98,88	..	50,98,88	5,09,60	4,32,92	..	76,68	1.5	..	2,01,77	..	1,25,09	
	1934-35	51,10,05	..	51,10,05	5,59,27	4,46,95	7,72	1,04,60	2.0	..	1,97,87	..	93,27	
East Indian	1932-33	1,45,49,13	1,12,14	1,44,36,99	17,56,01	11,51,75	..	6,04,26	4.1	..	6,17,37	..	13,11	
	1933-34	1,43,85,63	1,12,14	1,42,73,49	18,06,93	11,60,94	..	6,45,99	4.5	..	6,08,69	37,30	..	
	1934-35	1,44,50,72	1,12,14	1,43,38,58	18,93,70	11,75,26	7,83	7,10,61	4.9	..	5,96,66	1,13,95	..	
Great Indian Peninsula	1932-33	1,22,92,13	..	1,22,92,13	12,08,49	9,18,84	..	2,89,65	2.4	..	4,58,05	..	1,68,40	
	1933-34	1,21,72,88	..	1,21,72,88	12,35,42	9,07,06	..	3,28,36	2.7	..	4,52,50	..	1,24,14	
	1934-35	1,21,31,12	..	1,21,31,12	12,77,85	9,16,55	25,59	3,35,71	2.8	..	4,39,92	..	1,04,21	
Burma	1932-33	35,05,52	..	35,05,52	3,49,05	2,73,92	..	75,13	2.1	..	1,50,58	..	75,45	
	1933-34	35,19,96	..	35,19,96	3,66,22	2,82,29	..	83,93	2.4	..	1,54,53	..	70,60	
	1934-35	35,02,69	..	35,02,69	3,78,20	2,83,71	..	94,49	2.7	..	1,50,22	..	55,73	
<i>State Lines managed by Companies.</i>														
Bengal Nagpur	1932-33	76,99,05	10,32,47	66,66,58	7,02,99	6,28,14	..	74,85	1.0	..	3,54,56	..	2,79,71	
	1933-34	77,13,70	10,12,20	67,01,50	7,51,31	6,32,33	..	1,18,98	1.5	..	3,45,93	..	2,26,95	
	1934-35	77,45,42	10,12,20	67,33,22	8,07,80	6,56,87	1,29	1,49,64	1.9	..	3,35,69	..	1,86,05	

Bombay, Baroda and Central India	1932-33	75,77,98	5,50,86†	70,27,13	10,22,95	6,82,79	..	3,40,16	4.5	12,60†	2,86,91	40,65	..
	1933-34	75,75,05	5,50,86†	70,24,20	10,65,13	6,68,37	..	3,96,76	5.2	13,64†	2,85,24	97,88	..
	1934-35	75,95,88	5,49,00	70,46,88	11,78,93	7,27,01	27,93	4,23,99	5.6	15,61†	2,80,51	1,27,87	..
Madras and Southern Mahratta	1932-33	55,04,15	10,68,25	44,35,90	6,71,93	4,12,35	..	2,59,58	4.6	41,32	2,38,12	19,86	..
	1933-34	55,06,92	10,68,25	44,38,67	6,93,31	4,24,48	..	2,68,83	4.9	31,45	2,36,74	64	..
	1934-35	55,20,23	10,68,25	44,51,98	7,48,93	4,73,97	29,79	2,45,17	4.4	36,31	2,32,13	23,27	..
South Indian	1932-33	44,84,69	6,35,81||	38,48,88	5,59,96	3,61,63	..	1,98,33	4.4	7,13†	1,84,80	6,40	..
	1933-34	44,92,94	6,35,81||	38,57,13	5,16,93	3,48,04	..	1,68,89	3.8	7,26†	1,82,41	20,78	..
	1934-35	45,25,00	6,35,81||	38,89,19	5,50,82	3,67,79	8,97	1,74,06	3.8	6,22†	1,77,47	9,63	..
Other railways	1932-33	41,55,81	6,36,73	35,19,08	3,78,16	2,52,97	..	1,25,19	3.2	4,16	1,70,05	49,02	..
	1933-34	42,53,19	6,33,04	36,20,15	3,72,75	2,60,65	..	1,12,10	2.6	4,30	1,72,43	64,63	..
	1934-35	42,64,12	5,89,46	36,74,66	6,52,22	3,80,31	1,39,06	1,32,85	3.1	2,98	1,68,32	38,45	..
Suspense	1932-33	..	..	..	..	..	..	..	..	..	..	..	..
	1933-34	..	..	..	..	..	..	..	..	..	..	..	..
	1934-35	..	..	..	..	4	..	—4	..	..	..	..	4
Adjustments :—													
1. Net result of adjustment of credits on account of released materials and expenditure on non-wasting assets of company-managed railways under Repairs and Maintenance.	1932-33	..	..	..	..	6,23	..	—6,23	..	..	..	..	6,23
	1933-34	..	..	..	..	3,10	..	—3,10	..	..	..	..	3,10
	1934-35	..	..	..	..	3,16	..	—3,16	..	..	..	..	3,16
2. Write-back of Renewal and Replacement Expenditure of the Company's Sections of the Bengal and North-Western and Rohilkund and Kumaon Railways for the years 1924-25 to 1929-30.	..	..	..	..	..	..	..	..	..	..	..	..	..
	1932-33	..	..	..	72,69	..	..	72,69	..	..	..	72,69	..
	1933-34	..	..	..	57,21	..	..	57,21	..	..	..	57,21	..
Interest on Depreciation and Reserve Fund balances.	1934-35	..	..	..	48,15	..	..	48,15	..	..	..	48,15	..

(Figures in thousands of rupees.)

Railways.	Year.	(b) Capital at charge.	Deduct amount of capital contributed by Companies and Indian States.	Net Government Capital at charge.	Receipts.	Working Expenses including Depreciation.	Payment to worked lines.	Net Receipts.	Per-centage of Net Receipts on Capital at charge.	CHARGE AGAINST NET REVENUE RECEIPTS.			Gain.	Loss.
										Payment on account of Surplus Profits.	Interest Annuity and Sinking Fund charges.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
<i>State Lines managed by Companies—conold.</i>														
<i>Net Miscellaneous Receipts and Charges not attributable to any one Railway.</i>														
	1932-33	..	..	..	..	..	..	..	..	..	..	..	16,54*
	1933-34	..	..	..	..	..	..	..	..	..	..	..	14,74*
	1934-35	..	..	..	..	..	..	..	..	..	..	..	9,44*
Total (Central)	1932-33	7,97,11,72	40,36,25	7,56,75,47	86,34,97	62,85,63	..	23,49,34	3-0	65,21	32,90,52	..	10,22,93	
	1933-34	7,95,06,27	40,12,29	7,54,93,98	88,38,69	63,05,66	..	25,33,03	3-2	56,65	32,57,97	..	7,96,33	
	1934-35	7,95,29,55	39,66,86	7,55,62,69	96,86,68	66,65,32	2,76,99	27,44,37	3-5	61,12	31,80,06	..	5,66,25	
Provincial Railways	1932-33	14,61	..	14,61	(a)1,81	..	..	1,81	..	..	57	1,24	..
	1933-34	14,61	..	14,61	(a)1,57	..	..	1,57	..	..	46	1,11	..
	1934-35	14,61	..	14,61	(a)1,14	..	..	1,14	..	..	51	63	..
Grand Total (Central and Provincial)	1932-33	7,97,26,33	40,36,25	7,56,90,08	86,36,78	62,85,63	..	23,51,15	3-0	65,21	32,91,09	..	10,21,69	
	1933-34	7,95,20,88	40,12,29	7,55,08,59	88,40,26	63,05,66	..	25,34,60	3-2	56,65	32,58,43	..	7,95,22	
	1934-35	7,95,44,16	39,66,86	7,55,77,30	96,87,82	66,65,32	2,76,99	27,45,51	3-5	61,12	31,80,57	..	5,65,62	
North Western (Commercial)	1932-33	1,13,73,94	..	1,13,73,94	12,87,22	9,85,16	..	3,02,06	2-7	..	4,79,69	..	1,77,63	
	1933-34	1,13,63,56	..	1,13,63,56	13,37,69	10,00,45	..	3,37,23	3-0	..	4,73,57	..	1,36,34	
	1934-35	1,12,77,78	..	1,22,77,78	14,64,11	10,43,91	28,81	3,91,39	3-5	..	4,61,04	..	69,65	
Non-Commercial (Strategic) (North Western Railway).	1932-33	34,30,46	..	34,30,46	1,27,41	1,90,04	..	-62,63	-1-8	..	1,46,56	..	2,09,18	
	1933-34	34,23,56	..	34,23,56	1,26,20	1,85,03	..	-58,83	-1-7	..	1,44,16	..	2,02,99	
	1934-35	34,06,54	..	34,06,54	1,26,70	1,89,79	..	-63,09	-1-9	..	1,49,23	..	2,63,32	

† Includes capital expenditure on Tinnerelly Quilon (Indian State Section).

‡ Represent figures on account of subsidized Companies.

(b) Figures of Capital at charge include sterling liabilities involved in the purchase of Railways converted at the average rate of the year in which the liabilities were originally incurred.

The receipts and working expenses for 1934-35 in columns 6 and 7 include the figures of worked lines.

† Includes Capital provided by the Palampur Durbar.

‡ Includes payments to Darbars—

	1932-33.	1933-34.	1934-35.
Jaipur Durbar	6,49	6,68	6,72
Palampur "	18	20	10
Travancore "	17	17	69
* Includes recoveries from Travancore Durbar	46	70	10

III.—*General results of working of all Indian Railways.*

27. Traffic and mileage.—The more important statistical figures of traffic on all Indian Railways are summarised in the table below :—

Particulars.	Year.	Class I Railways.	Other Railways.	Total of all Railways.
(i) Total route mileage.	1930-31	38,020	4,261	42,281
	1931-32	38,460	4,353	42,813
	1932-33	38,550	4,394	42,944
	1933-34	38,298	4,655	42,953
	1934-35	38,294	4,727	43,021
(ii) Number of passengers originating	1930-31	542,062,100	33,764,400	575,826,500
	1931-32	475,513,000	30,323,400	505,836,400
	1932-33	471,689,600	30,205,600	501,895,200
	1933-34	456,617,900	32,995,200	489,613,100
	1934-35	463,010,900	33,580,100	496,591,000
(iii) Number of passenger miles.	1930-31	19,708,551,000	779,675,000	20,488,226,000
	1931-32	17,339,974,000	716,844,000	18,056,818,000
	1932-33	16,890,772,000	715,682,000	17,606,454,000
	1933-34	16,384,713,000	765,667,000	17,150,380,000
	1934-35	16,987,135,000	777,474,000	17,764,609,000
(iv) Tons originating	1930-31	79,658,000	3,719,000	83,377,000
	1931-32	71,064,000	3,511,000	74,575,000
	1932-33	67,163,000	3,438,000	70,601,000
	1933-34	72,951,000	3,562,000	76,513,000
	1934-35	80,649,000	3,854,000	84,503,000
(v) Number of ton miles.	1930-31	20,145,778,000	260,699,000	20,406,477,000
	1931-32	18,106,542,000	240,223,000	18,346,765,000
	1932-33	16,978,015,000	224,526,000	17,202,541,000
	1933-34	18,459,656,000	247,161,000	18,706,817,000
	1934-35	20,090,588,000	261,027,000	20,351,615,000

28. Analysis of earnings.—The total earnings of all railways, including those with which the Government of India are not directly concerned, amounted to Rs. 102·81 crores, of which 64·35 crores or 62·6 per cent. were from goods traffic, Rs. 30·35 crores or 29·5 per cent. from passenger traffic and Rs. 8·11 crores or 7·9 per cent. from parcels, luggage and other miscellaneous items.

29. Passenger earnings.—Passenger earnings showed an increase of about 1 per cent. from Rs. 30·11 to 30·35 crores. The following table shows

the numbers of and earnings from passengers separately for each class for the four years previous to the War and for the last seven years. Graphs are also inserted showing the number of passengers carried and of passenger miles by classes from 1923-24 :—

Year.	NO. OF PASSENGERS CARRIED (IN THOUSANDS).						EARNINGS FROM PASSENGERS (IN THOUSANDS OF RUPEES).					
	1st class.	2nd class.	Inter class.	3rd class.	Season and Vendor's tickets.	Total.	1st class.	2nd class.	Inter class.	3rd class.	Season and Vendor's tickets.	Total.
1910 .	685	2,784	10,702	315,839	24,341	354,351	58,82	77,23	94,99	14,65,16	15,85	17,12,05
1911 .	703	2,947	11,409	331,055	25,687	371,801	66,38	83,83	1,08,88	15,73,15	16,85	18,49,09
1912 .	700	3,030	10,508	356,789	26,810	397,837	62,90	83,31	91,37	17,01,35	17,55	19,56,48
1913-14 .	715	3,253	12,000	390,412	30,114	436,494	68,94	88,70	1,03,48	18,37,03	19,36	21,17,51
1928-29 .	912	9,585	17,870	591,743	*	620,110	1,12,25	1,91,89	1,66,43	33,53,82	*	38,24,39
1929-30 .	804	9,125	17,900	606,468	*	634,297	1,04,45	1,83,56	1,58,96	34,11,36	*	38,58,33
1930-31 .	670	8,089	16,189	550,879	*	575,827	94,06	1,70,20	1,41,34	30,24,15	*	34,29,75
1931-32 .	508	5,937	12,354	487,037	*	505,836	83,34	1,53,71	1,22,98	27,75,41	*	31,35,44
1932-33 .	429	5,278	10,871	485,317	*	501,895	77,95	1,47,44	1,15,14	27,91,67†	*	31,32,20
1933-34 .	421	5,050	10,557	473,585	*	489,613	76,07	1,42,24	1,11,54	26,79,09	*	30,10,90‡
1934-35 .	408	4,818	10,316	481,051	*	496,591	76,83	1,41,48	1,11,92	27,04,74	*	30,84,97

* The number of season and vendor's tickets and their earnings included under the respective classes; the former at the rate of 50 single journeys per month.

NOTE.—In pre-war reports the sum of the numbers of passengers carried on each separate railway was shown as the total number of passengers carried on all railways. Passengers travelling over two or more railways were thus counted as two or more passengers. The actual number of passengers carried on all railways is in fact the same as the number of passengers originating and this figure has been adopted for "number of passengers carried" in the reports from 1923-24 onwards. As the number of passengers originating is not available prior to 1923-24 the figures of pre-war years have been modified.

† Revised figures.

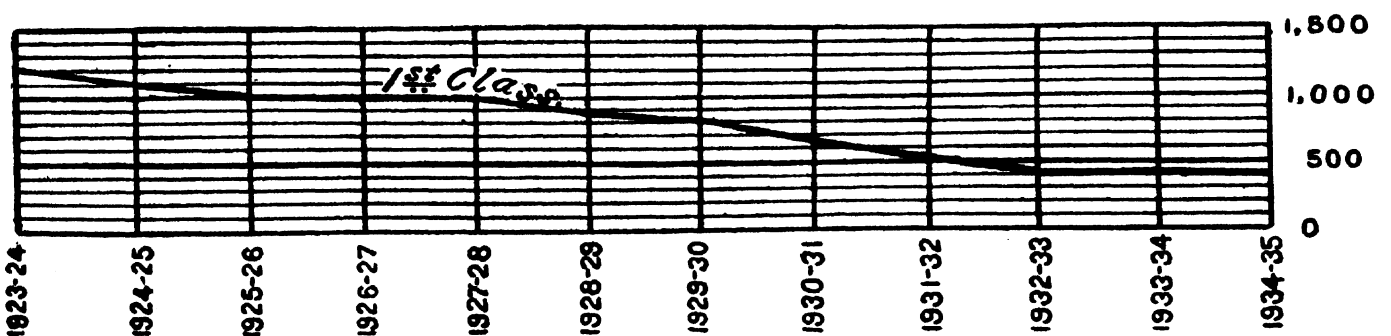
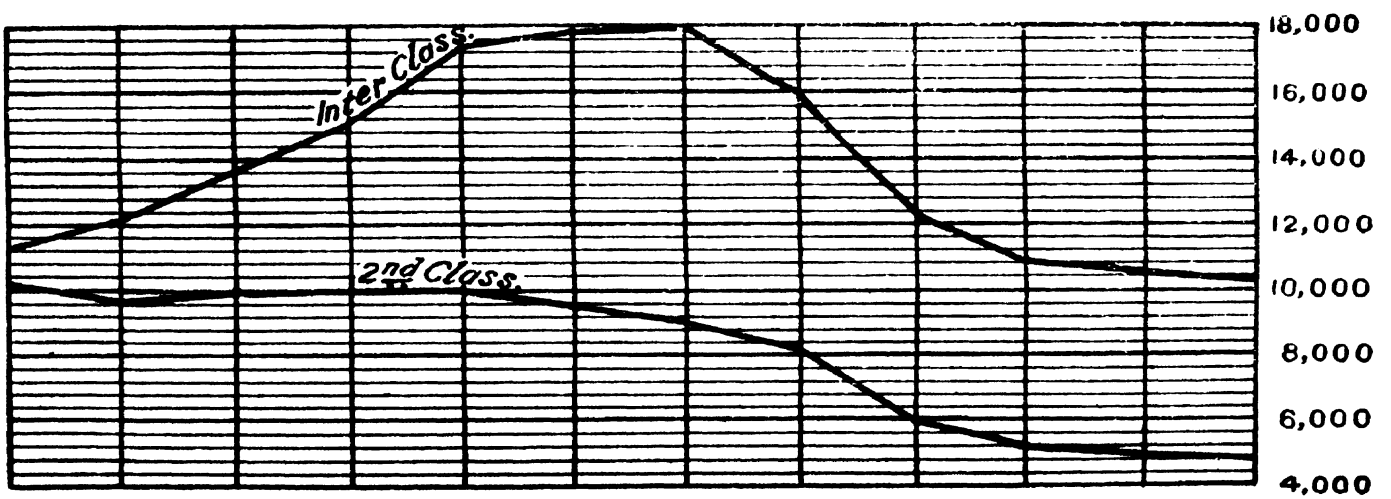
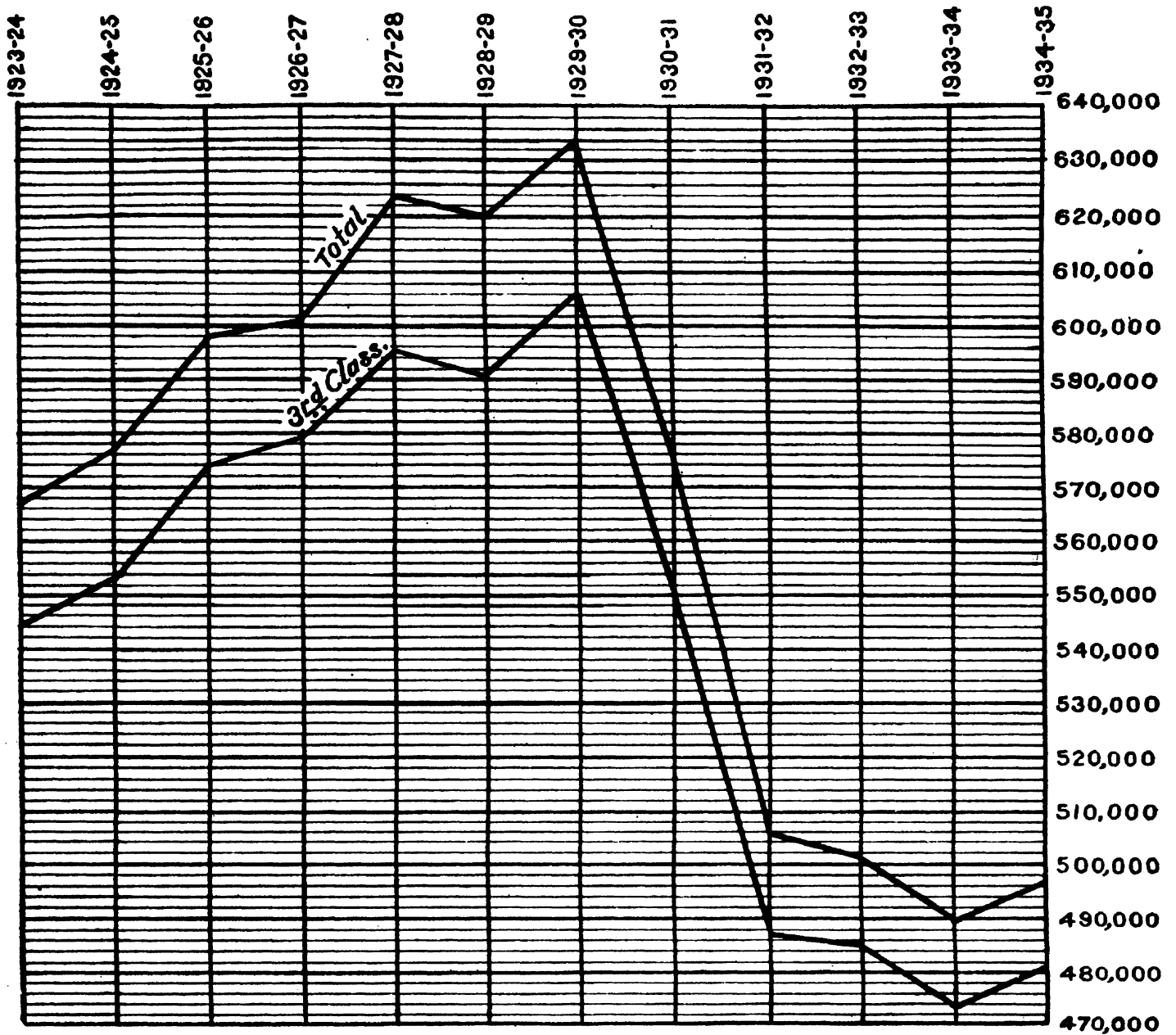
‡ Includes credit of Rs. 1,94(000) received from the East Indian Railway on account of passengers carried over the Delhi-Ghaziabad section for the period April 1925 to May 1931: details under different classes are not available.

During 1934-35, 10 million more passengers were carried on Class I Railways than in 1933-34 and passenger earnings increased by Rs. 25 lakhs. The following statement shows the variations over the various railways :—

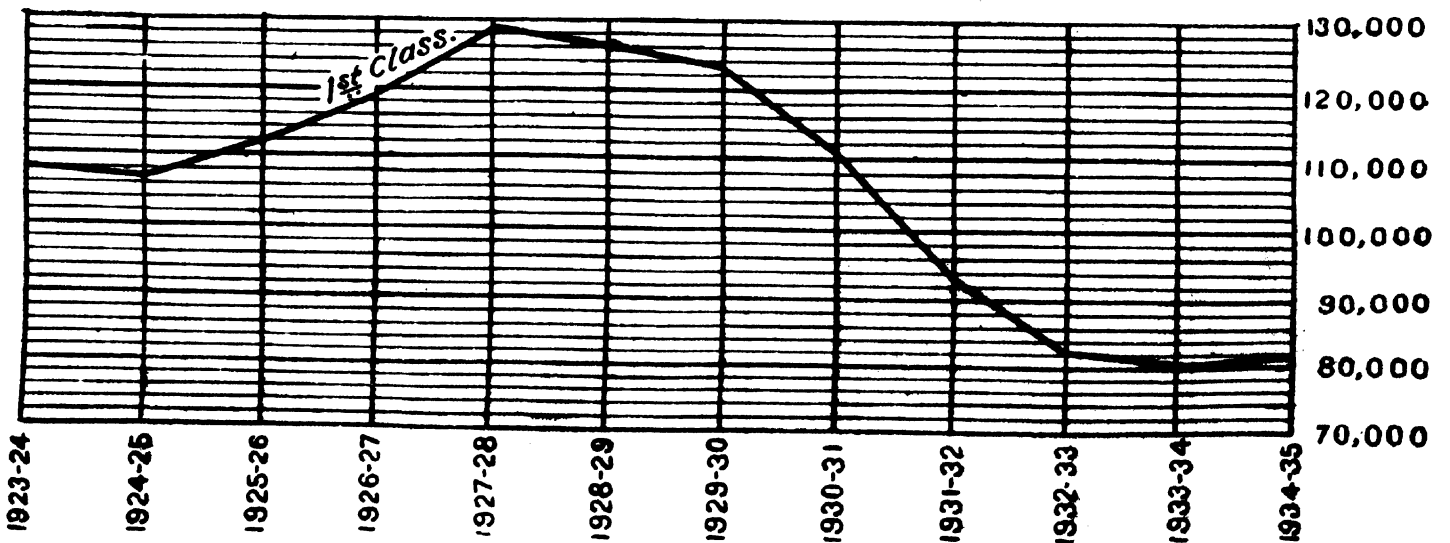
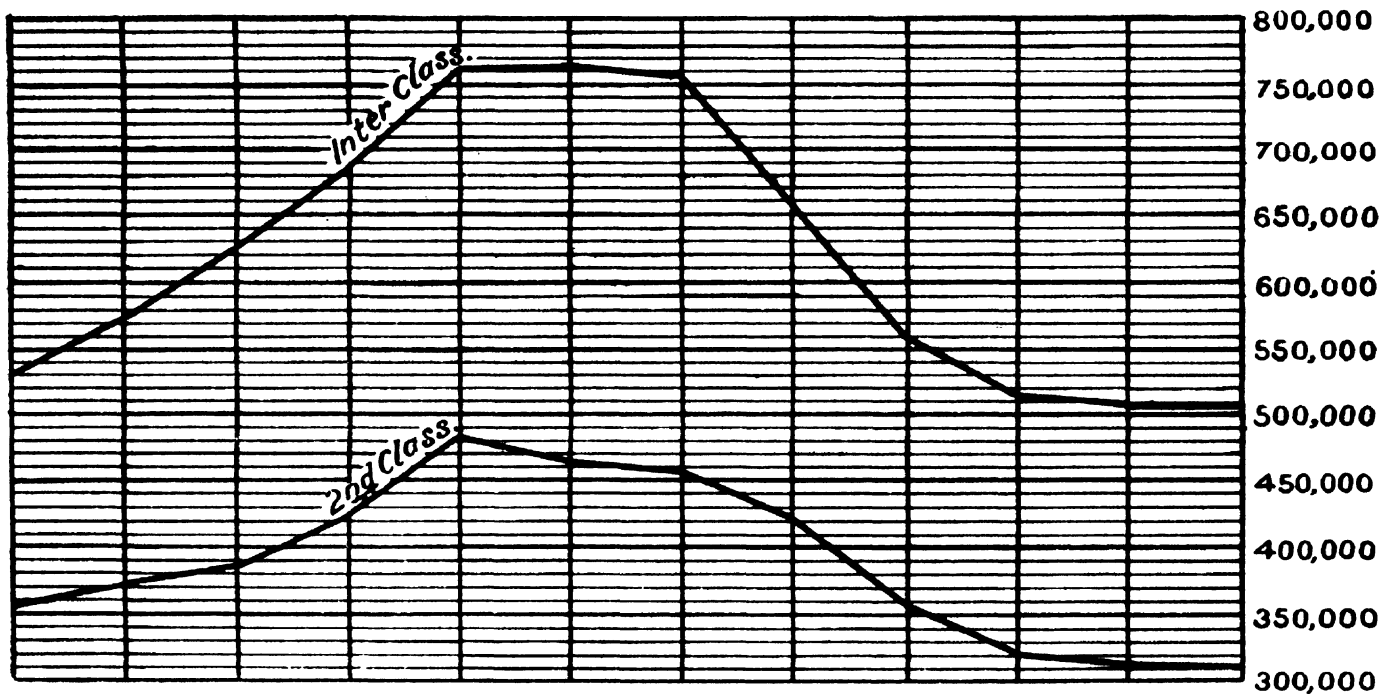
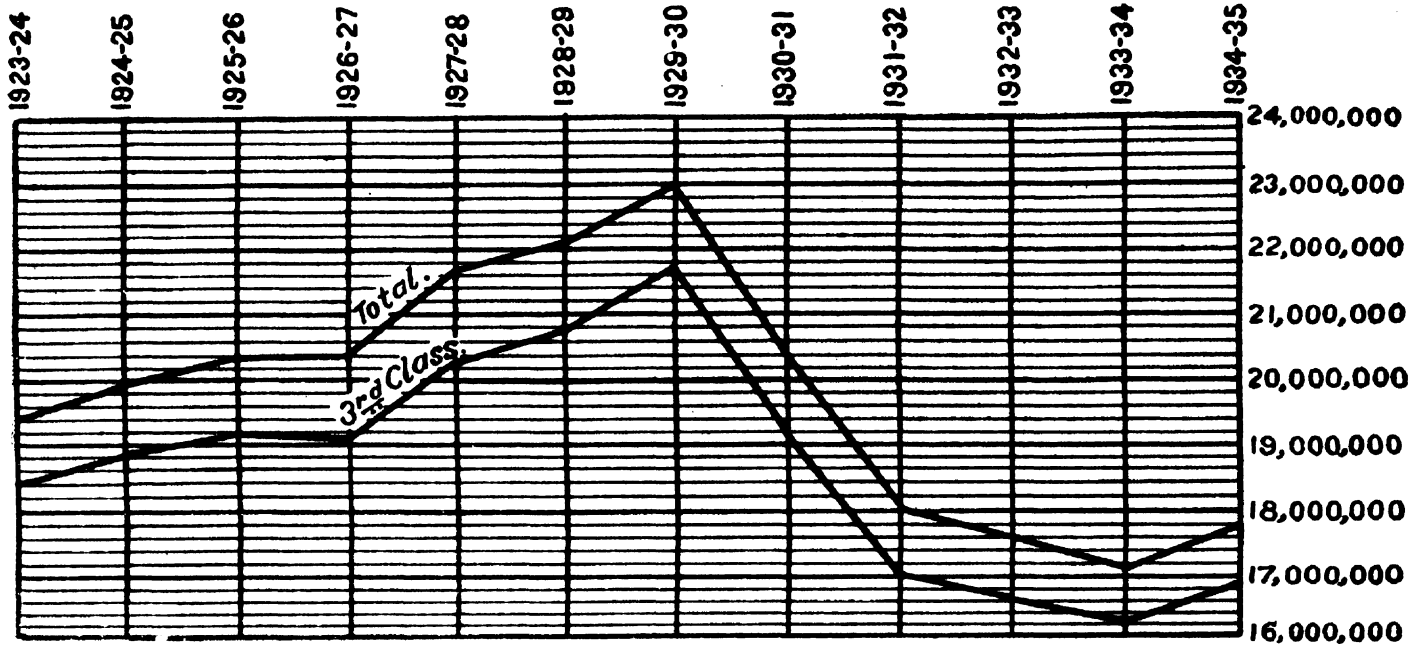
Name of Railway.	Variations in the number of passengers carried as compared with 1933-34.	Variations in earnings as compared with 1933-34.
Assam Bengal	- 1,900	- 1,67,000
Bengal and North-Western	+ 494,700	+ 4,71,000
Bengal Nagpur	+ 540,800	+ 5,17,000
Bombay, Baroda and Central India	+ 1,945,300	+ 4,96,000
Burma	+ 406,400	+ 1,83,000
Eastern Bengal	+ 1,041,400	+ 5,97,000
East Indian	+ 1,137,500	+ 21,77,000
Great Indian Peninsula	- 70,700	- 12,94,000
Jodhpur	+ 444,800	+ 3,94,000
Madras and Southern Mahratta	- 1,300,300	- 5,40,000
H. E. H. the Nizam's State	- 18,300	- 22,000
North Western	+ 4,961,500	- 1,12,000*
Rohilkund and Kumaon	+ 47,800	+ 41,000
South Indian	+ 74,200	- 2,20,000
Total	+ 9,703,200	+ 25,21,000

* Due to a reduction in third class fares on the North Western Railway.

NUMBER OF PASSENGERS CARRIED ON INDIAN RAILWAYS (IN THOUSANDS)



PASSENGER MILES INDIAN RAILWAYS (IN THOUSANDS)



30. Goods earnings.—The earnings from goods traffic on all railways increased by Rs. 2·84 crores, this improvement being chiefly under coal, gram and pulses and other grains; this however was offset by a considerable fall under oilseeds.

The tonnage of, and earnings from, the principal commodities carried by Class I Railways during the year 1934-35 as compared with the previous year, are shown in the statement below. Apart from the main increases, mentioned above, there were appreciable increases under metallic ores, rice, provisions, wheat and materials and stores on revenue account.

Commodity.	1933-34.		1934-35.		Increase + Decrease— in earnings. Rs. (in lakhs).
	No. of tons originating (in millions).	Rs. (in crores).	No. of tons originating (in millions).	Rs. (in crores).	
<i>Increases.</i>					
Fuel for public and foreign Railways.	18·47	9·65	20·15	10·34	+69
Gram and pulses and other grains.	2·39	2·91	2·51	3·36	+45
Metallic ores	2·24	0·64	2·99	0·95	+31
Rice	4·36	3·89	4·80	4·19	+30
Provisions	1·08	2·74	1·20	3·04	+30
Wheat	1·65	1·85	1·65	2·10	+25
Materials and stores on revenue account.	11·15	2·50	13·39	2·75	+25
Iron and Steel, wrought	1·30	2·21	1·34	2·34	+13
Petrol	0·23	0·79	0·24	0·89	+10
Railway materials . .	4·33	0·44	5·07	0·53	+9
Marble and stone . .	2·29	0·73	2·64	0·82	+9
Wood, unwrought . .	1·23	0·79	1·34	0·88	+9
Fruits and Vegetables .	2·71	1·28	3·75	1·36	+8
Kerosene Oil	0·79	1·46	0·82	1·52	+6
Tobacco	0·29	0·76	0·30	0·82	+6
Fodder	0·87	0·51	0·95	0·56	+5
Manures	0·14	0·11	0·19	0·13	+2
Other commodities . .	8·63	9·96	8·91	10·41	+45
<i>Decreases.</i>					
Oilseeds	2·57	3·64	2·27	2·99	—65
Salt	1·40	1·89	1·30	1·76	—13
Sugar refined and unrefined.	0·84	1·67	0·80	1·57	—10
Cotton raw and manufactured.	1·70	5·96	1·75	5·87	—9
Jute, raw	0·99	1·29	0·99	1·24	—5
Military traffic . . .	0·32	0·29	0·31	0·27	—2
Gur, Jagree, Molasses .	0·82	1·21	0·83	1·21	..
Live stock	0·16	0·50	0·16	0·50	..
TOTAL	72·95	59·67	80·65	62·40	+2,73

31. Alterations in rates and fares.—*Passenger fares.*—Apart from reductions in the passenger fares made by railways on isolated sections of their systems, chiefly in competition with road motor services, mention may be made of some of the more important changes. On the Great Indian

Peninsula Railway the bases of third class fares were revised with effect from 1st April 1934 as follows:—

<i>Previous.</i>	<i>Mail or Express.</i>	<i>Revised.</i>
	Per mile.	Per mile.
1 to 50 miles . . .	5 pies.	1 to 50 miles . . . 5 pies.
+ 51 „ 150 „ . . .	4½ „	+ 51 miles and over . . . 3 „
+ 151 „ 300 „ . . .	3 „	
+ 301 miles and over . . .	2½ „	
	<i>Ordinary.</i>	
1 to 50 miles . . .	4 pies	1 to 50 miles . . . 4 pies.
+ 51 „ 150 „ . . .	3½ „	+ 51 miles and over . . . 3 „
+ 151 „ 300 „ . . .	3 „	
+ 301 miles and over . . .	2½ „	

The revised mail fares are applicable in local booking only. In the case of through booking, the distinction between third class mail and ordinary fares was abolished.

On the Eastern Bengal Railway, third class ordinary return tickets at a fare and two thirds have been introduced as an experimental measure, the period of availability varying from 2 to 18 days according to distance.

Other Coaching traffic.—Most of the railways continued to quote special rates for fresh fruit in wagon loads, to encourage long distance movement. On the Great Indian Peninsula Railway the rates for certain selected fruits and vegetables were reduced from 28 stations to Bombay. Similar reductions were made on the Bombay, Baroda, and Central India Railway.

Goods traffic.—The following are the more important changes made:—

Rice.—The rates for rice and paddy were reduced for distances from 401 to 500 miles from 1st April 1934 and for 150 to 175 miles from 1st June 1934 with a view to stimulate the movement of Tanjore District rice and paddy to inland stations and to assist the Indian rice to compete with imported rice. Reduced rates for distances from 175 to 400 miles were already in force.

Wheat.—A rebate of 25 per cent. of the freight rates was allowed over the North Western Railway for wheat exported overseas west of Aden *via* Karachi.

Cotton.—Reductions in the rates which had been made in 1933 for cotton, full-pressed from certain stations on the Great Indian Peninsula and Bombay, Baroda and Central India Railways to Bombay, in competition with the sea route, were continued during the year. Special rates were also quoted from Coimbatore and Tiruppur to Ahmedabad, Bilimora, Navsari, Surat, Broach, Baroda, Petlad, Cambay, Nadiad and Viramgam.

Sugar-cane.—Special reduced wagon rates were introduced over the East Indian, North Western and Bengal and North-Western Railways for sugar-cane consigned to sugar factories.

Sugar.—Specially low reduced rates from sugar factory stations in the United Provinces, Punjab and Bihar have been quoted for traffic to certain stations.

32. Compensation claims for goods.—The statement below shows for each Class I Railway the amounts paid on account of compensation for goods lost or damaged during the year 1934-35 as compared with the previous seven years. The total amount paid during 1934-35 shows a slight increase over the 1933-34 figure. It will be noted, however, that the figure for 1934-35 is substantially lower than those for the other six years. In 1922-23 the amount of claims paid exceeded Rs. 120 lakhs.

Claims for goods lost or damaged paid by Class I Railways (excluding Jodhpur Railway) during 1927-28 to 1934-35.

Railways.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	PERCENTAGE TO GOODS EARNINGS.	
									1933-34.	1934-35.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
Assam Bengal	18,006	20,973	19,096	15,976	10,303	5,600	5,784	5,898	0·06	0·06
Bengal and North-Western	59,875	45,387	56,914	26,865	25,291	25,866	13,288	14,460	0·06	0·07
Bengal Nagpur	65,248	1,02,726	77,437	60,128	11,878	14,255	20,002	27,342	0·04	0·05
Bombay, Baroda and Central India.	1,57,447	1,21,175	1,07,749	96,011	46,910	31,242	22,054	29,347	0·03	0·04
Burma	42,791	34,696	18,828	22,129	11,947	9,226	6,893	11,146	0·03	0·04
Eastern Bengal	1,71,266	1,53,676	1,08,360	83,409	47,013	43,211	37,416	25,536	0·12	0·08
East Indian	2,36,368	2,27,600	1,75,501	1,10,596	90,624	72,983	52,150	32,474	0·04	0·03
Great Indian Peninsula .	1,18,333	1,45,133	1,11,392	1,15,364	1,11,645	63,868	72,883	59,183	0·09	0·07
Madras and Southern Mahratta.	80,517	95,330	1,28,478	70,612	51,557	22,641	18,953	21,902	0·04	0·05
His Exalted Highness the Nizam's State.	11,270	11,443	23,075	16,206	11,978	9,899	4,459	11,034	0·03	0·08
North Western	—36,383	99,446	78,321	1,26,939	65,900	59,117	21,346	47,248	0·02	0·05
Rohilkund and Kumaon .	7,347	7,204	5,775	2,611	4,574	1,220	2,654	2,400	0·07	0·06
South Indian	17,691	23,350	12,992	18,826	13,732	7,320	9,523	4,179	0·04	0·02
TOTAL	9,49,776	10,93,139	9,23,864	7,65,672	5,03,352	3,66,448	2,87,405	2,92,159	0·05	0·05

NOTE.—The above figures exclude the amount of credits afforded to home line departments for the loss of their goods.

CHAPTER III.

NEW CONSTRUCTION AND ENGINEERING WORKS.

33. Capital Expenditure.—At the end of March, 1935, the total capital at charge on all railways, including those under construction, amounted to Rs. 885·47 crores, of which Rs. 795·44 crores was capital at charge on State-owned Railways inclusive of premia paid in the purchase of Companies' lines. The remainder, Rs. 90·03 crores, represented capital raised by Indian States, Companies and District Boards.

The capital at charge of State-owned Railways is composed as follows :—

	£
Liability and debt incurred in purchase of Railways	150,106,630
Less liability and debt cancelled by the operation of Annuities and Sinking Funds	- 29,284,941
Net amount outstanding	120,821,689*
Rs. (omitting 000)	
Direct expenditure by Government	6,25,90,02
The above sterling figure converted into rupees	1,69,39,53*
Total	7,95,29,55
Add Provincial Railways expenditure	14,61
Grand Total	7,95,44,16

By far the greater portion of this amount, namely, Rs. 7,55,77,30,000 is Government Capital and only 1-20th or Rs. 39,66,86,000 is owned by Companies. These figures include Rs. 34·07 crores on account of capital expenditure to the end of March 1935, on strategic lines.

The total capital outlay on all railways during 1934-35 was Rs. 1·30 crores, of which Rs. 0·25 crores were spent on state-owned railways. The following statement shows how this outlay of Rs. 0·25 crores was distributed between open line works, rolling stock and new lines, similar figures being given for the previous four years and for 1913-14.

Year.	OPEN LINES.			New lines.	GRAND TOTAL.
	Works including Stores and general charges.	Rolling-stock.	TOTAL.		
	Rs. crores.	Rs. crores.	Rs. crores.		
1913-14	9·30	7·31	16·61	1·86	18·47
1930-31	5·29	3·81	9·10	4·11	13·21
1931-32	1·74	2·16	3·90	2·79	6·69
1932-33	0·05	-0·55	-0·50	0·57	0·07
1933-34	-0·45	-1·82	-2·27	0·22	-2·05
1934-35	0·78	-0·69	0·07	0·18	0·25

* £8,006 converted at the rate of £1—Rs. 13½ and the balance of £ 120,813, 683 converted at the average rate of exchange, ruling in the year in which the liabilities were incurred.

The distribution of the capital outlay in 1934-35 over the different state-owned lines is shown in the summary below :—

Railways.	OPEN LINES.			New lines.	GRAND TOTAL.
	Works, etc.	Rolling-stock.	TOTAL.		
	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.
Bengal Nagpur	0·27	0·03	0·30	0·02	0·32
Bombay, Baroda and Central India	0·15	0·08	0·23	..	0·23
Eastern Bengal	0·17	—0·07	0·10	0·01	0·11
East Indian	0·37	0·29	0·66	—0·01	0·65
Great Indian Peninsula	—0·22	—0·20	—0·42	..	—0·42
Madras and Southern Mahratta	0·12	0·02	0·14	..	0·14
North Western	—0·12	—0·91	—1·03	..	—1·03
South Indian	0·09	0·22	0·31	0·01	0·32
Other Railways	—0·07	—0·15	—0·22	0·15	—0·07
TOTAL	0·76	—0·69	0·07	0·18	0·25

34. Lines opened during 1934-35.—71·09 miles of railways were opened to public traffic during the year and consisted of :—

0·30 miles on the 5' 6" gauge.

70·79 miles on the 3' 3 $\frac{3}{8}$ " gauge.

Details regarding the sections opened are given below :—

Name of line.	Gauge.	Mileage.	Owner.	Working Agency.	Date of opening.
Original line (Madras and Southern Mahratta Railway)	5' 6"	0·30	State	Madras and Southern Mahratta Railway.	1st October 1934.
Prachi Road to Jamwala	3' 3 $\frac{1}{2}$ "	7·05	Indian State line	Junagad State Railway.	18th April 1934.
Jamwala-Delvada	3' 3 $\frac{3}{8}$ "	24·22	Do.	Do.	10th January 1935.
Morvi-Navlakhi	3' 3 $\frac{3}{8}$ "	29·93	Do.	Morvi Railway	15th December 1934.
Arasalu-Anandapuram	3' 3 $\frac{3}{8}$ "	9·59	Do.	Mysore Railway	30th April 1934.

35. Lines sanctioned in 1934-35.—During the year under review sanction was accorded to the construction of new lines totalling 101·28 miles, all on the metre gauge.

36. Lines under active construction on 31st March 1935.—At the end of the financial year 1934-35 the mileage of new lines under active construction was as follows :—

3' 3 $\frac{3}{8}$ " gauge	Miles. 138·64
Total	138·64

The lines under active construction are given in the table below, which also shows the construction agencies and the progress reached:—

Name of line.	Gauge.	Mileage actually under construction.	Working Agency.	* Progress of work (Proportion completed on 31st March 1935).
Marwar Junction Phulad	3' 3½"	15·88	Jodhpur Railway .	·67
Jhudo Pithoro	3' 3½"	64·11	Do. .	·62
Prachi Road-Kodinar	3' 3½"	16·10	Gaekwar's Baroda State Railway.	·15
Visavadar-Talala	3' 3½"	29·44	Junagad State Railway.	..
Khambli Ghat-Phulad Junction	3' 3½"	13·11	Udaipur Chitorgarh Railway.	·70
Total . . . . .	..	138·64		

37. Surveys.—Much of the investigation work undertaken by railways during the year was of the nature of a revision of the traffic and engineering estimates of lines considered in earlier years in order to bring those estimates up to date. Among the projects so examined were the Khadro-Nawabshah, Shahjahanpur-Mailani, Kashipur-Kalagarh, Chakia-Sidhwalia, Muzaffarpur-Darbhanga and the Bulsar-Dharampore railway projects.

Traffic surveys were also carried out for the projected feeder lines in the area irrigated by the Sukkur Barrage Scheme in Sind, and for a line from Badampahar to Joda which is intended to serve the iron ore deposits in the Joda area, Bengal Nagpur Railway. A detailed engineering survey was undertaken also of the Jhudo-Pithoro Railway in Sind, which project was subsequently sanctioned for construction.

38. Important lines under construction.—The following is a brief account of the lines which were under construction during the year:—

(i) *Prachi Road-Kodinar Railway.*—The work of construction of this railway was started by the Baroda State in January 1935. Land within Baroda State was acquired but land in Junagad State was still under acquisition. The railway is expected to be opened for public traffic in May 1936 provided acquisition of land is not delayed.

(ii) *Talala-Visavadar Railway.*—On the completion of the Prachi Road-Una-Delvada section of the Veraval-Delvada Railway, the construction of the Talala-Visavadar section, 29·44 miles long, of the Talala Dhari extension was taken in hand in March 1935.

(iii) *Marwar Junction to Phulad Railway.*—The construction of this metre gauge line was sanctioned in January 1935. It was undertaken by the Jodhpur Railway and is expected to be opened to goods traffic in June 1935, and for all kinds of traffic in about January 1936.

(iv) *Nathdwara-Sursinghji ka Gudha Railway.*—The last section of this Railway, Khambli Ghat to Phulad is under construction. It is expected that the construction of this section will be completed and the line opened for traffic in January 1936.

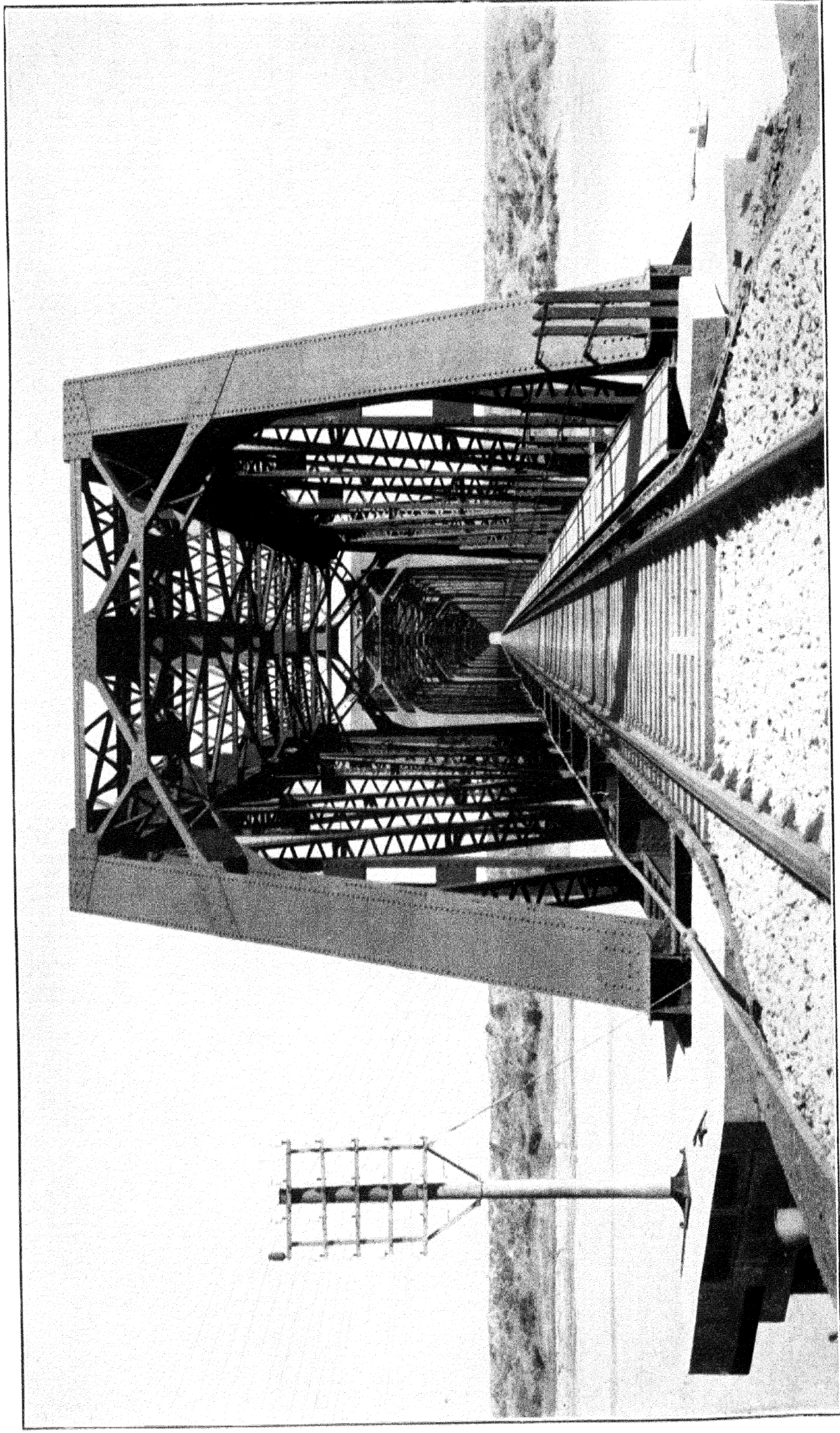
(v) *Agastiyampalli Point Calimere Railway Extension.*—This line, the survey of which was mentioned in last year's report, is a small extension, 5½ miles long, of the Tiruturaipundi-Agastiyampalli section of the South Indian Railway to serve the village of Kodikarai near Point Calimere, and to afford

* ·30 signifies that $\frac{3}{10}$ th of the work has been done.

·50 signifies that half the work has been done.

1·00 signifies completion of the work.

GREAT INDIAN PENINSULA RAILWAY.



New Chambal Bridge Superstructure. Standard H. M. Loading 1934.

access to a tract over which, due to seasonal floods and the sandy nature of the soil, it is more economical to construct and maintain a railway rather than a road. Preliminary arrangements were taken in hand but active construction, it is expected, will commence only in April 1935.

(vi) *Jhudo-Pithoro Railway*.—The construction by the Jodhpur Railway Administration, on the metre gauge, of a line of railway from Jhudo to Pithoro, a distance of about 64 miles, was sanctioned in August 1934. The line, which has been located so as to distribute the benefits of rail transport as evenly as possible over a large tract of country, is being constructed fundamentally for the movement of the increased volume of agricultural produce grown within the area as a result of the Lloyd Barrage Irrigation Scheme. The completion of the line will convert the Mirpur Khas-Jhudo branch into a complete loop of 114 miles leaving and joining the main line at Jamrao and Pithoro respectively. The line is under construction and it is expected that it will soon be ready for opening to public traffic.

39. Important lines opened during 1934-35.—Of the lines opened during the year, the following may be specially mentioned :—

Prachi Road-Una-Delvada section of the Junagad State Railway.—31·27 miles.—This railway serves a part of the country which was almost inaccessible for the greater part of the year. It was completed and opened for public traffic on 10th January 1935.

40. Important New Works.—*Meghna Bridge, between Ashuganj and Bhairab Bazar, Assam Bengal Railway.*—The importance of a bridge over the Meghna river near Ashuganj as a means of communication between Assam and Eastern Bengal, had long been recognised, but had to be held in abeyance owing to shortage of funds. The matter, however, came into prominence during the flood season of 1934 when as a result of the Gauhati branch being closed for several weeks, traffic was diverted to the Ashuganj-Bhairab Bazar route and very severely taxed the capacity of the ferry. The position was further aggravated by a solid mass of water hyacinth which came down the river and considerably prolonged the time normally required for crossing. As the circumstances clearly showed that the possibility of a breakdown in the ferry arrangements was by no means remote and the estimates showed that the undertaking was financially justified, it was decided that there should be no further delay in providing a bridge and a scheme was accordingly decided on at a cost of about Rs. 56 lakhs to be taken in hand during the coming year.

41. Open Line Improvements.—(i) *Permanent Way Renewals.*—Of the permanent way renewal works sanctioned during the year, special mention may be made of re-sleepering 38·2 miles of wooden sleeper track with steel trough sleepers between Ramganj Mandi and Kotah on the Bombay, Baroda and Central India Railway. This forms the third and last item of the re-sleepering programme for the 123 mile section of the main line north of Ratlam, which was mentioned in previous reports. On the Bengal and North-Western Railway, as a result of an investigation into the condition of the 50-lb. steel rails in the main line from Katihar to Gorakhpur, it was decided to enter upon a regular programme of relaying with 60-lb. steel rails and sanction was accorded to relay as a first instalment 32·5 miles between Sonapore and Chupra. On the Madras and Southern Mahratta Railway the existing 41½-lb. rails on the Guntakal-Mysore section will be relaid with 2nd hand 75-lb. rails released from broad gauge sections. The intention is to relay also the remaining section of the line up to Yesvantpur using 60-lb. new rails within the Mysore State.

(ii) *Permanent retired alignment of the Bengal and North-Western Railway main line between Karagola and Kursela.*—Owing to the encroachment of the Kosi river which had come to within 327 feet of the main line of the Bengal and North-Western Railway between Karagola and Kursela stations and was also a source of danger to the bridge over the Kosi, it was considered necessary to retire the alignment to a safe distance from the river so as to remove the danger and maintain railway communication.

The work was taken in hand at a cost of Rs. 5,46,334 so as to have it completed before the following monsoons.

(iii) *Katareah Fender, Bengal and North-Western Railway.*—Due to the continued encroachment of the Kosi river towards the west approach of the main line to the Kosi bridge between Katareah and Kursela stations, it was considered necessary to construct a substantial protective apron on the north side of the embankment which is the place at which the attack will be most severe if the Kosi river cuts away the remaining 520 ft. between its 1933 bank and the exposed edge of the proposed apron. The work was accordingly taken in hand at an estimated cost of Rs. 2.44 lakhs.

(iv) *Remodelling of the East Indian Railway Workshops at Jamalpur.*—The existing workshops at Jamalpur were constructed about 1862, and have since been added to or altered to meet subsequent requirements. The layout, as it now stands, has many defects, the accommodation and facilities in the Erecting and other shops are very inadequate, due primarily to the narrow span of the bays which prevents the free movement of material in the shops, and the want of adequate crane power in the Erecting shop has also been a serious drawback. While the question of suitably remodelling the shops has been under consideration for some time past, it came into prominence a few years ago when the introduction of the first lot of the new standard engines presented difficulties in handling with the existing 30-ton erecting shop cranes.

Preliminary plans for remodelling the shops were prepared in 1921-22 and subsequently in 1925 but in view of the impending investigations by the State Railways Workshops Committee, their consideration was deferred. The proposals were subsequently examined by the State Railways Workshops Committee, when they visited Jamalpur in 1925-26.

In paragraph 315 of that Committee's report the necessity for extensive remodelling was admitted. After that a number of large standard locomotives were received with which it was impossible to deal in the existing Jamalpur shops. Were it not for the fact that the new Locomotive Erecting shop in the Locomotive Workshops at Lucknow is capable of dealing with these heavier locomotives the provision of new shops at Jamalpur could not have been delayed until the present time. As, however, the heavier locomotives are employed on the eastern sections of the railway the solution of repairing these at Lucknow can only be considered as a temporary expedient on account of the unnecessary light mileage and consequent delay involved in sending them from districts near Calcutta to Lucknow for repairs.

Consequently a scheme for remodelling the workshops was prepared by the Railway Administration in the year 1929 for inception when the financial situation permitted. This scheme was in abeyance till 1932 when, in consultation with the Railway Administration, the Railway Board considered that a thorough investigation into the question of transferring the existing Locomotive shops from Lucknow and their re-erection at Jamalpur was necessary for the following reasons:—

- (i) The growing necessity at Jamalpur for the earliest possible provision of shop and crane facilities for dealing with the heaviest classes of Locomotive engines, Boilers and Tenders, together with the necessity on the grounds of economy, of concentrating at Jamalpur the greatest possible amount of heavy repair work, by reason of the more favourable labour conditions prevailing there, and of bringing such heavy maintenance work into closer contact with the manufacturing shops which are located at Jamalpur.
- (ii) The less favourable labour conditions at Lucknow and the lack of close contact with the manufacturing shops, rendering the cost of periodical repairs somewhat higher than those obtaining at Jamalpur, with the result that the large and modern shops at Lucknow cannot be fully employed to the best advantage.

In accordance with the decision mentioned above a revised scheme was prepared by the East Indian Railway Administration which involves the dismantlement of the major portion of the Locomotive repair shops at Lucknow, their re-erection at Jamalpur, and the retention at Lucknow of certain shops as an auxiliary locomotive works. The Railway Board were satisfied that the scheme as prepared by the East Indian Railway was sound and remunerative and accordingly sanctioned it in May 1934. The scheme, which is in progress, is expected to be finished in three years.

(v) *Remodelling of Carriage and Wagon Shops at Jhansi (Great Indian Peninsula Railway).*—The transfer of Locomotive repair work from Jhansi to Parel is now complete. It is, therefore, proposed to carry out certain alterations to the present Locomotive workshop building and modifications to the yard, to make it suitable for a Carriage and Wagon Repair Shop for repairing 4 coaching and 20 wagon units *per diem*.

Carriage and Wagon repairs are now carried out at Jhansi in the open on a number of short lines which make progress difficult. The present outturn of four coaching and twelve wagon units *per diem* at Jhansi fully occupies the repair yard leaving no room for satisfactory extension. The proposed scheme provides for the alteration of the Locomotive buildings, vacated on account of the transfer of Locomotive repairs to Parel, to serve as Carriage and Wagon repair shops with a convenient layout for the expeditious movement of stock under repairs and equipped with plant such as overhead cranes, electric trucks and for the expeditious outturn of 4 coaching and 20 wagon units *per diem*. The scheme is capable of expansion without extra cost to double the outturn of coaching stock and at small additional cost to increase the outturn of wagons by 33 per cent. The scheme, which is estimated to cost Rs. 4,34,635, was sanctioned during the year under review, and includes provision for the following works :—

- (1) Permanent way, points and crossings and ballast.
- (2) Alterations to existing Shop Columns and providing new stanchions.
- (3) 85-ton traverser complete.
- (4) Removing and re-erecting machines, fencing, etc., in Mill Wright, Fitting and Machine Shops, providing additional machines and cranes, etc., in Wheel Shop and examining pit in Mill Wright Shop.
- (5) Concrete roads for electric trucks.
- (6) Ash and examining pits and hydrants.
- (7) Rearrangement of Crane Girders and installing additional cranes.

The work is expected to be finished within two years.

(vi) *Remodelling Delhi Yard.*—The existing yard at Delhi had not been materially improved during the past twenty years and was very cramped and unsuitable for present day conditions. Remodelling of the Delhi main station was, therefore, sanctioned in September 1934. The main works to be undertaken in connection with the project are the lengthening of passenger platforms, involving alterations in yard arrangements which are also required in order to give increased safety in operation by the introduction of track circuiting, provision of power signalling and installation of new battery charging plant. The scheme will take about two years to complete.

(vii) *Shoranur-Cochin Railway conversion.*—The conversion of this line into broad gauge was completed during the year and the line was opened to traffic on the 21st October 1934. With the opening of the line, goods can now be despatched to the new harbour at Cochin without break of gauge at Shoranur.

The conversion scheme also necessitated the remodelling of the junction arrangements at Shoranur, which were taken in hand at an approximate cost of Rs. 6.75 lakhs

42. Hardinge Bridge, Eastern Bengal Railway.—A short description of the trouble experienced at this important bridge and of the protective measures undertaken on the advice of Sir Robert Gales, was given in last year's report. As the scheme embodied in Sir Robert Gales' recommendations for the further protection and permanent security of the bridge involved the expenditure of a very large amount of money, a committee of engineers including Irrigation experts known as the Hardinge Bridge Committee was formed to further investigate the situation. After detailed inspections of the river and due deliberation, this committee came to the conclusion that there were still certain works for the protection of the bridge during the following flood season, which should be done immediately, but that the formulation of the final scheme for permanent protection should be postponed till after the result of certain experiments to be carried out with a working model of the river and the protection works by the Research division of the Bombay Public Works Department at Poona, were known. This will probably be some time after the next flood season, 1935.

The recommended works, as also certain repair works, were taken in hand during the year, and measures were put in hand also to ensure the prompt introduction of a ferry service over the Ganges if the danger to the bridge during the flood season proved sufficiently great to necessitate it.

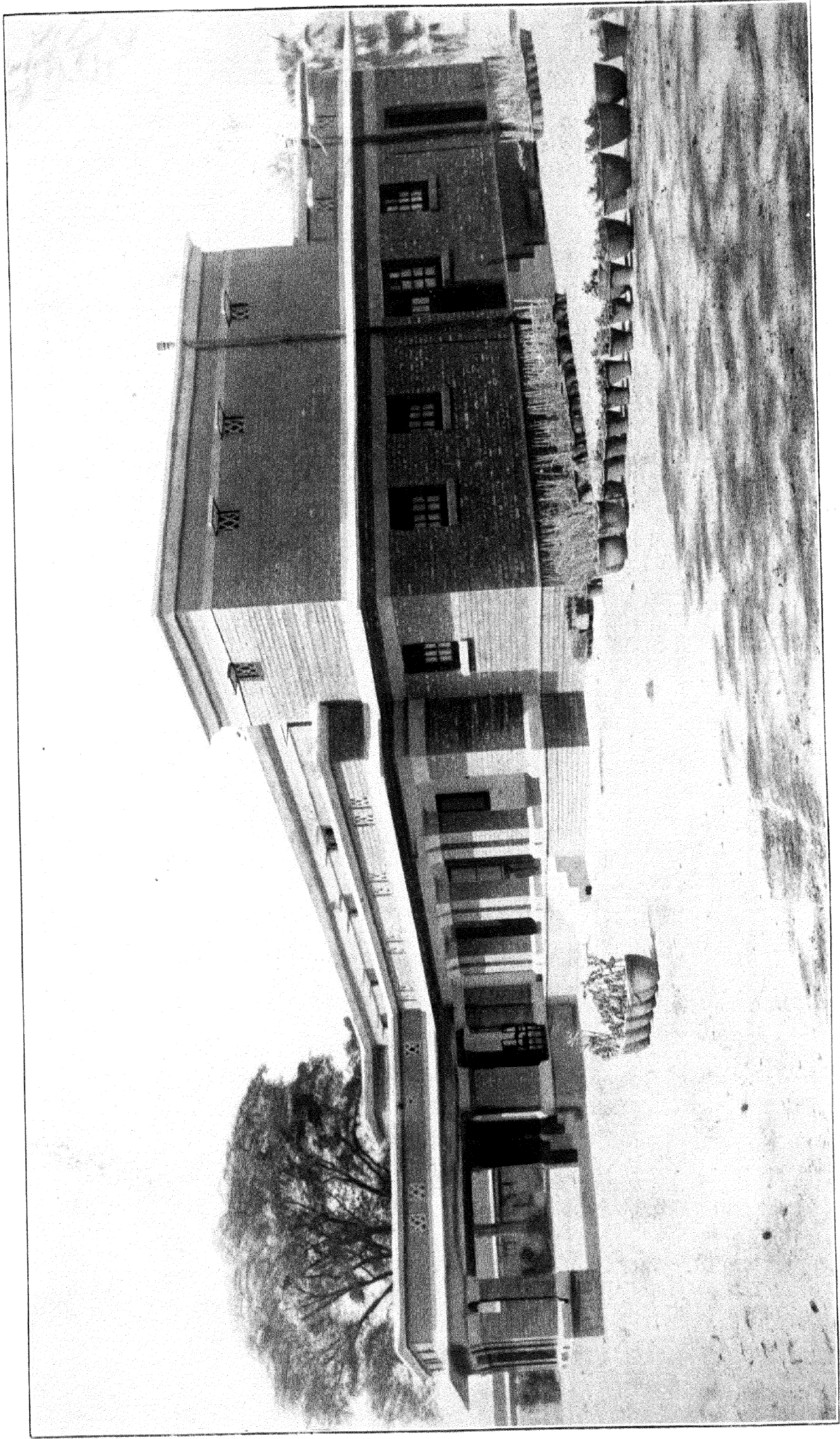
43. Quarters for Subordinate Staff.—The statement below shows the additions made during the year to the number of quarters available for subordinate and inferior staff on the various railways :—

Assam Bengal Railway	40
Bengal and North-Western Railway	120
Bengal Nagpur Railway	172
Bombay, Baroda and Central India Railway	23
Burma Railways	13
Eastern Bengal Railway	87
East Indian Railway	342 <i>plus</i> 300 rooms temporary quar- ters at Jamal- pur.
Great Indian Peninsula Railway	2
Madras and Southern Mahratta Railway	36
North Western Railway	168
Rohilkund and Kumaon Railway	8
South Indian Railway	201
Jodhpur Railway	64 (of these 24 are on the Indian State section.)
His Exalted Highness the Nizam's State Railway	94

Conditions were rather exceptional in the areas visited by the disastrous earthquake of 15th January 1934 and account for the relatively greater number provided, notably on the Bengal and North-Western and East Indian Railways. On the South Indian Railway, however, the figures include the balance of the previous year's sanction.

The question of providing quarters for the staff of the Railway Clearing Accounts Office and certain other Railway offices located in Delhi, also received consideration, but no final decision could be come to, owing mainly to difficulties in securing a suitable site.

EAST INDIAN RAILWAY.



Type of Senior Scale Officer's Bungalow built at Jamalpur to replace those destroyed in the earthquake 1934.

CHAPTER IV.

TRANSPORTATION AND WORKING.

44. Statistics.—The best index to the volume of business handled by railways is passenger miles as regards passenger traffic and net ton miles as regards goods traffic: to arrive at these figures the total number of passengers and tons of goods carried are multiplied by the number of miles over which they are moved. The following table shows that the amount of traffic thus expressed which Class I Railways had to carry, increased during the year, as compared with the previous two years. The figures of net ton miles given do not include the mileage incurred by purely departmental trains but this mileage only represents about 3 per cent. of the total.

Particulars.	In thousands.			
	1932-33.	1933-34.	1934-35.	Percentage of increase (+) or decrease (—) compared with 1933-34.
Passenger miles	16,850,772	16,384,713	16,987,135	+ 3·68
Net ton miles	16,632,652	18,043,937	19,546,967	+ 8·33

Service performed.—The following table shows the number of train miles incurred in carrying the above mentioned traffic. Passenger train miles show an increase of 2·99 per cent. on the broad gauge and 1·65 per cent. on the metre gauge and a decrease of 2·15 per cent. on the narrow gauge. The figures of goods train miles show an increase of 6·52 per cent. on the broad gauge, 4·96 per cent. on the metre gauge and 1·10 per cent. on the narrow gauge. Full details of train and engine miles of Class I Railways are given in statement No. 17 of Volume II and that of class II and III Railways in statement No. 37 :—

(Figures in thousands.)

Particulars.	CLASS I RAILWAYS,											
	BROAD GAUGE.				METRE GAUGE.				NARROW GAUGE.			
	1932-33.	1933-34.	1934-35.	Percentage of variations with 1933-34.	1932-33.	1933-34.	1934-35.	Percentage of variations with 1933-34.	1932-33.	1933-34.	1934-35.	Percentage of variations with 1933-34.
Passenger (including proportion of mixed) train miles.*	62,498	62,468	64,337	+ 2·99	30,354	30,196	30,693	+ 1·65	2,301	2,323	2,273	— 2·15
Goods (including proportion of mixed) train miles.*	35,799	37,712	40,172	+ 6·52	18,217	18,947	19,837	+ 4·96	1,559	1,548	1,565	+ 1·10

* Includes mileage of electric locomotive trains.

In addition to the train services mentioned above a large amount of directly unproductive or "Other" engine miles, viz., shunting, light and assisting had necessarily to be run. During the year under review, however, this mileage was equivalent to only 16 per cent. of the total engine miles (including departmental), as compared with 17 per cent. in the preceding

year. The total departmental train and engine mileage, which is also not directly productive, formed 4 per cent. of the total engine mileage including departmental, as compared with 5 per cent. in the previous year. As the shunting miles on railways form the greater proportion of unproductive mileage, the following table has been prepared to show the ratio of shunting miles per 100 train miles on the passenger and goods services of Class I Railways :—

Particulars.	BROAD GAUGE.				METRE GAUGE.			
	1932-33.	1933-34.	1934-35.	Percentage of variations with 1933-34.	1932-33.	1933-34.	1934-35.	Percentage of variations with 1933-34.
Shunting miles per 100 train miles (Passenger and proportion of mixed).	5.51	5.37	5.03	-6.33	5.35	5.43	5.07	-6.63
Shunting miles per 100 train miles (Goods and proportion of mixed).	37.0	35.8	35.4	-1.12	31.6	31.9	32.6	+2.19

Engines.—The work done by engines is expressed by the figure “engine miles per engine per day”. Based on the number of engines on the line, this figure shows an increase on the broad gauge from 61 to 65 and on the metre gauge from 62 to 65. Based on the number of engines in use, the number of engine miles per engine per day increased from 107 to 108 on the broad gauge and from 100 to 102 on the metre gauge. The percentage of engines under or awaiting repairs in mechanical and transportation workshops increased from 16.9 to 17.4 on the broad gauge, while there was a slight decrease on the metre gauge, *viz.*, from 14.3 to 14.1.

45. Speed of goods trains.—The average through speed of goods trains is calculated on the total time taken by a train from the start to the finish of its run inclusive of stops *en route*. During the year under review the average speeds on Class I Railways remained substantially the same as in the previous year. The actual figures for 1934-35 were 11.6 miles per train engine hour on the broad gauge, and 11.0 on the metre gauge, as compared with 11.7 and 11.0 respectively for the previous year. In statement No. 20 of Volume II detailed particulars are given for each railway.

46. Loads of goods trains.—The average net or freight load of broad gauge goods trains on Class I Railways during the year under review was the same as during the previous year, *i.e.*, 391 tons (steam). On the other hand, the figure for metre gauge lines on Class I Railways increased from 168 tons in 1933-34 to 174 tons in 1934-35. Statement No. 23 of Volume II contains the figures for each railway.

The main index figure of goods train working, *i.e.*, “net ton miles per engine hour” again showed an improvement: being 1,946 for the broad gauge and 891 for the metre gauge in 1934-35 as compared with 1,927 and 877 for the broad and metre gauge respectively in 1933-34.

47. Wagon Usage.—The extent to which available wagon stock is utilised may be expressed either in the average number of miles run per wagon per day (both loaded and empty wagons being taken into account) or in the average number of net ton miles performed by a wagon per day. Both these statistical figures, however, indicate the work done by the total number of wagons on railways and not only by the wagons actually in use, as all empty wagons are also taken into account, whether actually in use or stabled in sidings during the period that they are in excess of traffic.

requirements. The following table shows these two results for 1934-35 compared with the previous year:—

	Wagon miles per wagon day.		Net ton miles per wagon day.	
	1933-34.	1934-35.	1933-34.	1934-35.
Broad gauge	32·5	34·8	283	308
Metre gauge	26·5	28·2	134	147

The average percentage of unserviceable wagons in mechanical and transportation workshops and sick lines to the total number of goods wagons fell from 10·53 to 9·31 on the broad gauge while on the metre gauge the percentage increased from 2·46 to 2·56.

Passenger vehicles.—Similar figures with regard to repairs of passenger vehicles show an increase from 11·25 to 11·96 on the broad gauge and from 8·43 to 8·52 on the metre gauge.

Turning to individual railways, some of the principal features of the year's transportation working are as follows:—

Bengal Nagpur Railway.—The wagon miles per wagon day and net ton miles per wagon day advanced from 27·9 and 265 in 1933-34 to 32·8 and 321 in 1934-35, respectively. The net ton miles per engine hour increased from 1,590 in 1932-33 and 1,782 in 1933-34 to 1,830 in 1934-35. The shunting miles per 100 goods train miles fell from 49·6 in 1932-33 and 48·4 in 1933-34 to 44·8 in 1934-35.

Burma Railways.—The engine miles per day per engine in use advanced from 107 in 1932-33, 108 in 1933-34 to 112 in 1934-35. The average wagon load increased from 7·66 in 1932-33, 7·87 in 1933-34 to 8·29 in 1934-35. The wagon miles per wagon day rose from 25·5 in 1932-33, 30·1 in 1933-34 to 32·3 in 1934-35.

Bombay, Baroda and Central India Railway.—The net ton miles per engine hour advanced from 2,061 to 2,191 on the broad gauge and 1,124 to 1,193 on the metre gauge.

Eastern Bengal Railway.—The wagon miles per wagon day advanced from 22·7 to 25·0 on the broad gauge and from 22·9 to 24·7 on the metre gauge. The net ton miles per wagon day increased from 161 to 178 on the broad gauge and from 88 to 103 on the metre gauge. The engine miles per day per engine in use and on line advanced from 107 and 69 to 120 and 83 on the broad gauge indicating a more intensive use of locomotive power.

East Indian Railway.—The net ton miles per goods locomotive day on line advanced from 15,147 in 1933-34 to 16,268 in 1934-35.

Great Indian Peninsula Railway.—The average freight load per train and the net ton miles per wagon day increased from 371 and 374 in 1933-34 to 376 and 386 in 1934-35, respectively.

Madras and Southern Mahratta Railway.—The wagon miles per wagon day and net ton miles per wagon day on the broad gauge advanced from 36·6 and 281 in 1933-34 to 42·4 and 333 in 1934-35, respectively.

His Exalted Highness the Nizam's State Railway.—The net ton miles per engine hour increased from 1,586 to 1,798 on the broad gauge and from 961 to 1,064 on the metre gauge. The wagon miles per wagon day rose from 35·0 to 38·8 on the broad gauge and from 29·7 to 33·1 on the metre gauge.

North Western Railway.—The net or freight load per goods train advanced from 300 in 1933-34 to 317 in 1934-35. The shunting miles per 100 passenger train miles fell from 8·02 in 1933-34 to 6·86 in 1934-35.

South Indian Railway.—The net train load rose from 236 to 243 tons on the broad gauge and on the metre gauge sections from 152 to 160 tons under steam and from 141 to 168 tons under electric locomotive services

respectively. The net ton miles per wagon day advanced from 203 to 237 on the broad gauge and from 99 to 105 on the metre gauge.

48. Punctuality of passenger trains.—The following table shows the percentage of passenger trains not losing time to total number of trains run during 1934-35, as compared with 1933-34, on Class I Railway :—

	All trains (including electric multiple unit trains).	Mail and important through trains.	Mixed trains.	Suburban trains.	Other passenger trains.
<i>Broad Gauge.</i>					
1934-35	88.1	82.9	85.7	89.4 95.5*	85.3
1933-34	87.0	83.0	84.3	89.5 93.4*	84.5
<i>Metre Gauge.</i>					
1934-35	88.0	87.2	87.0	95.9 97.3*	85.8
1933-34	87.2	86.4	86.5	95.7 91.1*	85.2

* Bombay, Baroda and Central India, Great Indian Peninsula and South Indian Railways' electric multiple unit trains.

It will be seen that on the broad gauge, although the percentage of mail and important through trains and suburban (steam) trains not losing time shows a slight fall, there has been an appreciable improvement in the running of all other passenger trains. On the metre gauge, there has been a substantial improvement in the running of all passenger trains and this has been particularly marked in the suburban (electric) services.

49. System of Ticket Checking.—(i) *Assam Bengal Railway.*—The only important change during the year was a re-arrangement of the head-quarter stations of the travelling ticket examiners, so as to provide for their better distribution over the system. The establishment was also increased by the addition of five travelling ticket examiners.

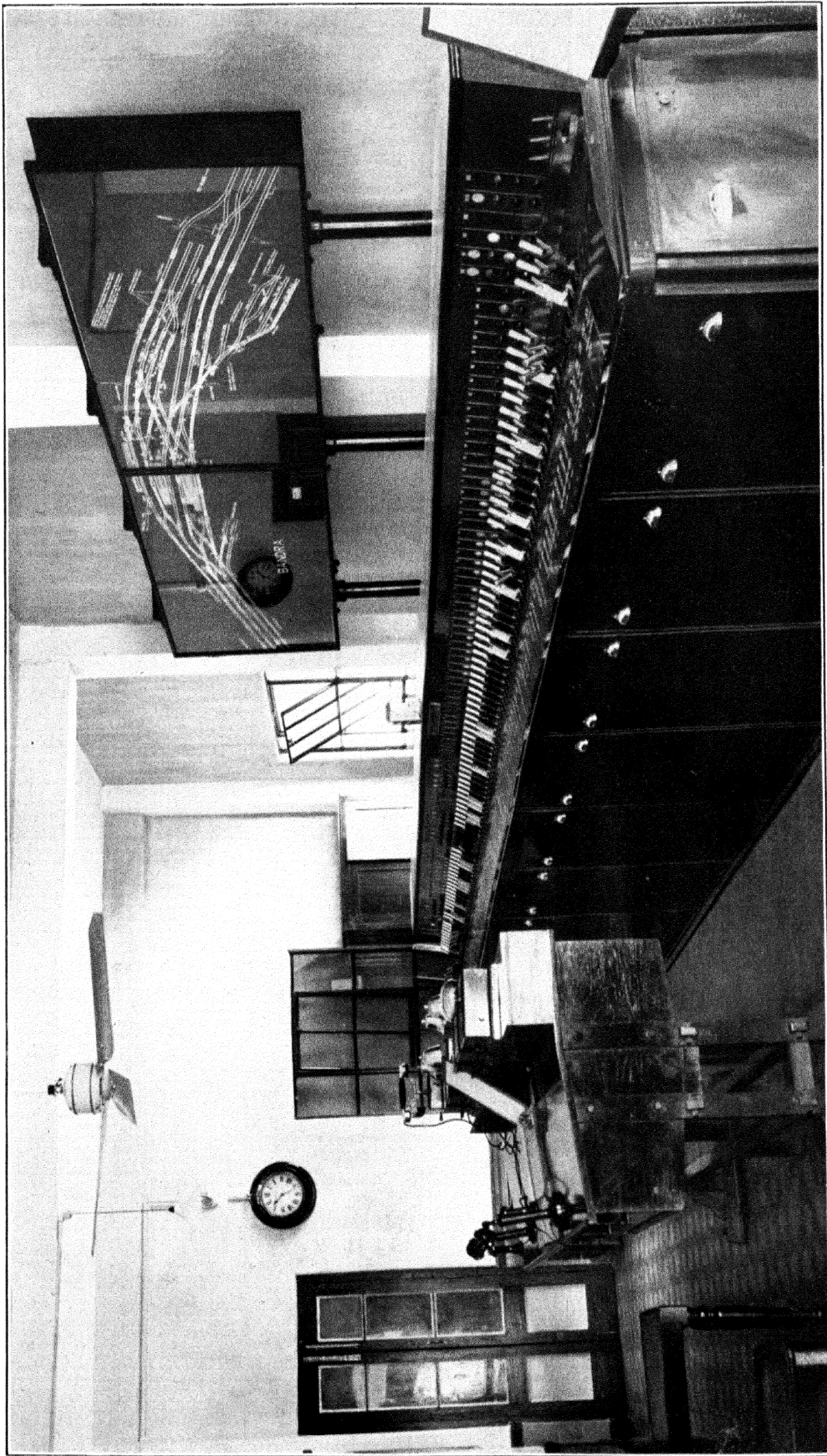
Intensive checks made over selected sections of the line showed that considerable revenue is still being lost.

(ii) *Bengal and North-Western Railway.*—The travelling ticket checking staff is divided into ten sections. There are three supervisors who are responsible for seeing that the work of the travelling ticket examiners is efficiently carried out. One special gang is utilised on sections where it is suspected that systematic fraud is prevalent. This gang is sent during *melas* to help the regular staff at stations and on trains.

(iii) *Bengal Nagpur Railway.*—The traffic department previously controlled the collection and check of tickets at stations and from May 1934 it also took over from the Audit department the control of ticket checking in trains and the organisation was placed under the control of an Assistant Commercial Officer. The strength of the travelling ticket checking staff is 134. Seven temporary travelling ticket collectors were appointed during the year to cope more effectively with the illicit travelling prevalent in the Howrah-Machada suburban section and the extra staff paid for itself.

Arrangements were also made with certain local Governments for the attendance of magistrates at important stations so that cases instituted under the Indian Railways Act might be more expeditiously dealt with. A special batch of travelling ticket inspectors made a thorough check of trains in areas adjacent to stations at which these magistrates sat, with very satisfactory results. Apart from the check of tickets by travelling ticket inspectors, the practice was continued of making surprise checks by staff temporarily available organised by District Commercial Officers and District Transportation Officers.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY.



All-electric power signal interlocking lever frame with illuminated signal and track diagram and Block Signalman's table at Bandra Station.

(iv) *Burma Railways*.—There has been no change in the system of checking tickets. Owing to the length of the section which was previously given to the upper flying squad, an intensive check of trains could not be made on the Mu-Valley, and an additional flying squad was therefore constituted with headquarters at Kanbalu, and the sections of the other three squads were readjusted.

(v) *East Indian Railway*.—The system of checking tickets and their collection, as recommended in the Moody-Ward Report has been continued. The following additional steps were taken to prevent ticketless travel:—

- (a) twenty-four hour concentrated surprise checks at stations under the supervision of responsible officials;
- (b) issue of platform tickets at stations where they were not previously issued;
- (c) check of ice-vendors' compartments, as a result of which a number of ticketless passengers and unbooked parcels were detected;
- (d) check of workmen's trains;
- (e) special checks carried out under the supervision of the Accounts and the Watch and Ward Departments;
- (f) direction of holders of short journey tickets at certain stations into a special compartment to ensure that they detrained at destination;
- (g) removal of mendicants and unauthorised persons from railway premises;
- (h) posting of porters or other available station staff on the off-side of trains and at the end of platforms to prevent passengers leaving by unauthorised exits;
- (i) the co-operation of District Magistrates led to more Railway Magistrates being appointed to deal expeditiously with railway cases;
- (j) check of trains in the presence of Railway Magistrates.

A considerable number of passengers, however, continued to travel without tickets and the question of strengthening the ticket checking staff was taken up.

(vi) *Eastern Bengal Railway*.—There was no substantial change in the system of ticket checking. The "Alternate Crew Check" on the suburban section and the "Moody-Ward" system on other sections were continued as in the previous year. Four special inspectors were, however, appointed. The appointments made during the year of special Railway Magistrates at Katihar and Kishanganj to deal with cases instituted under the Indian Railways Act will facilitate disposal of such cases.

(vii) *Great Indian Peninsula Railway*.—Travelling ticket inspectors supervise and check the work of ticket collectors at stations and also travel over their respective lengths to collect excess fares and penalty charges from passengers without tickets. They also conduct when necessary the prosecution of passengers travelling without proper tickets.

A permanent flying squad is employed on the Bombay Division. Flying squads are similarly arranged by Divisional Traffic Managers, whenever possible.

The Crew system of checking tickets was continued on the sections Bhusaval-Harda and Bhusaval-Badnera.

(viii) *Jodhpur Railway*.—Besides the usual checks applied by the travelling ticket examiners the following measures and precautions were adopted:—

- (a) special vigilance at junction stations where illicit traffic mostly originates;
- (b) watching off-sides of trains at halts;
- (c) watching short journey ticket holders;

(d) getting the station staff at small stations, where the staff cannot prevent mendicants from entraining without tickets, to draw the attention of the travelling staff to such persons.

(ix) *Madras and Southern Mahratta Railway*.—Travelling ticket examiners under the control of District officers work to a programme of check of tickets in running trains. They are also used to augment the ticket collecting staff at stations on special occasions, such as *melas*, etc.

Stationary and travelling ticket examiners are employed as a special squad to deal with the exceptional conditions prevalent in the Madras suburban area. Headquarters travelling ticket examining squads are employed for short periods over selected sections to check all trains in the area.

Certain subordinates of other departments have been invited to co-operate in detecting and handing over ticketless travellers with satisfactory results.

(x) *His Exalted Highness the Nizam's State Railway*.—The check on suburban trains of both gauges was performed by a crew of six to seven travelling ticket collectors under the direct supervision of travelling ticket inspectors specially selected for the work, all trains being checked every day.

During the first fortnight of each month, travelling ticket inspectors headquartered at Purna were formed into batches each consisting of two for the purpose of making surprise test checks on all trains, according to a confidential chart, each batch concentrating on a particular section. During the second fortnight of each month the travelling ticket inspectors worked singly to a roster which provided for a daily check of certain important trains and others at frequent intervals.

At Secunderabad two batches each consisting of two travelling ticket inspectors made surprise test checks on all trains (working to a confidential chart) throughout the year, one batch concentrating on the broad gauge, the other on the metre gauge. The remaining travelling ticket inspectors at Secunderabad worked to a roster which provided for a daily check of important trains at frequent intervals. The arrangements made last year in co-operation with the local Government for magistrates occasionally to travel over the line accompanied by a special batch of travelling ticket inspectors and police so that those detected without tickets might, where necessary, be placed immediately before a magistrate were continued.

(xi) *North Western Railway*. As a special measure groups of special ticket examiners were split into sub-groups of two men (and in some cases one) in order to check a larger number of stations. On the Karachi, Quetta and Rawalpindi Divisions the experiment of providing special ticket examiners with spring balances to weigh passengers' luggage was tried and the introduction of similar measures on other divisions is being considered.

The United Provinces Government agreed to detail magistrates at certain railway stations to try cases of ticketless travelling and accordingly a magistrate was detailed to sit at Meerut city. This had the effect of reducing the number of cases detected in that area.

(xii) *Rohilkund and Kumaon Railway*.—The duties of travelling ticket checkers are changed weekly. Principal trains are checked almost daily and particular attention is paid to the checking of branch line trains.

One of the two important changes made in the procedure adopted hitherto has been a series of surprise raids in collaboration with Railway Magistrates and their staff. These checks proved efficacious both in the recovery of railway dues and a reduction in the number of persons travelling without proper tickets.

Three additional travelling ticket collectors and one travelling ticket inspector were appointed to serve as a flying squad and make surprise checks under instructions from an Assistant Traffic Superintendent in charge.

(xiii) *South Indian Railway*.—197 travelling ticket examiners and 14 travelling ticket inspectors were utilised for checking trains. 20 travelling

ticket examiners and 4 travelling ticket inspectors were retained at headquarters, the remainder being distributed on the six districts. The twenty travelling ticket examiners at headquarters were divided into four squads, but two of these squads were withdrawn to make an intensive check of trains on sections round Trichinopoly Junction. Passengers detected travelling without tickets on these sections and refusing to pay the excess fare due were immediately produced before a Special Magistrate at Trichinopoly Junction.

50. Road Motor Competition.—The question of co-ordinating the development of road and rail transport facilities has continued to receive the attention of the Government of India. In the report for 1933-34, it was stated that the Government of India were in correspondence with local Governments as to the action to be taken to implement the resolutions adopted at the Rail-Road Conference held in April, 1933. This correspondence led to a meeting being held in January, 1935, of a body called the Transport Advisory Council which it is hoped will be a permanent institution. It consists of the members of the Governor-General's Executive Council in charge of matters relating to communications and representatives from each Governor's province, ordinarily a Minister, each with one or two technical advisers. At the meeting referred to, the Council formulated a precise statement of policy to secure the co-ordinated development of road and rail transport. This statement has since been placed before local Governments with a view to its adoption by them. In addition to these steps to secure a sound policy in the future, the Government of India have always administered the Road Account, which at present forms the chief source of funds for the development of roads, in a manner designed to avoid undesirable competition between motor and railway traffic.

Meantime, the question of taking steps to meet the competitive conditions created by the running of road motors has continued to receive close attention on all railways. Brief particulars indicating the position on certain principal railways and of what has been done during the year under review are given in the following paragraphs.

(i) *Assam Bengal Railway.*—This railway is not subject to competition from road motors to any great extent, but the improvement of roads and provision of road bridges, specially in Assam, are creating a position which will need careful attention. The principal development during the year was the growth of road competition between Karimganj and Sylhet Bazar and on the Chittagong-Dohazari line. The number of trains on these sections was increased to meet this competition.

(ii) *Bengal and North-Western Railway.*—Competition is not serious at present, principally on account of the comparatively low fares charged and the poor condition of roads running parallel to or short-circuiting railway lines through the greater part of the system.

(iii) *Bengal Nagpur Railway.*—Reduced third class single journey tickets between certain stations on the Satpura narrow gauge system and on the Dhamtari Railway were introduced, with satisfactory results.

Special rates lower than the half parcels rates from certain stations on the Ranchi-Lohardaga section to Howrah were quoted for vegetable and fresh fruit traffic which it was found was being diverted to the road.

(iv) *Bombay, Baroda and Central India Railway.*—No new measures were taken to meet road competition as regards passenger traffic, but the effect of measures taken in previous years was carefully watched and it was found that competition had decreased to a certain extent on some sections.

Competition as regards parcels traffic has been experienced on the Bombay suburban section, and action has been taken by local canvassing and the placing of a motor lorry service at the disposal of the trade to meet this competition.

(v) *Burma Railways.*—(a) The co-ordinated bus services between Kyaukpadaung and Chauk and Kyaukpadaung and Yenangyaung continued

to function throughout the year, and the parcels traffic continued to improve on these services. An agreement was entered into with the Tavoy Motor and Cycle Company, for the carriage of railway parcels between the rail head at Ye and Tavoy to provide through booking between all stations on the railway and Tavoy. The traffic on this route has been very good since the opening of this new service and promises well for the future. The bus service has also popularised the rail route to Tavoy *viâ* Ye.

(b) *Passenger traffic*.—The local trains which had been running between Toungoo and Penwagon were extended to run between Toungoo and Nyaung-lebin. A service of two local trains each with two coaches was instituted between Letpadan and Paungde. This section has been one of the worst sufferers from bus traffic, the road running parallel to and practically adjoining the railway line for the whole distance. The trains referred to stop at certain busy level crossings between stations adjacent to big villages for the purpose of entraining or detraining passengers. A great deal of the lost traffic has thus been regained.

(c) *Other than passenger traffic*.—Competitive rates were introduced where necessary, and in certain cases siding or similar charges were waived, but the loss of goods traffic to the road now presents a serious problem. In the case of paddy to up-country mills alone, it is estimated that the railway now loses possibly 60,000 tons per annum to the road representing about Rs. 1,50,000 in freight. The lorries which take loads of paddy to the up-country mills often get return loads in the form of rice, and where rice is taken to Rangoon, the lorries again get return loads in the form of higher grade commodities. It is probably not an unfair estimate to place the present total loss of goods traffic to the road at Rs. 4,50,000 per annum. The question of meeting this competition is receiving very careful consideration.

(vi) *East Indian Railway*.—The number of omnibus services operating in the areas served by this railway at the end of March 1935 was 282, showing no increase over the figure for the previous year. The action taken by the railway to meet competition reduced by twenty the number of buses licensed for operation on competitive roads and short-circuiting roads. On the other hand, there was an increase of 63 buses in the number licensed for operation on feeder roads.

Cheap return tickets were being issued on 37 sections, nine of these being additions made during the year. With these reduced fares was combined, whenever possible, an improvement in travelling facilities by the running of light trains and the opening of halt stations. Action was also taken to give greater publicity to the reduced fares introduced.

(vii) *Eastern Bengal Railway*.—Cheap lower class return tickets were introduced on the Rupsa East-Bagerhat section. The introduction of third class ordinary return tickets at one and two-thirds single journey fares, and their availability for a minimum period of two days after the day of issue will, it is believed, act as an effective check against road competition.

Apart from the Ballygunge-Diamond Harbour section, motor services elsewhere have not been able to extend the scope of their activities to the detriment of railway revenues.

(viii) *Great Indian Peninsula Railway*.—Competition from road motor services continued to be keen throughout the year and measures were taken to regain lost coaching and goods traffic. Besides adjustments in train timings and reduction in third class fares on certain sections, an intensified passenger service by a Diesel rail car was introduced on the Pulgaon-Arvi Railway. A reduction in the basis of charge for lower class traffic from 4 pies to 3 pies per mile was also made from 1st January, 1935. As a result, bus competition on this section has received a definite check.

Frequency of service, running of special trains, strengthening of the rakes of the already existing train services, and the quotation of reduced third class fares, were among the important measures adopted to divert pilgrim traffic from the road to the rail.

Reduced rates were also quoted for certain commodities to prevent the diversion by motor lorries of traffic previously carried by rail.

(ix) *Madras and Southern Mahratta Railway*.—The most serious competition so far experienced is in connection with passenger traffic, but there is evidence that competition by buses and lorries is growing in respect to parcels and certain classes of goods traffic. The measures taken to counter competition for passenger traffic include:—

- (a) improvements in the train service;
- (b) flat rate reductions over sections or branches of the railway;
- (c) cheap return journey tickets between competitive points;
- (d) cheap single journey tickets between competitive points.

In regard to (a), much has been done to improve the train service by reducing the overall time of trains. In particular, attention has been paid to the grouping of trains at junctions in order to avoid long halts. Experience has shown that additional trains, as a measure of combating competition from the roads, are not particularly effective.

With regard to (b), flat rate reductions over certain sections and branches have been tried, but here again experience has shown that the measure is one to be adopted with caution if a net loss is to be avoided.

As regards (c) and (d), cheap return journey tickets between competitive points have met with a certain measure of success, but it is not considered that these effectively counter bus services. The greatest measure of success has been obtained with cheap single journey tickets between competitive points, but here also it is necessary to proceed with caution if loss is to be avoided on account of the rebooking which is liable to occur. It is also necessary to ensure that sufficient potential traffic exists and is likely to be attracted in order to offset the loss which is inevitably involved by a reduction in the fare.

Competition for parcels traffic is mainly confined to perishables such as betel leaf and it has been found necessary in the case of traffic for the Bombay market to reduce parcel rates in conjunction with the Great Indian Peninsula Railway from stations near Poona.

As regards goods traffic, the principal competition consists of either—

- (a) cases where the railway is considerably short-circuited such as Miraj to Bijapur, or
- (b) cases where traffic is conveyed under special conditions.

To meet (a), the only possible counter measure is rate reductions.

To meet (b), service and facilities are of importance. For example, hides and skins which are sold by weight are readily susceptible of transfer to the roads owing to the loss of weight which occurs during delayed transit by rail in iron wagons. A recent development is the transport of matches by road due to the adoption of a cheap form of packing which does not conform to the regulations prescribed for the conveyance of matches by railway.

(x) *North Western Railway*.—Severe competition from road motors for passenger traffic still continues to be experienced on certain sections. A new feature of this competition has been the formation of organised companies which run motor services to regular timings and at fixed charges. Their activities extend also to parcels and goods traffic, the commodities most affected being fresh fruit, vegetables, piece-goods, wheat, groceries, haberdashery, ghee, etc.

In order to check these activities and to re-divert passengers to the railway the policy started in 1931 of issuing cheap single or one (or two)-day return tickets has been pursued. The train services have also been improved and accelerated and a campaign of canvassing for passengers carried out.

Competition in parcels traffic is mostly felt in regard to fresh fruit and vegetable traffic. Low rates have been introduced for smalls, and special concession rates for wagon loads.

The effect of competition in goods traffic is mostly felt for distances within 50 miles. Attempts are made to regain the traffic by improving the services, running guaranteed vans, relaxing conditions of packing and carriage, etc. When, however, such measures do not improve matters, very low station-to-station rates are introduced. In the majority of cases, however, it is believed that it would have been easier to combat road competition if it were not for the extensive and indiscriminate overloading of lorries.

The newly organised Sales branch has also started canvassing for traffic in towns, villages and *mundies*.

(xi) *His Exalted Highness the Nizam's State Railway*.—The Railway Road Mechanical Transport Services took over the Mahbubnagar Devarkadra road paralleling the railway line, and the Nander-Hingoli road which short circuits and competes directly with the Hingoli Branch. Most other competitive roads are at present worked under monopolies and cannot be taken over until these expire in July and August, 1936.

(xii) *Rohilkund and Kumaon Railway*.—With a view to combat bus competition, the following measures were adopted:—

- (a) Intermediate and third class return tickets were issued at concession fares over the main line from Lucknow to Kasganj including Bareilly-Kathgodam section.
- (b) Return third class tickets were issued from stations on the Bombay, Baroda and Central India Railway between Agra and Kasganj to Soron *viâ* Kasganj at 1½ fares to divert *mela* passengers to the railway.
- (c) Light passenger trains were run with speed accelerated between Bareilly and Kathgodam and Bareilly and Pilibhit.

Motor buses are attracting goods of a perishable nature carried by rail as parcels for short distances, but competition in respect of goods traffic has not yet been felt.

(xiii) *South Indian Railway*.—Competition from motor buses has affected both coaching and goods traffic. Cheap third class single journey fares have been quoted on certain sections, and this has tended to check the expansion of road services. Other steps taken include improvement of travel facilities by the introduction of fast passenger trains, the running of additional trains at convenient timings and the stoppage of certain trains at level crossings near villages.

Reduced rates have been quoted, where necessary, for certain commodities normally carried as parcels traffic and also for others generally carried by goods trains. Further facilities have been afforded by arrangements being made for quick transit, etc.

51. Mela Traffic.—During the year under review further efforts were made to facilitate dealing with the large influx of passengers visiting places of religious importance, and to encourage pilgrims to visit such places. In some cases special rates for return tickets were quoted in conjunction with steamer companies.

The following are some of the more important melas which occurred during the year:—

(i) *The Ardhodaya Yoga Mela at Sitakund, in Calcutta, and at various stations along the banks of the Ganges*.—This fair occurs about once in 27 years. From the Assam Bengal Railway nearly 75,000 passengers travelled to Sitakund, the Bengal Nagpur Railway conveyed 70,000 by special trains into Calcutta, and the number of pilgrims who attended the *melas* at various stations on the Bengal and North-Western Railway totalled about 115,000.

(ii) *Ardhodayam in the Madras Presidency*.—This occurred at Dhanushkodi, Chingleput and Vedaranniyam, and the South Indian Railway carried 119,000 pilgrims to these stations.

(iii) *The anniversary ceremony of the Mulagandha Kuti Vihara-Sarnath on the East Indian Railway.*—In collaboration with certain steamer companies an extensive joint publicity campaign was undertaken in the Chittagong Hill tracts and Arakan Coast territory, to stimulate Buddhist pilgrim traffic for this ceremony and to other places of Buddhist interest served by the East Indian Railway.

Concessions in fares granted were advertised by means of illustrated folders and coloured letterpress posters printed in Bengali and Burmese, which were distributed and displayed in traffic areas through various Buddhist organisations, District Boards, clubs, etc.

(iv) *Magh Mela at Allahabad.*—This *mela* which occurs every year is very largely attended and an intensive advertising campaign was undertaken to give it the widest publicity possible.

(v) *Khwaja or Urs at Ajmer.*—The number of pilgrims who attended was 36,569, an increase of nearly 13,000 over the previous year.

(vi) *Pushkar fair at Ajmer.*—The Bombay, Baroda and Central India Railway opened a temporary enquiry office to give information to passengers regarding the facilities offered, and generally to assist in matters of travel. Special handbills containing brief information regarding their pilgrim centres were also distributed for the first time to the 72,700 pilgrims who visited the fair.

52. Wagon position.—During the year under review, the demand for wagons was not in excess of the stock available except for the first two weeks of February 1935. As compared with the previous year, the number of wagons loaded was more by 200,540 or an increase of 5.05 per cent. Despatches of coal increased by approximately 1,563,668 tons representing an increase of 9.28 per cent. over the previous year.

53. Neutral examination of interchanged wagon stock.—The staff working under the Director of Wagon Interchange continued to examine wagons interchanged between railways at the following junctions:—

Agra Cantonment.	Khanalampura.
Ajni Nagpur.	New Delhi.
Chheoki.	Raichur.
Ghaziabad.	Waltair.

The system of neutral umpires introduced in July 1932 at Gomoh and in February 1934 at Katni Murwara, was continued.

54. Railway Collieries.—The output from the principal railway-owned collieries during 1934-35 compares with the previous years' output as follows:—

Colliery.	Owned by	Output (tons).	
		1933-34.	1934-35.
1. Joint Bokharo	E. I. & B. N.	551,650	672,266
2. Joint Sawang	E. I. & B. N.	56,097	59,235
3. Kurharbaree and Serampore	State	644,363	771,187
4. Bhurkunda	State	103,348	104,113
5. Kargali	State	495,934	445,172
6. Argada	B. N.	195,155	251,316
7. Talcher	B. N.	50,719	106,265
8. Jarangdih	B., B. & C. I. and M. & S. M.	141,386	118,420
9. Talcher	M. & S. M.	185,062	141,916
10. Kurasia	B., B. & C. I.	83,486	122,895

State Railway Collieries.

(i) *Bhurkunda Colliery*.—Owing to continued restriction in the output, no development work was done during the year. New sub-stations for the control of pumps and other electrical equipment were built in No. 2 Kurse and No. 4 Simana inclines. The electrification of No. 3 Kurse incline haulage engine was completed and the haulage brought into commission. All buildings, plant and machinery and power house were maintained in a satisfactory condition. The supply of labour, health and sanitation of the colliery were satisfactory.

(ii) *Kargali Colliery*.—A new travelling road from the pits to No. 3 quarry was opened. This constitutes a separate travelling road for the pit labour and leaves the pits free for coal winding throughout the 24 hours. An endless haulage was installed on the west side of the pits. This has worked satisfactorily and development is now being made in the area adjoining the Dhori boundary. The power house, all colliery machinery and buildings were maintained in a satisfactory condition. The supply of labour, health and sanitation of the colliery were satisfactory.

(iii) *East Indian and Bengal Nagpur Railways' Joint Sawang Colliery*.—No constructional work was carried out at this colliery during the year under review. The labour supply was adequate and the health of the community was good. No reportable accident occurred during the year.

(iv) *East Indian and Bengal Nagpur Railways' Joint Bokharo Colliery*.—No new construction work was undertaken at this colliery during year under review. All screening plants, haulages and pumping plant have worked satisfactorily.

(a) *Quarry No. 1*.—The three portable electrically driven pumps have been put into commission to deal with the water at the bottom of the quarry and are working satisfactorily.

(b) *Quarry No. 2*.—A new haulage gallery is being driven under the railway to replace the existing galleries. When these are connected a large area of coal will be released. Owing to the corrosive nature of the water it has been decided not to instal electrically driven pumps at this quarry.

(c) *Quarry No. 3*.—A new pipe line has been laid from the main air compressor to this quarry. The small and inefficient compressors have been released and economy and increased efficiency have been effected. Arrangements are being made to sink a new pumping shaft to the south of the present one in order to release a large area of coal in the vicinity of the existing shaft. The proposal to instal electrically driven pumps at this quarry has been abandoned as the water has very corrosive properties. Labour supply has been plentiful, and the health of the community generally has been good. Three sporadic cases of cholera occurred during the year. There were no other infectious diseases. 1,527 persons were inoculated against cholera as a precautionary measure. No fatal accident occurred during the year. Nine persons were seriously injured during the year and all were successfully treated and cured.

(v) *Giridih Collieries*.—(a) *Serampore Colliery*.—Difficult conditions still prevail in several districts, but the output has been satisfactorily maintained. The underground fires have been kept under control in all cases. There have been no fresh outbreaks of fire. The underground haulage systems have worked well. A new and improved auxiliary haulage is being installed to deal with the coal from an area situated at a considerable distance from the main dip haulage.

Deep Pit.—A good output has been maintained and conditions underground have been satisfactory. Development through the dyke has been difficult and disappointing as the coal seam has thinned out in the development galleries. There is evidently a faulty and disturbed area to drive through before reaching coal of good thickness and quality. The new screening plant has been put into commission and is working satisfactorily.

16 A Pit.—Conditions in the fire area remain much the same. It has not been possible to build the dam to prevent the leakage of water impounded in the fire area owing to the dangerous conditions of the strata. An effort was made to get into the seat of the fire, but failed owing to the high temperature within the dams. On the other hand, the temperature registered is now several degrees lower than it was a year ago which proves that the fire is not so active as it was.

(b) *Kurharbaree Colliery.*—Difficulties have been experienced in extracting coal in some areas, but the necessary output has been raised.

Nos. 1 and 2 Jubilee Pits.—Development of the new area through the dyke to the east and north has made good progress. The new pump house to accommodate the additional 60,000 gallons per hour pump has been completed.

Joktiabad Pit.—One of the high lift pumps at No. 2 Central Pit was transferred to this pit during the year to augment the existing pumping units. An improved reconstructed haulage engine for the main haulage road has been put into commission and is working satisfactorily and no difficulties have been experienced.

Sariabad.—Conditions underground continued to be satisfactory. Main galleries were driven to tap the water in some old workings at Domohani, which have been waterlogged for over 27 years. This has been satisfactorily carried out and all the water has been drained off. This area will be kept as a reserve of coal to meet emergent requirements at any time.

Kalimaran.—This shaft was re-opened during the year and development at the southern boundary has been re-started in order to provide working places as the coal in other areas becomes gradually exhausted.

(c) *Bye-Products—Coke Ovens.*—The outturn from the bye-product coke oven and benzol plant was as follows:—

	Tons	cwts.	qrs.
(1) Coke	19,974	2	0
(2) Tar	892	0	1
(3) Sulphate of Ammonia	221	4	0
(4) Sulphuric Acid	315	13	3
(5) Benzol	29,718	gallons.	
(6) Rectified Solvent Naptha	1,799	,,	

There were 13 accidents at the collieries; of which 4 proved fatal.

All plant and machinery have been maintained in a satisfactory working order during the year under review.

(vi) *Bombay, Baroda and Central India and Madras and Southern Mahratta Railways' Jarangdih Colliery.* Owing to the restriction of output, the progress in gallery driving was limited. The system of keeping the airways wet to prevent explosions of coal dust was extended to cover the whole of Nos. 1, 2, 3 and 4 east and west main roads and Nos. 1 and 2 dips. All main rise airways are naturally wet throughout and do not require this precaution. Work was discontinued in Nos. 1 and 2 quarry inclines as the orders for coal were insufficient to keep them going. To reduce expenditure the underground plant was withdrawn and no pumping was done. The existing plant was maintained in an efficient working condition and no additions were made during the year.

(vii) *Bombay, Baroda and Central India Railway's Kurasia Colliery.*—The following principal works were done at this colliery during the year under review:—

Buildings.—6 blocks of labour quarters were erected.

Power House.—The building of a Condensor circulating tank was completed.

Electrification.—The wiring of the hospital, power house, river pumps, fan house and 4 blocks of labour quarters, was completed.

Gantry, screening plant.—The erection of the coal gantry and screening plant was, with the exception of the concrete floor on the east side of the picking belt, completed.

Colliery siding.—The work on the extension of the colliery siding was carried out and finished with the exception of linking with the Bengal Nagpur Railway line.

Development underground.—A progress of 973 feet of gallery drivage was made. A coal cutting machine and electric locomotive were put into operation in No. 2 incline.

(viii) *Madras and Southern Mahratta Railway's Talcher Colliery.*—The development of this colliery proceeds steadily. Recently, a fault has been met and trial borings indicated that there is a down throw of about 80 feet and both the top and bottom seams appear to thin out.

(ix) *Bengal Nagpur Railway's Talcher Colliery.*—The development of this colliery is still in progress. Raisings during the year under review amounted to 108,321 tons.

Coal mined in India.—In 1934 the coal mined in the various provinces of British India amounted to 20,243,977 tons as against 18,160,681 tons in 1933, or an increase of 2,083,296 tons.

Quantity of coal despatched by rail.—The quantity of coal carried by the East Indian and Bengal Nagpur Railways was as follows:—

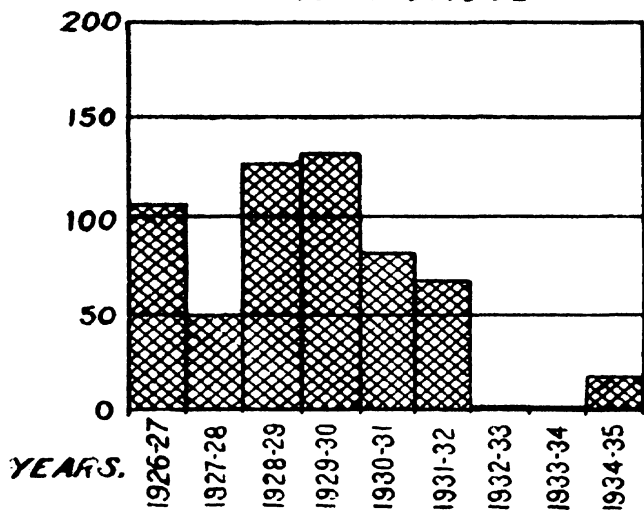
East Indian Railway	12,988,649 tons.
Bengal Nagpur Railway	7,624,512 „

Shipment of coal from Calcutta.—Shipments including bunker coal from the port of Calcutta to Indian and foreign ports during 1934-35 amounted to 2,633,933 tons of which 314,135 tons were on account of Indian Railways and 74,625 tons for the Ceylon Government Railway or a total of 388,760 tons as compared with 440,859 tons in 1933-34.

Tonnage of coal inspected by the State Railways Coal Department.—The State Railways Coal Department inspected 6,638,649 tons of coal during the year 1934-35 as compared with 5,974,946 tons in 1933-34.

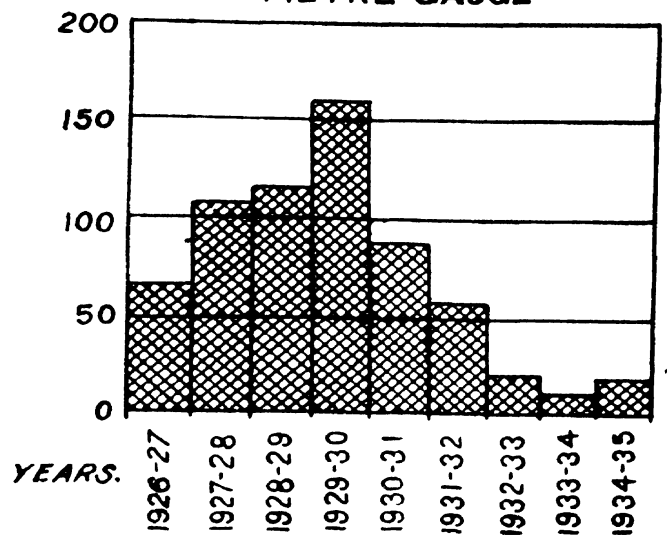
Indian Coal Grading Board.—The State Railways Coal Department continued to carry out the work on behalf of the Indian Coal Grading Board during the year. The amount of cargo coal shipped under the Coal Grading Board's certificates to various ports during 1934 was 1,900,204 tons and inspections were carried out by this department both at the collieries and Kidderpore Docks.

(1)
BROAD GAUGE



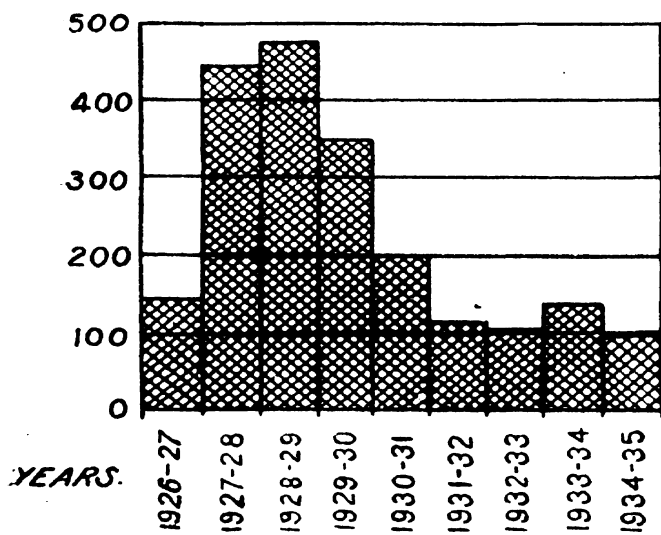
Number of locomotives provided in the rolling stock programme.

(2)
METRE GAUGE



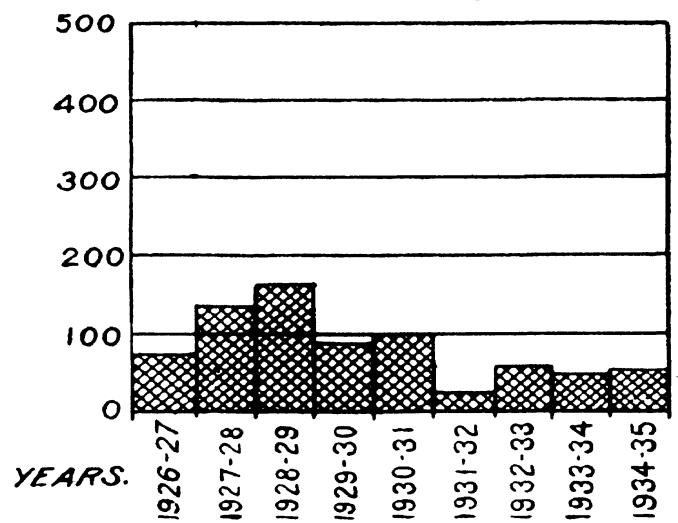
Number of locomotives provided in the rolling stock programme.

(3)
BROAD GAUGE



Number of boilers provided in the rolling stock programme.

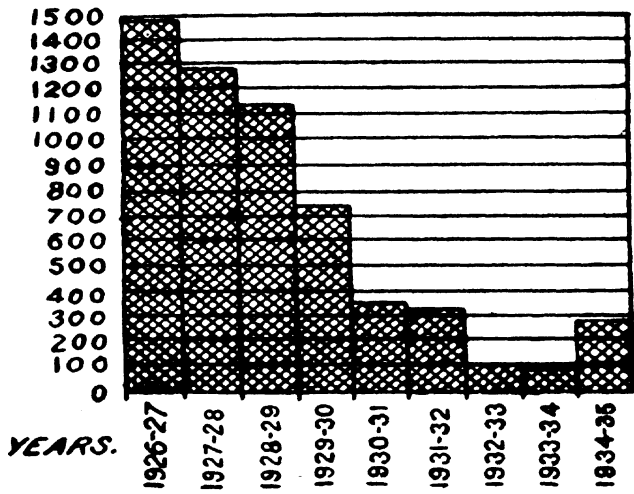
(4)
METRE GAUGE



Number of boilers provided in the rolling stock programme.

(5)

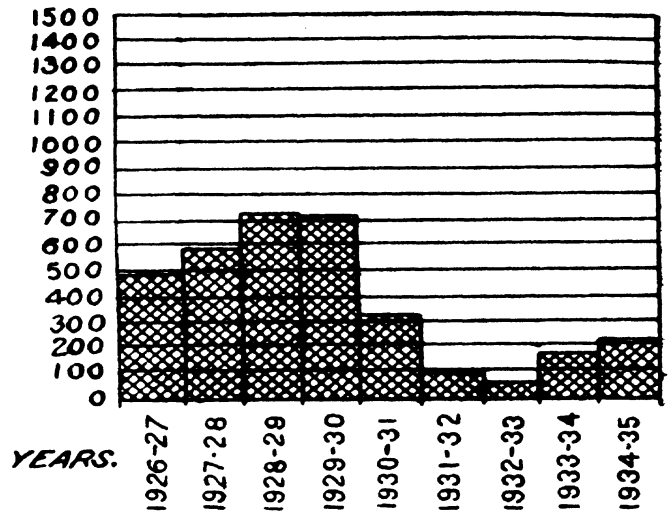
BROAD GAUGE



Number of coaching stock units provided in the rolling stock programme.

(6)

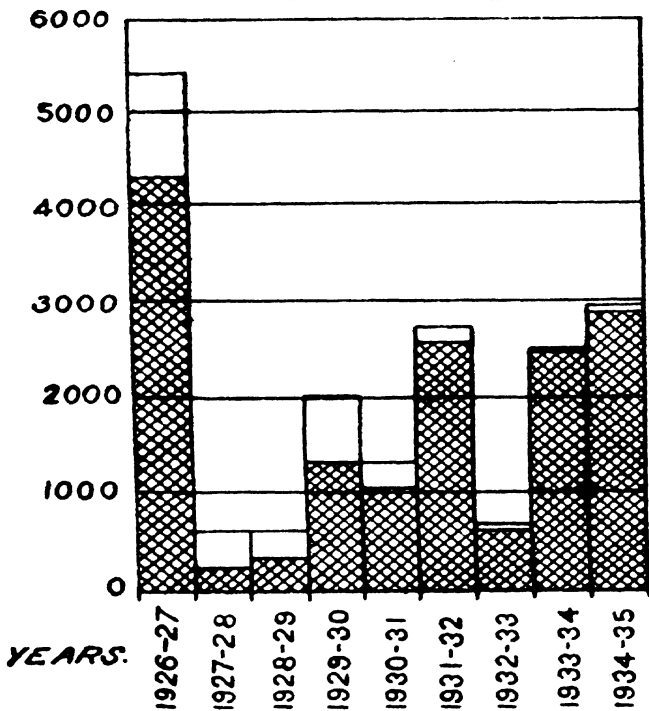
METRE GAUGE



Number of coaching stock units provided in the rolling stock programme.

(7)

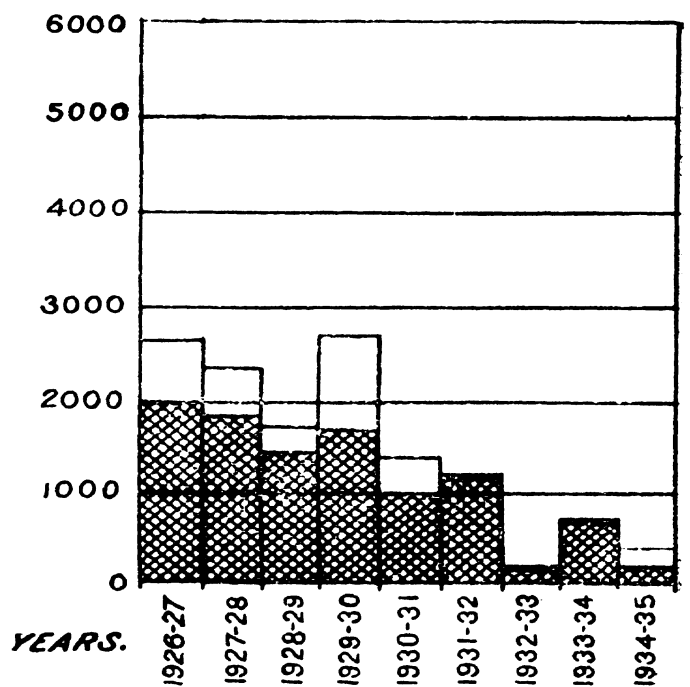
BROAD GAUGE



General service & other types of wagons in units provided in the rolling stock programme.

(8)

METRE GAUGE



General service & other types of wagons in units provided in the rolling stock programme.

General service wagons shown thus

Other types shown thus



CHAPTER V.

ROLLING STOCK AND MATERIALS.

55. Additions to equipment.—During the year the following rolling stock, including arrears brought forward from previous years, was ordered for Class I Railways, broad and metre gauge :—

<i>Items.</i>	<i>Broad Gauge.</i>	<i>Metre Gauge.</i>
Locomotives	12	41
Coaching Stock	458	550
Goods Stock	3,318	1,579

Those actually placed on the line by the end of the year were as under :—

<i>Items.</i>	<i>Broad Gauge.</i>	<i>Metre Gauge.</i>
Locomotives	6	18
Coaching Stock	157	203
Goods Stock	3,073	529

The numbers of coaching and goods stock shown in the preceding paragraph are stated in terms of four-wheelers, a bogie being reckoned as two four-wheelers. These figures do not, however, represent the actual net additions to rolling stock as they also include stock built in replacement of stock which had reached the end of their useful life.

No broad or metre gauge locomotives were obtained as additions during the year. On the broad gauge 162 locomotives were scrapped during the year, of which 6 were replaced so that the number of locomotives on 31st March, 1935 was 156 less than at the beginning of the year. The number of metre gauge locomotives at the end of the year was 38 less than at the beginning, 56 being scrapped during the year, 18 of which were replaced. The average tractive effort per engine rose in the course of the year from 25,262 lbs. to 25,531 lbs. on the broad gauge and from 14,906 lbs. to 15,033 lbs. on the metre gauge.

Coaching vehicles.—There was no addition to the number of coaching stock on the broad and metre gauge. The number of broad gauge coaching vehicles at the end of the year was 273 less than at the beginning, due to 430 being scrapped during the year, of which 157 were replaced. On the metre gauge, the number of coaching vehicles at the end of the year was 134 less than at the beginning, 337 being scrapped during the year, of which 203 were replaced.

Wagons.—There was a net addition of 826 wagons on the broad gauge; 2,247 wagons were scrapped during the year against an addition of 3,073. On the metre gauge, the number of wagons at the end of the year was 912 less than at the beginning, 1,441 being scrapped during the year, 529 of which were replaced.

The graphs on the preceding pages show the total number of locomotives, boilers, carriages and wagons provided for in the programmes of Class I Railways during the past nine years. These figures include replacements and renewals.

56. Supply of rails and fishplates from indigenous sources.—During the year under review orders amounting to approximately 66,000 tons of rails and 2,850 tons of fishplates were placed with the Tata Iron and Steel Company, Limited.

57. Development of the use of indigenous timbers for carriage building.—The total consumption of timber in Carriage and Wagon shops continued abnormally low because of the very small programme of new construction. Figures for 1934-35 are not yet available owing to recalculations in progress. The figure of 21,231 tons consumed in 1933-34, given in the report for that year, requires revision because it includes logs, squares and sawn timber, added directly without allowance for the differences in

sawmill wastage associated with those different forms. The correct figures for the total consumption in 1933-34 by all Class I Railways other than the Burma Railways, His Exalted Highness The Nizam's State Railway and the Jodhpur Railway, are 29,471 tons in terms of round logs or 13,344 tons in terms of timber actually used, excluding in the latter case the sawmill but not the further manufacturing and machining waste. The log figure of 29,471 tons used in 1933-34 compares with corresponding figures of 28,000 tons in 1932-33 and 29,000 tons in 1931-32. New construction accounted for only 16 per cent. of the total consumption in 1933-34, in terms of timber actually used, the remainder being repairs and miscellaneous work. The proportion of imported Burma teak used in 1934-35 was again low owing to the small amount of new construction. The percentage figures for Burma teak in 1933-34 given in the report for that year are correct in terms of timber actually used, namely 33 per cent. of the total was Burma teak and 67 per cent. was Indian teak and other woods.

Some of the timbers other than teak which had been used experimentally in exposed positions failed badly through lack of durability. The seasoning kilns at Lillooah on the East Indian Railway remained closed owing to the low price of teak, with which kiln seasoned woods of other species were unable to compete.

The total amount spent on timber, other than sleepers, by Class I Railways (excluding His Exalted Highness the Nizam's State and the Jodhpur Railways) during the year was Rs. 30.46 lakhs, compared with Rs. 21.51 lakhs in 1933-34 and Rs. 14.17 lakhs in 1932-33.

58. Wooden Sleeper Purchase Organisation.—The total purchases of wooden sleepers during the last three years have been :—

	(Number of sleepers in lakhs.)		
	1932-33.	1933-34.	1934-35.
<i>Broad Gauge</i>	12.15	12.37	17.40
<i>Metre Gauge</i>	11.06	10.29	13.30
<i>Narrow Gauge</i>	1.17	2.20	1.51

The relative position of the various kinds of sleepers can be seen from the following percentages, based on the total number of sleepers in the track of Class I Railways :—

	1933-34.			
	Wood.	Cast Iron.	Steel.	Other kinds.
<i>Broad Gauge</i>	44.3	38.6	16.6	0.5
<i>Metre Gauge</i>	71.8	6.0	22.1	0.1

The wooden sleeper track mileage of all gauges on Class I Railways on March 31st, 1934, was 28,870 miles out of a grand total of 53,211 miles.

No wooden sleepers were imported from abroad, and orders for special sized sleepers from Burma were relatively few owing to low prices in India. The price of *sal* sleepers in the Eastern group in 1934-35 averaged about Rs. 5-1-6 for broad gauge and Rs. 1-15-8 for metre gauge sizes during the year.

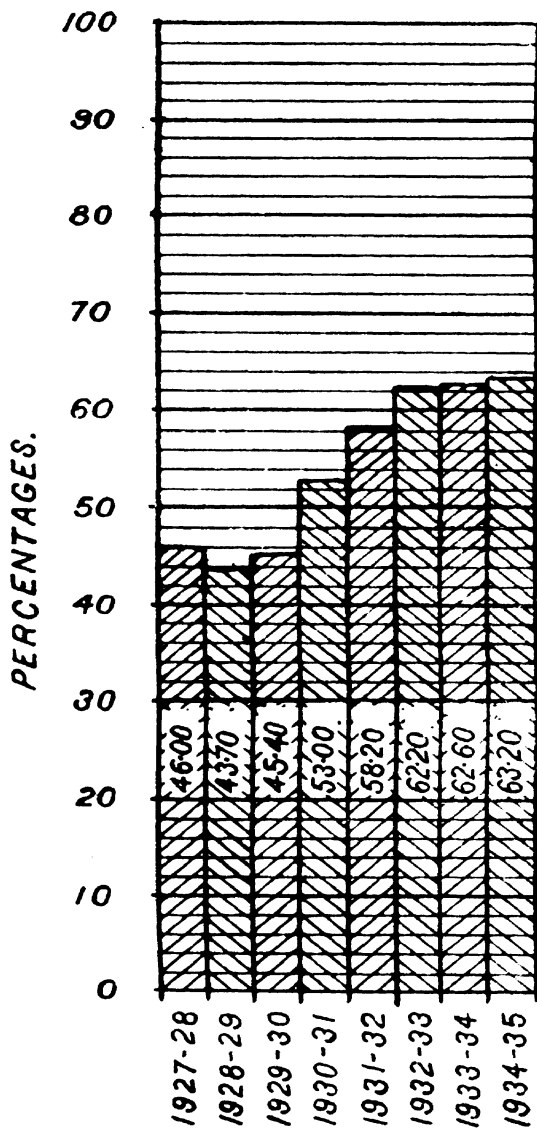
At Dhilwan on the North Western Railway the following soft wood sleepers of coniferous trees were impregnated with a mixture of 40 per cent. creosote and 60 per cent. liquid fuel :—

	1934-35.				
	Fir.	<i>Chir</i> pine.	<i>Kail</i> pine.	Deodar.	Total.
Number of broad gauge sleepers .	13,133	143,352	71,476	190,564	418,525.
Absorption per cubic foot in lbs. .	14.7	15.1	15.2	10.1	...

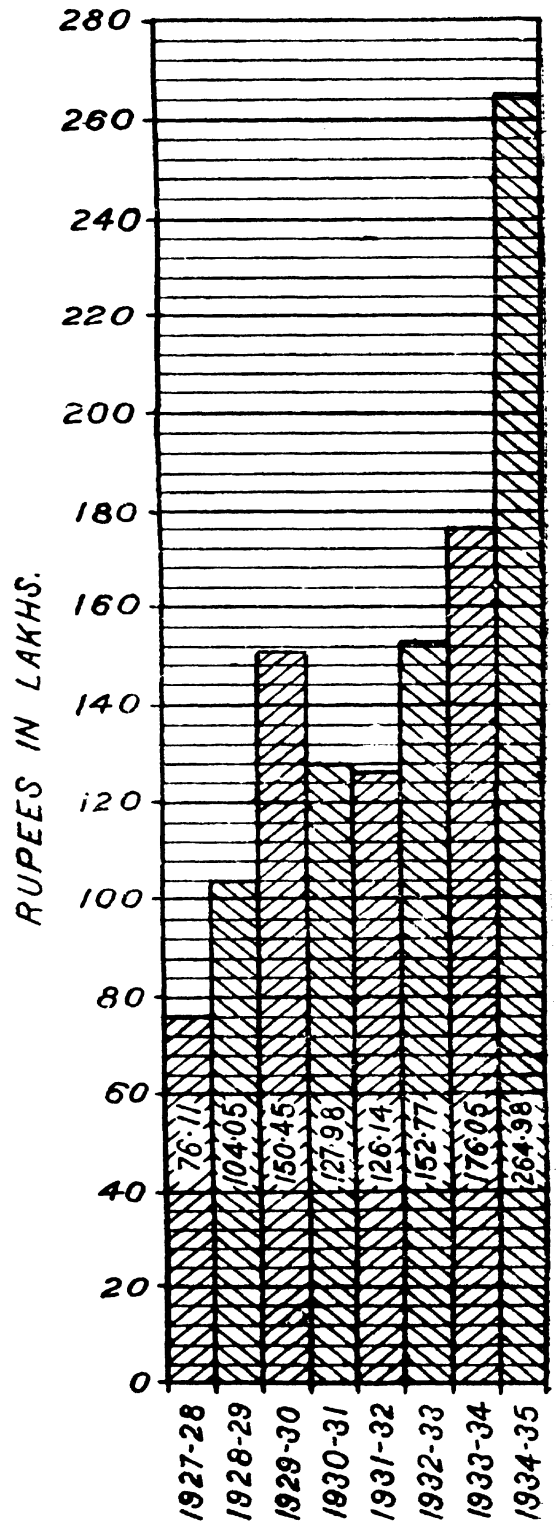
The prices of the sleepers, including all charges, were :—

	<i>Untreated.</i>			<i>Treated.</i>			<i>Cost of treatment.</i>		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Deodar	5	5	3	6	3	0	0	13	9
<i>Kail</i> pine	3	15	7	5	0	0	1	0	5
<i>Chir</i> pine	3	15	0	4	14	0	0	15	0
Fir	3	2	8	4	2	0	0	15	4

Graph showing Value of Indigenous Stores Purchased by State Railways expressed as a Percentage of Total Purchases.



Graph showing the Total Value of Orders placed by all Railways through the Indian Stores Department.



The cost of these treated sleepers was lower than in the previous year owing to 418,525 sleepers being treated in 1934-35, against 219,040 sleepers treated in 1933-34, and owing to lower prices for untreated sleepers.

The sleeper treating plant at Naharkatiya, Assam Bengal Railway, was closed down on the 16th November, 1934, owing to the low price of naturally durable *sal* sleepers. The plant had an output of 93,624 metre gauge hardwood sleepers compared with 169,903 in the previous year. The cost of the sleeper was Rs. 1-6-0 and the treatment came to 12 annas and 6 pies per sleeper, total Rs. 2-2-6 as compared with Rs. 3 in the previous year.

The total amount spent on wooden sleepers on Class I Railways (excluding His Exalted Highness the Nizam's State and the Jodhpur Railways) was Rs. 1.06 crores compared with Rs. 0.92 crores in 1933-34, Rs. 1.27 crores in 1932-33 and Rs. 1.59 crores in 1931-32.

The annual meeting of the Sleeper Pool Committee was held at Delhi on the 12th November, 1934.

59. Value of railway materials purchased.—The value of stores purchased by Class I Railways (excluding His Exalted Highness the Nizam's State and Jodhpur Railways which are mainly the property of the States) shows an increase from Rs. 11.97 crores in 1933-34 to Rs. 14.13 crores in 1934-35. The principal increases, as indicated by the statement below, were under permanent way (68 lakhs), rolling stock (66 lakhs) and tools and stores (62 lakhs). Of the total increase of Rs. 2.16 crores, Rs. 83 lakhs were accounted for by "imported materials" and Rs. 133 lakhs by "indigenous materials", the increase under the former being mainly accounted for by rolling stock (44 lakhs) whereas under the latter it was mainly accounted for by permanent way (57 lakhs), tools and stores (44 lakhs) and rolling stock (22 lakhs).

Particulars.	VALUE OF IMPORTED MATERIALS.			Value of indigenous materials.	Total purchases 1934-35.	Total purchases 1933-34.
	Purchased direct.	Purchased through Agents in India.	Total imported materials.			
	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.
Permanent way	0.09	0.11	0.20	2.49	2.69	2.01
Rolling stock	0.66	1.03	1.69	1.17	2.86	2.20
Tools and stores	0.18	1.87	2.05	2.04	4.09	3.47
Building and station materials and fencing .	0.03	0.15	0.18	0.14	0.32	0.20
Electric plant	0.10	0.51	0.61	0.03	0.64	0.53
Workshop machinery	0.08	0.12	0.20	0.01	0.21	0.16
Bridge work	0.01	0.01	0.02	0.12	0.14	0.21
Engineer's plant	0.01	0.06	0.07	..	0.07	0.09
Other materials* . . . . .	..	0.18	0.18	2.93	3.11	3.10
TOTAL	1.16	4.04	5.20	8.93	14.13	11.97

* Other materials consist of coal and coke, stone, bricks, lime, ballast, etc.

60. Value of indigenous stores purchased by the State-owned Railways and the value of stores purchased by all railways through the Indian Stores Department.—The value of indigenous stores purchased by the state-owned railways during the year under review and the previous seven years expressed as a percentage in each case of the total purchases made by those railways during those years and the value of stores purchased by all railways through the Indian Stores Department during the same period are reproduced in graphic form on the preceding page.

61. Purchase of stores by railways through the Indian Stores Department.—The total value of stores purchased by railways through the

agency of the Indian Stores Department during the year under review amounted to Rs. 264·98 lakhs of which Rs. 25·59 lakhs represented the value of textiles and Rs. 239·39 lakhs that of engineering stores. The list of items, the purchase of which by the state-managed railways through the agency of the Indian Stores Department is obligatory, was reviewed and the following items of railway stores were added to the list, namely:—Indian Railway Standard track fittings (excluding rails, fishplates, wood and metal sleepers complete), *i.e.*, fishbolts, dog spikes, bearing plates and metal sleeper components (where the latter are required separately and do not form part of an order for complete sleepers), points and crossings manufactured from B. S. (F. F.) rails, all Indian Railway Standard component parts of underframes and wagons, Indian Railway Standard plate girder spans, weighing machines and weighbridges, pumping plant of all types including tube well pumps and spare parts, forges portable, vices stand and hand, crucibles including rings and stands therefor, jacks, wheels and axles, pinions and spur wheels for electric multiple unit motor coaches, interior carriage ceiling boards, *e.g.*, mill boarding, *sundeala lincrusta* and like materials, metal-expanded, all brass and gunmetal water fittings, such as bibcocks, stopcocks, etc., glass, crockery, cutlery, jointing material, emery cloth, glass paper, locomotive headlight equipment including turbo generators and components, ebonite rods and sheets and substitutes.




The value of stores purchased by railways through the Indian Stores Department has increased from Rs. 176·06 lakhs during the previous year to Rs. 264·98 lakhs during the year under review. A comparison of the total value of stores purchased by railways during recent years with the value of purchases made by them through the Indian Stores Department during the same period will also show that there has been a progressive increase in the percentage of the value of purchases through the Indian Stores Department to the value of total purchases by railways.

62. Cost of maintenance and supply of locomotive power and cost of maintenance and operation of Carriage and Wagon Stock.—The results obtained during the year under review and the eight previous years in regard to the cost of maintenance and supply of locomotive power under the three major heads of accounts (running repairs, workshop repairs and operating expenses) and also of the cost of maintenance and operation of carriage and wagon stock per 1,000 gross ton miles for both broad and metre gauges of the Class I Railways in India, are reproduced in graphic form on the two following pages.

63. Central Standards Office.—During the year under review, the Civil Engineering branch of the Central Standards Office standardised broad gauge plate girder 30' and 40' spans of mild steel for ML and HM loadings. After successful trial manufacture of diamond crossings with single and double slips for the 115 lb. rail section, the set of drawings comprising these designs was finally standardized and issued to all railway administrations. A special two-way key for use with several sections of rails on metal sleepers was also finally issued as an Indian Railway Standard.

In addition to the above, the following designs were undertaken by the Central Standards Office and issued as tentative standards to railway administrations:—

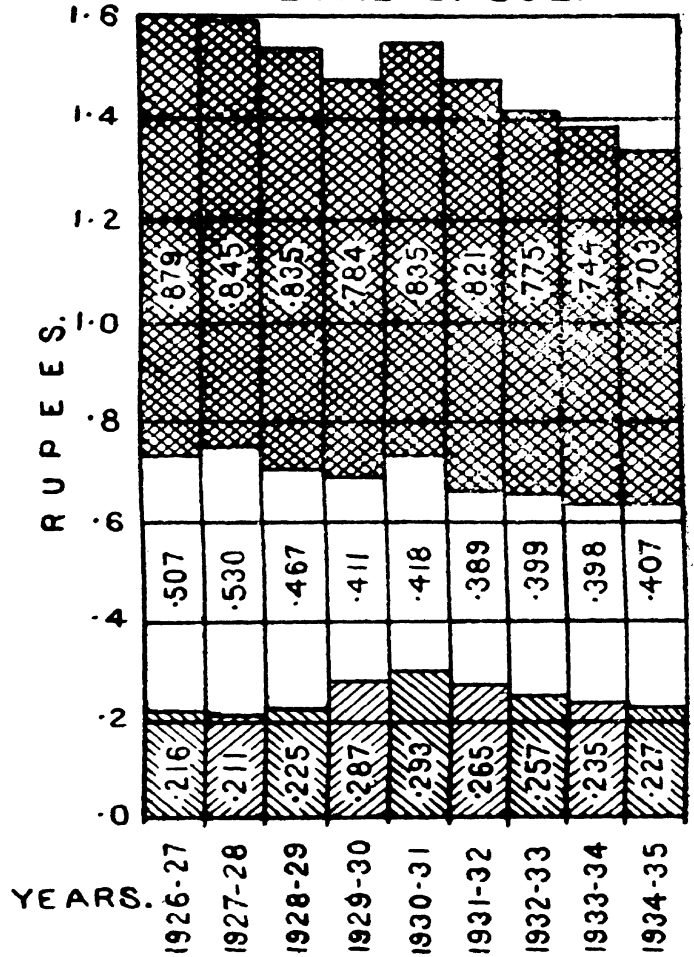
Permanent Way.—*Pressed steel trough sleepers both for broad gauge and metre gauge incorporating a new type of rail fastening, viz., spring steel moveable jaw.* The use of steel trough sleepers for permanent way was extended to switches and crossings for which a special rolled section was successfully manufactured by Messrs. The Tata Iron and Steel Company and complete turnout designs issued to all railways. Of these turnouts, those for the 90R section of rail have been manufactured and it is probable that similar turnouts for 115 lb. rail will be manufactured shortly. With a view to reducing the maintenance costs of permanent way laid on cast iron sleepers, the Central Standards Office has completed a design of a new type of cast

Running repairs shown thus 
 Workshop repairs shown thus 
 Operating expenses shown thus 

COST OF MAINTENANCE AND SUPPLY OF LOCOMOTIVE POWER PER 1,000 GROSS TON MILES.

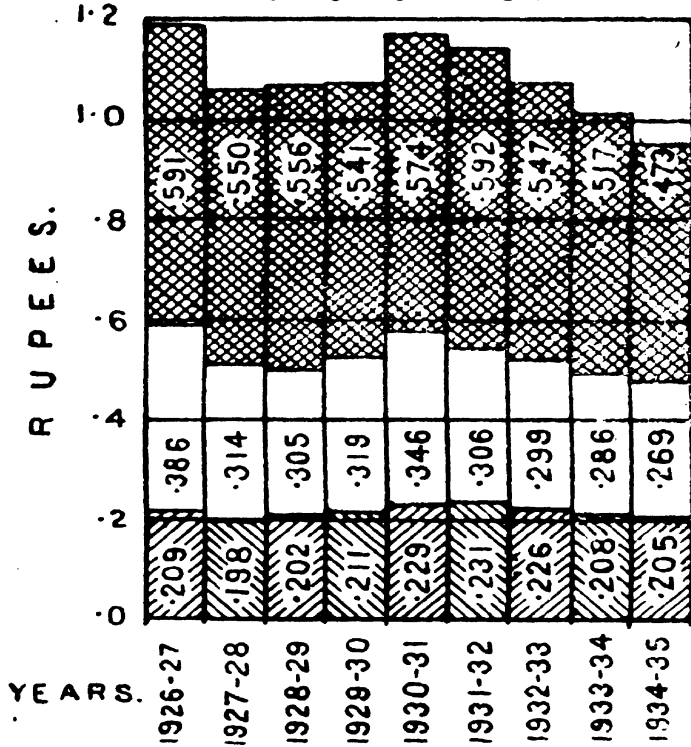
(2)

METRE GAUGE.



(1)

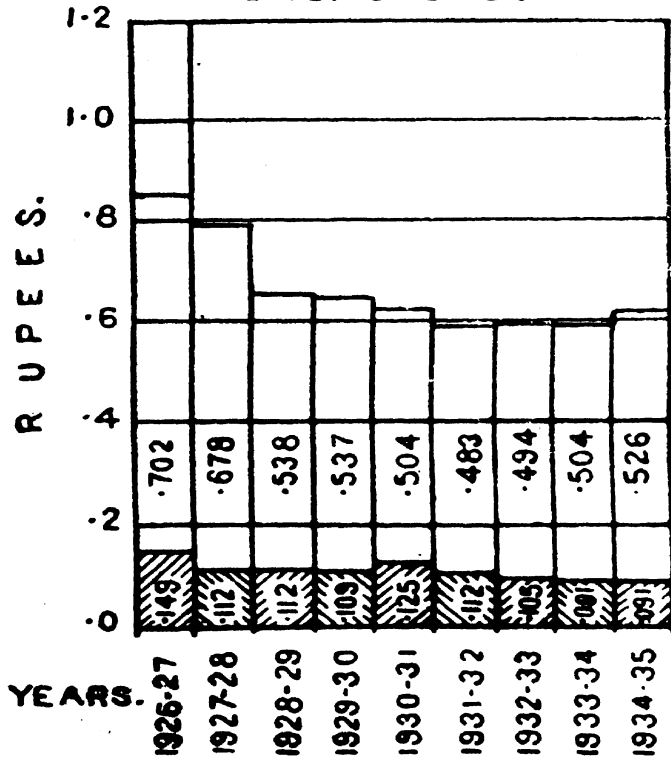
BROAD GAUGE.



COST OF MAINTENANCE AND OPERATION OF CARRIAGE AND WAGON STOCK PER 1,000 GROSS TON MILES.

(3)

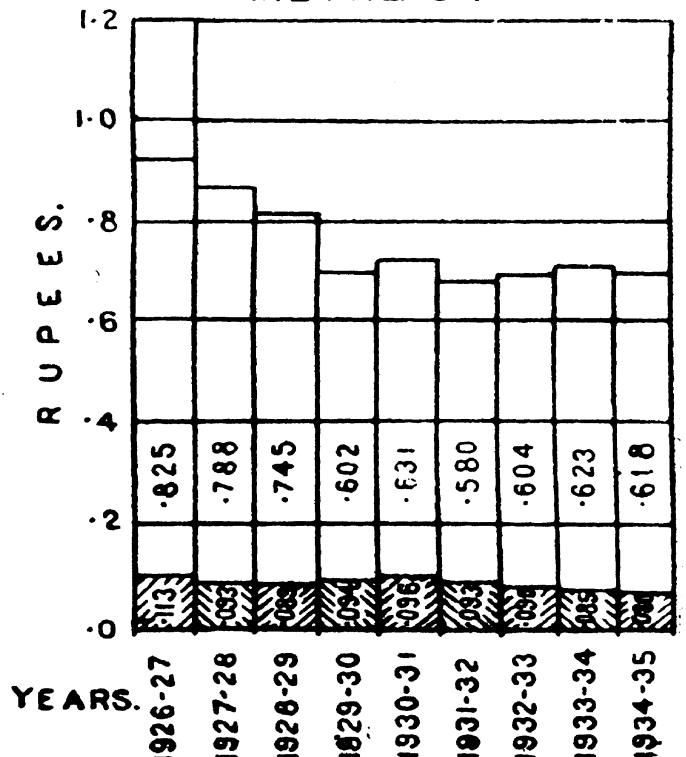
BROAD GAUGE.




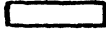

COACHING VEHICLES.

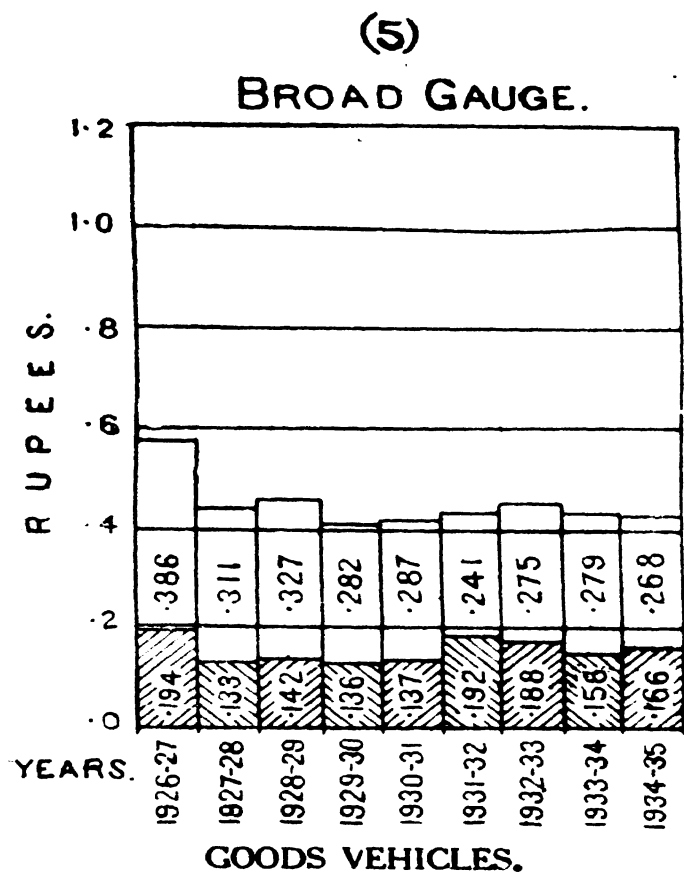
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METRE GAUGE.

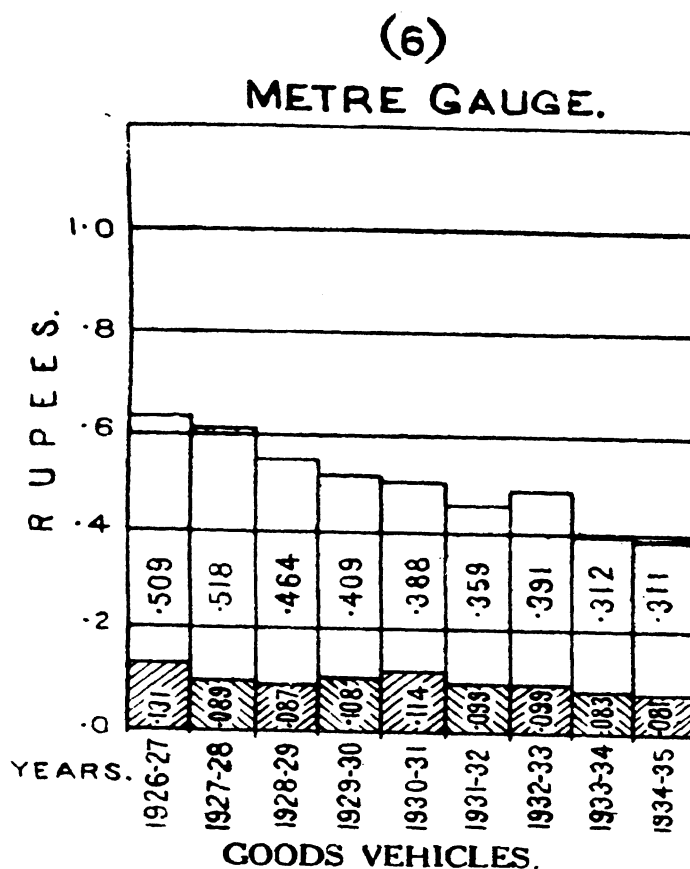


COACHING VEHICLES.

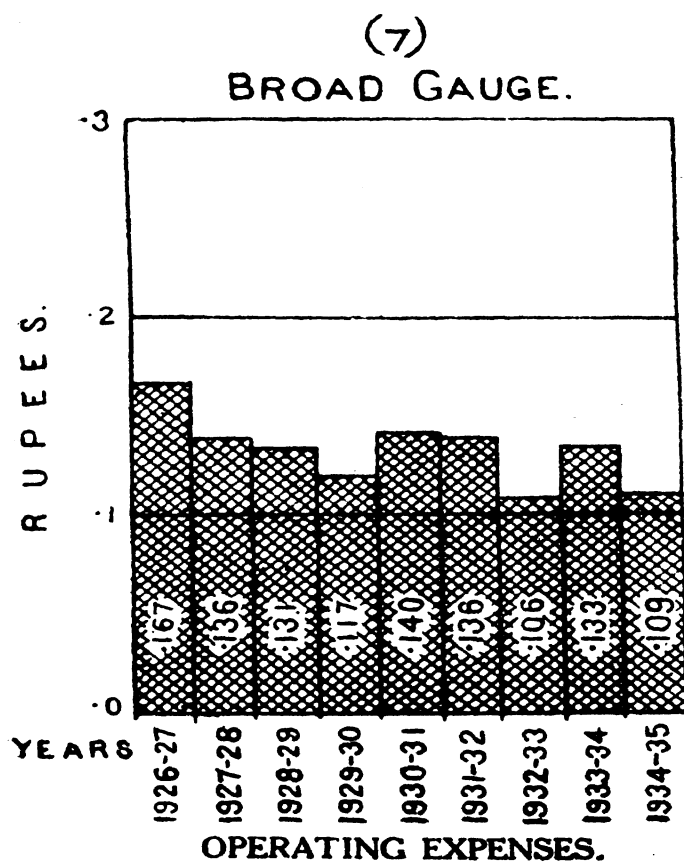
Running repairs shown thus 
 Workshop repairs shown thus 
 Operating expenses shown thus 



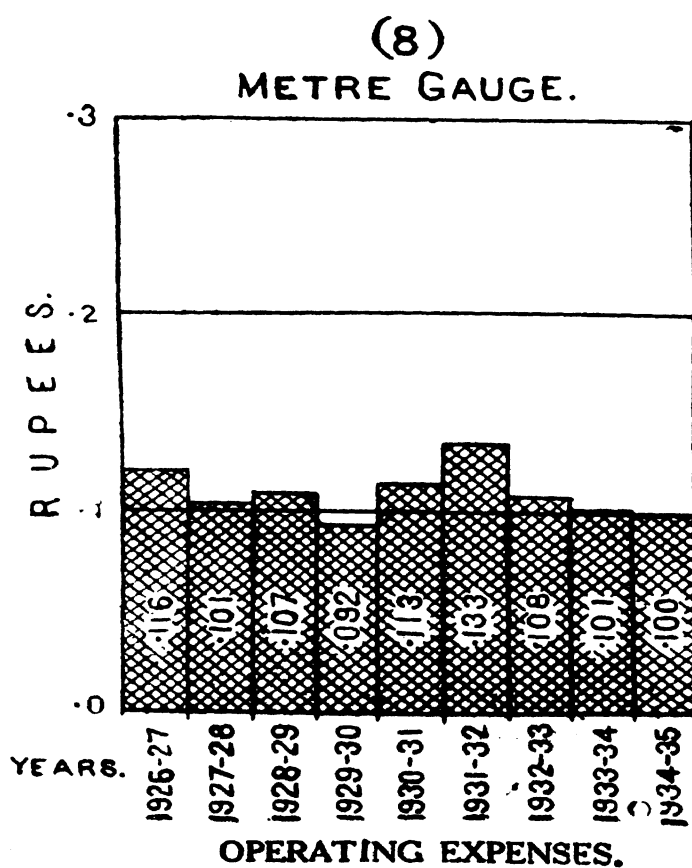
Cost of maintenance and operation of carriage and wagon stock per 1,000 gross ton miles.



Cost of maintenance and operation of carriage and wagon stock per 1,000 gross ton miles.



Cost of operation of carriage and wagon stock per 1,000 gross ton miles.



Cost of operation of carriage and wagon stock per 1,000 gross ton miles.

iron sleeper for 90R rail section which is now being extensively adopted by state-managed railways. In conjunction with this design, an endeavour has been made to improve the conditions that exist at rail joints and a special cast iron joint sleeper has also been designed and is at present in its experimental stage.

Complete sets of drawings for 75R switches and crossings have been issued. Similar designs for metre gauge using 50R rail sections have also been issued. A set of designs for diamond crossings with single or double slips for metre gauge 60R section of rails has been issued to the South Indian Railway for their proposed re-modelling of certain existing station yards.

Bridges.—Complete sets of designs for the 60' and 80' span plate girder bridges both for ML and HM loadings were prepared and issued. Similar designs for the metre gauge were commenced.

Roofs and similar steel structures.—Tests on the 50' long arc-welded lattice purlin designs by the Central Standards Office having proved satisfactory, standard designs whose main features are inter-changeable parts, were prepared for the following widths of island passenger platform roofs:—

23', 30', 40' and 50'.

It is probable that these designs will be adopted at Karachi, Kalka, Moghal Sarai, Aligarh, Dehra Dun and Khanalampura.

Arches and other masonry structures.—With a view to revising the present arch designs and quantity tables, the Central Standards Office have prepared preliminary designs for 10' and 12' span three-centred arches together with which quantity tables for ready reference have also been completed.

In the Mechanical Engineering branch of the Central Standards Office, drawings of the Indian Railway Standard I and II composites were received from Great Indian Peninsula Railway who had undertaken their preparation. These drawings have since been issued, together with further Indian Railway Standard coaching body part drawings.

Further Indian Railway Standard wagon and underframe part drawings mainly relating to 2'-6" gauge, were also prepared and issued.

Revised preliminary general arrangement drawings of the ZF, a new type of Indian Railway Standard 2'-6" gauge locomotive, were completed.

Drawings were prepared in connection with the XP type of locomotive which is an experimental design of express passenger engine, two of which are being ordered by the Great Indian Peninsula Railway in 1935-36.

Particular specifications were prepared in connection with the 1935-36 combined call for railways' requirements of wagons and help was given to railways in the preparation of particular specifications for the XP, ZF and XT locomotives. The work involved in the preparation of these specifications was considerable owing to the large number of modifications and improvements which are incorporated in designs year by year.

On the Specification side, 16 new Indian Railway Standard specifications were issued and 43 Indian Railway Standard specifications revised during the year 1934-35.

64. Locomotive Standards Committee.—During the year under review, the Locomotive Standards Committee met once, *viz.*, in February-March 1935. At this meeting the Committee approved the adoption of the XTI, a modified design of XT (0-4-2 tank) locomotive, as a permissible Indian Railway Standard alternative. The XTI is to have an axleload of 14½ tons and is to carry 1,100 gallons of water in order to enable it to travel greater distances between watering stations. Examination of trial results of the YF and the YK types showed the former engine to be more economical in fuel consumption but trials with regard to riding qualities are continuing.

A further large number of minor modifications (necessitated by experience of the Indian Railway Standard locomotive in service) were accepted for inclusion in new Indian Railway Standard locomotives and adoption as far as possible on existing Indian Railway Standard engines.

65. Carriage and Wagon Standards Committee.—The Carriage and Wagon Standards Committee met once in January 1935. At this meeting the Committee dealt with a number of minor modifications in design of rolling stock and components, both mechanical and electrical, which were found necessary from experience in service. The use of high tensile steel in the construction of wagon underframes having been introduced, the Committee examined the general question of weight reduction of coaching stock and recommended the preparation of a design of Indian Railway Standard coaching underframe lightened by the use of high tensile steel.

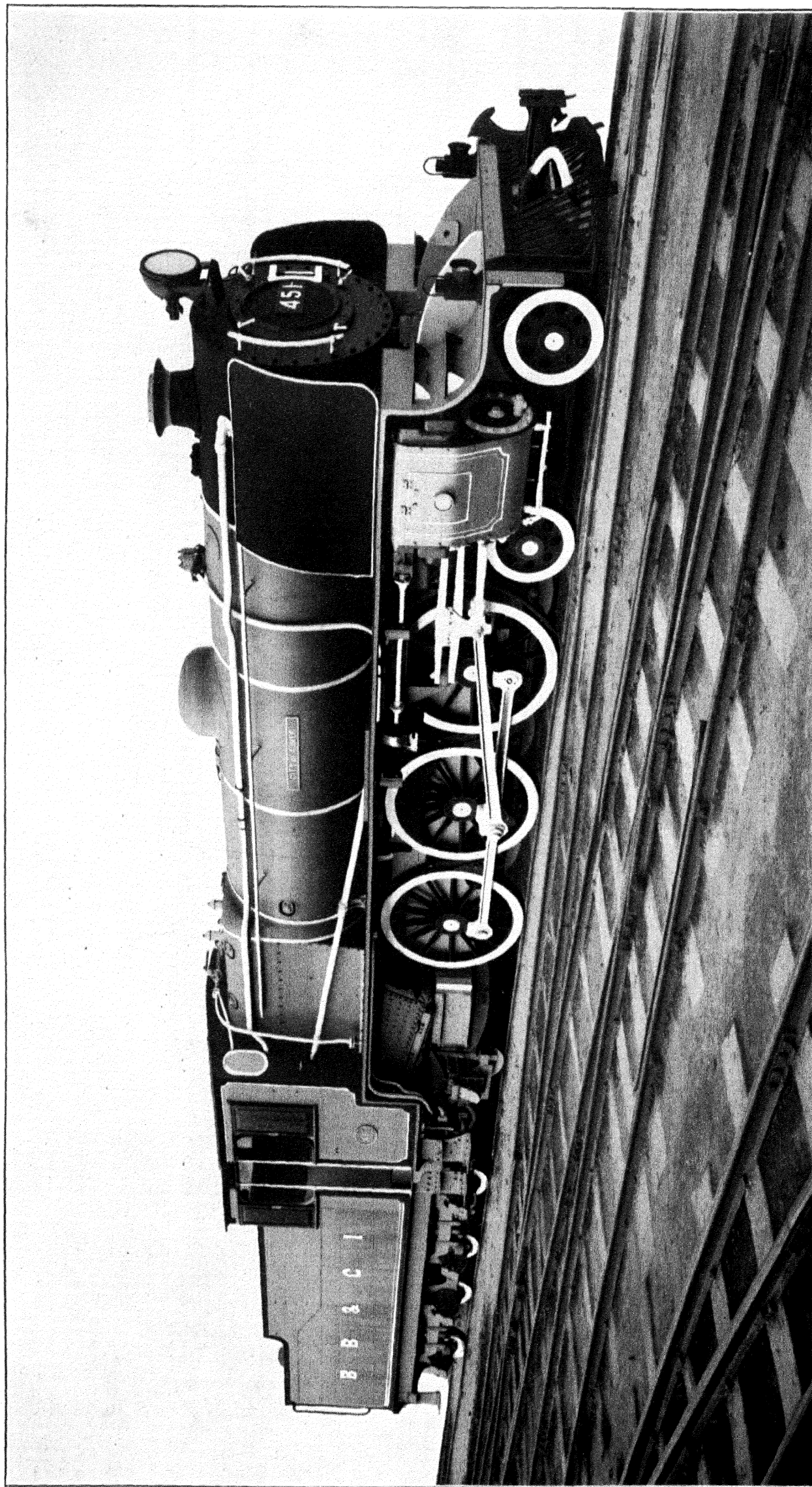
The design of the metre gauge Indian Railway Standard coaching bogie was considered and the Central Standards Office was asked to prepare a new experimental type.

66. Bridge Standards Committee.—During the year 1934-35, two meetings of this Committee were held one in Simla in June 1934 and the other in New Delhi in February 1935. The Committee framed proposals for the design of lattice girder spans of 100' and over for broad and metre gauge lines and revised the special rules for the design of ferro concrete bridges. They also recorded their opinion regarding spun concrete pipes for railway culverts. Designs of island passenger platform roofs, masonry arch bridges and sleeper pads for plate girder spans were perused by the Committee who either approved of these designs or indicated lines on which they may be improved. They also considered the revision of the bridge rules to govern the method of calculating horizontal earth pressure on railway bridge abutments and considered the application of rules regarding longitudinal forces on bridges to the design of brick masonry piers and abutments. They examined the progress of the experimental work done by the Bridge Department of the North Western Railway and recommended one of their designs for a tank staging to be adopted as a standard. Their views regarding suitable apparatus for the proposed experimental testing of rail stresses under moving loads were also recorded. Final draft specifications for (1) high tensile structural steel and (2) bridge and structural design employing high tensile steel have been recommended by the Committee for adoption.

67. Track Standards Committee.—The meeting of this Committee was convened in January 1935. The Committee recommended that the standard two-way key should be used in pressed up lug steel trough sleepers. They perused certain correspondence with the American Railways regarding rail bond manganese steel crossings and indicated certain lines of action. Regarding the question of improving conditions at rail joints, they perused literature and correspondence regarding the head-free type of fishplate and a method of upward setting existing worn fishplates and recorded their recommendations. The utilisation of scrap rails for the manufacture of track components was also considered. Drawings of standard over-riding switches and stretcher bars were perused and the Committee offered their opinion regarding certain difficulties pointed out by railways regarding these designs. Clause 13R in the schedule of standard dimensions 5'-6" gauge in respect of the permissible wear on rails under maximum axleloads was also considered. The Committee also advised the Central Standards Office on the question of dog-spike "draw" and length of sleepers in relation to gauge. They also recorded their discussions on (1) Morgan type of fishplate and (2) the Alexander Fulcrum heel block.

68. Signalling and Interlocking Standards Committee.—The 9th meeting of this Committee was convened in Delhi in December 1934. They considered the question of preparing standard specification for magneto wall telephones, electric cables for railway signalling, tubular steel signal poles and oils to existing Indian Stores Department specifications and commented

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY.



"Y. B." Class Engine built in the Ajmer Shops.

on the draft British Standard Institution specification for colours of signal glasses. They perused the existing Indian Railway Standards and recorded their suggestions for modifications or the standardization of additional fittings. Their discussion as to the operation of telegraph and block instruments over the common line wire was also recorded. The adoption of grease lubrication of signalling equipment as a standard practice on Indian railways was also considered. Upper quadrant signals for non-automatic signals in lieu of lower quadrant signals and calling on signals were also discussed.

CHAPTER VI.

STAFF.

69. Number of staff.—The total number of employees on all Indian Railways and in the office of the Railway Board and other offices subordinate thereto (excluding staff employed on construction) at the end of the year 1934-35 was 705,087 as compared with 701,436* at the end of 1933-34. The total route mileage at the end of the year was 43,021. The following table shows the number of employees by communities on the 31st March 1934 and 1935. A similar statement showing details by railways is given as Appendix C of Volume II of the Report by the Railway Board on Indian Railways for 1934-35.

Date.	Europeans.	INDIANS.							GRAND TOTAL.
		Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.	Other classes.	Total.	
31st March, 1934 .	3,906	497,667*	151,636*	12,841*	8,339	16,048*	10,999*	697,530*	701,436*
31st March, 1935 .	3,521	499,868	152,276	13,438	8,739	16,754	10,391	701,566	705,087

* Represents revised figures due to minor corrections made in the figures published last year.
[These figures exclude the staff on loan from the Indian Audit and Accounts Service (Deptt.).]

70. Cost of staff.—The following statement shows the number and cost of all staff, superior and subordinate (including labourers), permanent and temporary, open line and construction, employed on Class I Railways during the years 1933-34 and 1934-35. Contractors' labour is not included.

Railway Systems.	Year.	NUMBER OF STAFF ON 31ST MARCH.							COST OF STAFF.			
		OPEN LINE.			CONSTRUCTION.			Gazetted Officers on loan from the Indian Audit and Accounts Service (Deptt.).	Gazetted Officers.	Non-gazetted employees.	TOTAL.	Total including staff on loan from the Indian Audit and Accounts Service (Deptt.).
		Gazetted Officers.	Non-gazetted employees.	TOTAL.	Gazetted Officers.	Non-gazetted employees.	TOTAL.					
1	2	3	4	5	6	7	8	9	10	11	12	13
Assam Bengal	1934	67	16,341	16,408	Nil	1	1	..	Rs. 11,19,427	Rs. 63,94,599	Rs. 75,14,026	Rs. 75,14,026
	1935	64	16,249	16,313	Nil	1	1	..	11,06,313	65,39,629	76,45,942	76,45,942
Bengal and North-Western.	1934	72	26,725	26,797	Nil	Nil	Nil	..	10,89,917	68,88,081	79,77,998	79,77,998
	1935	75	27,345	27,420	Nil	Nil	Nil	..	11,36,357	71,22,097	82,58,454	82,58,454
Bengal Nagpur	1934	104	64,681	64,875	Nil	Nil	Nil	..	31,50,537	2,80,17,584	3,11,68,121	3,11,68,121
	1935	191	63,729	63,920	Nil	Nil	Nil	..	29,75,946	2,80,67,993	3,10,43,939	3,10,43,939
Bombay, Baroda and Central India.	1934	169	63,860*	64,029*	2	191	193	..	29,72,875	3,77,57,144	4,07,30,019	4,07,30,019
	1935	169	63,487	63,656	2	331	333	..	29,00,311	3,77,56,943	4,06,57,254	4,06,57,254

NOTE 1.—* Represents revised figures for 1933-34 due to changes made by the railway administrations in the figures published last year.

NOTE 2.—The figures of cost include the salaries and wages of staff, bonus contributions to the provident fund, gratuities, overtime allowances and all other allowances which are of the nature of extra pay and which are not granted to meet some definite expense incurred in the performance of duty, such as travelling allowance.

Railway Systems.	Year.	NUMBER OF STAFF ON 31st MARCH.							COST OF STAFF.			
		OPEN LINE.			CONSTRUCTION.			Gazetted Officers on loan from the Indian Audit and Accounts Service (Deptt.).	Gazetted Officers.	Non-gazetted employees.	TOTAL.	Total including staff on loan from the Indian Audit and Accounts Service (Deptt.)
		Gazetted Officers.	Non-gazetted employees.	TOTAL.	Gazetted Officers.	Non-gazetted employees.	TOTAL.					
1	2	3	4	5	6	7	8	9	10	11	12	13
									Rs.	Rs.	Rs.	Rs.
Barma	1934	100	24,429	24,529	2	62	64	1	16,90,353	1,22,48,529	1,39,38,882	1,39,79,628
	1935	98	23,479	23,568	Nil	5	5	2	15,54,358	1,23,66,064	1,39,30,422	1,39,80,174
Eastern Bengal	1934	116	48,590	48,706	Nil	7	7	5	20,60,252	2,17,17,275*	2,37,77,527*	2,38,24,871*
	1935	121	51,214	51,335	Nil	29	29	3	20,39,259	2,21,75,567	2,42,14,826	2,42,79,988
East Indian	1934	307	121,329	121,636	Nil	48	48	4	51,57,351*	5,73,13,476*	6,24,70,827*	6,25,18,827*
	1935	313	123,045	123,358	Nil	100	100	5	50,26,005	5,90,45,718	6,40,71,723	6,41,43,423
Great Indian Peninsula.	1934	211*	83,486	83,647*	Nil	Nil	Nil	3	44,93,516*	4,36,77,554	4,81,71,070*	4,82,25,119*
	1935	225	80,983	81,208	Nil	Nil	Nil	1	42,78,066	4,22,87,378	4,65,65,444	4,65,87,869
Jodhpur	1934	20	6,799	6,819	1	21	22	1	3,32,528	22,88,053	26,20,581	26,50,581
	1935	22	7,029	7,051	2	920	922	Nil	3,84,588	23,44,592	27,29,180	27,29,180
Madras and Southern Mahratta.	1934	142	49,492	49,634	Nil	236	236	..	25,02,020*	2,27,40,088*	2,52,42,708*	2,52,42,708*
	1935	139	49,542	49,681	Nil	88	88	..	22,94,536	2,26,82,657	2,49,77,193	2,49,77,193
Nizam's State	1934	59	16,697	16,756	1	96	97	..	9,68,744*	60,84,897	70,53,641*	70,53,641*
	1935	62	16,741	16,803	Nil	19	19	..	9,86,420	61,86,453	71,72,873	71,72,873
North Western	1934	267	102,266	102,533	Nil	10	10	5	43,39,261*	5,57,73,056*	6,01,12,317*	6,02,66,806*
	1935	265	103,605	103,870	Nil	6	6	5	43,88,508	5,60,06,343	6,03,94,851	6,04,46,485
Rohilkund and Kumaon.	1934	15	5,447	5,462	Nil	Nil	Nil	..	2,54,992	14,98,178	17,53,170	17,53,170
	1935	15	5,545	5,560	Nil	Nil	Nil	..	2,21,648	15,36,970	17,58,616	17,58,616
South Indian	1934	128	35,393	35,521	4	484	488	..	20,79,955	1,64,08,579	1,85,48,534	1,85,48,534
	1935	129	36,200	36,329	3	292	295	..	19,63,846	1,65,61,577	1,85,30,423	1,85,30,423
TOTAL	1934	1,867*	665,485*	667,352*	10	1,156	1,166	19	3,22,12,328*	31,88,67,093*	35,10,79,421*	35,14,54,039*
	1935	1,888	668,184	670,073	7	1,791	1,798	16	3,12,61,159	32,07,09,981	35,19,71,140	35,22,42,258

NOTE 1.—* Represents revised figures for 1933-34 due to changes made by the railway administrations in the figures published last year.

NOTE 2.—The figures of cost include the salaries and wages of staff, bonus contributions to the provident fund, gratuities, overtime allowances and all other allowances which are of the nature of extra pay and which are not granted to meet some definite expense incurred in the performance of duty, such as travelling allowance.

The above statement shows that the total number of staff on open line on 31st March 1935 was more by 2,720 than on 31st March 1934 and on construction by 632 while the staff on loan from the Indian Audit and Accounts Service was less by 3. The increase in the total cost of staff including staff on loan from the Indian Audit and Accounts Service during the year 1934-35 as compared with the preceding year was Rs. 7,88,214. The increase in the cost of staff was mainly due to the increase on the East Indian Railway

which was principally due to the entertainment of additional staff during the year under report for the following works :—

- (i) re-opening of Tatanagar Workshops.
- (ii) works in areas affected by the Earthquake.
- (iii) building of staff quarters in Rampur Colony.
- (iv) remodelling of the Jamalpur Workshops.

71. Indianisation.—*Recruitment of superior officers*—

State-managed Railways.—The following table gives a summary of the permanent appointments made to gazetted ranks (Superior and Lower Gazetted Services) in the various departments on State-managed Railways during the year under review :—

Department.	No. of vacancies which occurred in previous years not filled in those years remaining to be filled.	No. of new appointments created during the year.	No. of vacancies which occurred during the year.	No. of appointments abolished during the year.	No. of net vacancies to be filled.	No. of vacancies not filled up during the year.	No. of vacancies actually filled.	FILLED BY							TOTAL.	
								Europeans.	Indians.					TOTAL.		
									Hindus.	Muslims.	Anglo-Indians and Euro-peans.	Sikhs.	Indian Christians.			Other classes.
1	2	3	4	5	6 (a)	7 (a)	8	9	10	11	12	13	14	15	16	
1. Agency . . .	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..
2. Accounts . . .	2	..	..	..	2	2	..	..	..	..	..	..	..	..	..
3. Engineering . . .	43	2	14	..	59	46	18	8	1	1	..	..	1	2	6
4. Transportation (Traffic) and Commercial.	29	1	7	1	36	24	12	6	1	..	4	..	..	1	6
5. Transportation (Power) and Mechanical Engineering.	18	3	10	..	26	..	26	14	4	2	2	1	1	2	12	
6. Stores Department.	6	..	3	..	9	6	3	2	..	..	1	..	..	..	1
7. Other Departments.	10	2	3	4	11	6	5	1	2	1	..	1	..	..	4
8. Total {	1934-35 . . .	103	9	37	5	144	85	59	31	8	4	7	2	2	5	28
	1933-34 . . .	45	16	46	4	103	103
9. Percentage of Europeans to number of vacancies filled—								52.6								
1934-35 . . .								..
1933-34 . . .								..
10. Percentage of Indians to number of vacancies filled—								47.4								
1934-35 . . .								..
1933-34 . . .								..

(a) See Note 2.

NOTE 1.—It is usual to publish this statement in two parts, one showing the permanent vacancies, and the other the total vacancies, whether permanent or temporary, filled during the year. As during the year under report no temporary appointments were made, the statement is published in one part.

NOTE 2.—As a result of a number of posts being abolished during the years 1931-32 and 1932-33 there was an excess of officers in certain departments and consequently some of the vacancies to be filled during the year were taken as a set off against the excess.

The position in respect of gazetted ranks (superior services) and gazetted ranks (Lower Gazetted Services) is given below separately :—

(i) *Gazetted ranks (superior services).*—All the appointments were made during the year by direct recruitment to the superior services, the figures by departments being :—

DEPARTMENT.	VACANCIES FILLED BY							TOTAL.
	EUROPEANS.	INDIANS.						
		Hindus.	Muslims.	Anglo-Indians.	Sikhs.	Indian Christians.	Other classes.	
Engineering (a)	4	1	..	..	..	..	1	2
Transportation (Traffic) (b)	3	..	..	..	..	..	1	8
Mechanical Engineering (Power)	..	4	2	..	..	1	1	8
Stores (c)	1	..	..	..	..	..	..	3
Other Departments	..	1	1	..	1	..	..	3
TOTAL	8	6	3	..	1	1	2	13
Percentage of Europeans to number of vacancies filled.	38.1							
Percentage of Indians to number of vacancies filled.	61.9							

NOTE.—(a) Three temporary engineers who were initially recruited on the Burma Railways in 1928, prior to those Railways being taken over by the State, were made permanent. Of the three Indians recruited to Indian Railway Service of Engineers only one joined by 31st March 1935.

(b) Three officers who were recruited through the Secretary of State as a part of general recruitment joined about the end of March 1935. Six Indians recruited through the Public Service Commission joined after 1st April 1935.

(c) One temporary officer of non-Asiatic domicile who had 13 years' service to his credit was made permanent on the East Indian Railway.

It will be noticed that the percentage of Europeans and Indians was 38.1 and 61.9 respectively against the fixed percentage of 25 and 75. In order to obtain the fixed percentage of Europeans and Indians during the two years 1934-35 and 1935-36 taken together it was decided not to recruit European officers but to recruit direct four Indians in the Indian Railway Service of Engineers and eight Indians in the Transportation (Traffic) and Commercial Department in addition to the seven special class apprentices (all Indians) who were expected to be appointed in 1935-36 after the completion of their two years' training in the United Kingdom. Actually however nine special class apprentices have been appointed. It is expected that the proportion of Europeans and Indians for the two years 1934-35 and 1935-36 will be approximately 25 per cent. and 75 per cent. respectively.

(ii) *Gazetted ranks (Lower Gazetted Service).*—Thirty-eight appointments were made to the Lower Gazetted Service in the various departments by promotion which is based solely on merit. Twenty-three appointments went to Europeans and fifteen to Indians, of which two were Hindus, one Muslim, seven Anglo-Indians, one Sikh, one Indian Christian and three other classes. Figures by departments were as follows :—

DEPARTMENT.	VACANCIES FILLED BY							TOTAL.
	EUROPEANS.	INDIANS.						
		Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.	Other classes.	
Engineering	4	..	1	..	..	1	1	3
Transportation (Traffic) and Commercial.	3	1	..	4	..	..	1	6
Transportation (Power) and Mechanical Engineering.	14	..	..	2	1	..	1	4
Stores	1	..	..	1	..	..	..	1
Others	1	1	..	..	..	..	..	1
TOTAL	23	2	1	7	1	1	3	15

72. *Company-managed Railways.*—The tables on the following page give a summary of the recruitment made for the superior services on Company-managed Railways during the year under review : Part I relates to permanent appointments and Part II includes both permanent and temporary appointments. A detailed statement by individual railways will be found in Appendix G of this report.

PART I.

Statement showing the number of PERMANENT vacancies filled in the Superior establishments on (Class I) Company-managed Railways, excluding His Exalted Highness the Nizam's State and Jodhpur Railways during 1934-35.

Department.	No. of vacancies which occurred in previous years not filled in those years remaining to be filled.	No. of new appointments created during the year.	No. of vacancies which occurred during the year.	No. of appointments abolished during the year.	No. of net vacancies to be filled.	No. of vacancies not filled up during the year.	No. of vacancies actually filled.	FILLED BY								
								Indians.							Europeans.	Total.
								Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.	Other classes.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1. Agency	4	1	6	..	11	5	5	4	1	..	..	..	..	..	1
2. Accounts	4	1	4	..	9	5	3	..	..	1	..	..	..	..	..
3. Engineering	18	..	11	8	23	11	11	..	6	..	2	..	..	..	..
4. Transportation (Traffic) and Commercial.	11	2	7	..	13	12	4	2	..	2	..	..	..	..	2
5. Mechanical	5	3	5	..	13	8	5	3	1	1	..	..	..	..	2
6. Stores Department	..	..	..	..	2	..	1	1	..	..	..	..	..	..	..
7. Other Departments	4	..	3	..	7	5	2	..	1	..	1	..	..	..	2
8. TOTAL	1934-35	46	7	38	8	83	44	31	12	9	4	3	..	2	1	19
	1933-34	47	5	36	7	81	47	27	11	10	4	1	..	1	2	16
9. Percentage of Europeans to number of vacancies filled.	1934-35							33.7								
	1933-34							40.7								
10. Percentage of Indians to number of vacancies filled.	1934-35							61.3								
	1933-34							59.3								

PART II.

Statement showing the TOTAL number of vacancies filled in the Superior establishments on (Class I) Company-managed Railways, excluding His Exalted Highness the Nizam's State and Jodhpur Railways during 1934-35.

Department.	No. of vacancies which occurred in previous years not filled in those years remaining to be filled.	No. of new appointments created during the year.	No. of vacancies which occurred during the year.	No. of appointments abolished during the year.	No. of net vacancies to be filled.	No. of vacancies not filled up during the year.	No. of vacancies actually filled.	FILLED BY								
								Indians.							Europeans.	Total.
								Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.	Other classes.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1. Agency	4	2	6	1	11	5	6	4	2	..	..	..	..	..	2
2. Accounts	4	1	4	..	9	5	4	..	..	1	..	..	..	..	4
3. Engineering	19	4	12	11	24	10	14	3	3	..	2	..	..	..	11
4. Transportation (Traffic) and Commercial.	11	..	7	..	18	12	6	2	2	2	..	..	..	..	4
5. Mechanical	5	3	5	..	13	8	5	3	1	1	..	..	..	..	2
6. Stores Department	..	..	..	..	2	..	2	1	..	1	..	..	..	..	1
7. Other Departments	4	..	3	..	7	5	2	..	1	..	1	..	..	..	2
8. TOTAL	1934-35	47	10	39	12	84	45	39	18	14	5	3	..	3	1	26
	1933-34	49	6	36	10	75	48	27	11	10	4	1	1	16
9. Percentage of Europeans to number of vacancies filled.	1934-35							33.3								
	1933-34							40.7								
10. Percentage of Indians to number of vacancies filled.	1934-35							66.7								
	1933-34							59.3								

* Excludes eight vacancies filled by officers of the temporary Establishment as under:—
 Agency 1
 Accounts 1
 Engineering 3
 Transportation and Commercial 2
 Stores 1
TOTAL 8

† Excludes seven vacancies filled by officers of the temporary Establishment as under:—
 Agency 1
 Engineering 3
 Transportation and Commercial 2
 Other Departments 1
TOTAL 7

It will be observed from Statement Part I that during the year under review the total number of appointments made in the superior service on Company-managed Railways was 31 of which 12 went to Europeans and 19 to Indians, of whom 9 were Hindus, 4 Muslims, 3 Anglo-Indians and domiciled Europeans, 2 Indian Christians and 1 of other classes. The net total number of vacancies filled, permanent or temporary, was 39 of which 13 went to Europeans. The total actual appointments filled by Indians were 26, of which 14 were Hindus, 5 Muslims, 3 Anglo-Indians and domiciled Europeans, 3 Indian Christians and 1 of other classes. The ratio of Indian to European recruitment was 61·3 to 38·7 in respect of permanent appointments and 66·7 to 33·3 in respect of all appointments, whether permanent or temporary. The percentage of Indian recruitment in the principal departments was :—

	Permanent appointments.	Total appointments, permanent or temporary.
	Per cent.	Per cent.
Accounts	100·0	100·0
Engineering	81·8	78·6
Transportation (Traffic) and Commercial	50·0	66·7
Transportation (Power) and Mechanical Engineering	40·0	40·0

Among Indian recruits the proportionate recruitment from each community was as shown below :—

	Permanent vacancies.	Total vacancies.
	Per cent.	Per cent.
Hindus	47·4	53·9
Muslims	21·1	19·2
Anglo-Indians and domiciled Europeans	15·8	11·5
Indian Christians	10·5	11·5
Other classes	5·2	3·9

It will be seen from Appendix G to this report that while the Bengal Nagpur, Madras and Southern Mahratta and South Indian Railways appointed Indians only to the Gazetted rank (Superior Services) the Assam Bengal, Bombay, Baroda and Central India, Bengal and North-Western and Rohilkund and Kumaon Railways did not obtain the percentage fixed for Indians. The recruitment on the Assam Bengal Railway was, however, small, *viz.*, 2 and 1 Indian was appointed. The Bombay, Baroda and Central India appointed 8 Indians out of 13 and Bengal and North-Western and Rohilkund and Kumaon Railways no Indian out of 5 and 2 respectively. The Bombay, Baroda and Central India, Bengal and North-Western and Rohilkund and Kumaon Railways are being addressed in the matter.

73. Review of the progress made since 1925.—The statements on the following pages will throw further light on the progress made in Indianisation and in the recruitment of the various communities both on State-managed and Company-managed Railways since 1925, as reflected in the relative strength of Europeans and Indians belonging to the various communities. Part I relates to superior staff and Part II to subordinate staff on scales of pay rising to Rs. 250 and over.

PART I.

Statement of gazetted officers on State-managed Railways and Officers of corresponding rank on Company-managed (Class I) Railways (excluding H. E. H. the Nizam's State and Jodhpur Railways) on the 1st April 1925, 31st March 1934 and 31st March 1935.

Name of Railway.	1st April 1925.										31st March 1934.										31st March 1935.									
	Europeans.					Indians.					Europeans.					Indians.					Europeans.					Indians.				
	Hindus.	Muslims.	Anglo-Indians.	Sikhs.	Indian Christians.	Other classes.	Total.	Total number on the Railway (column 2 plus 9).	Hindus.	Muslims.	Anglo-Indians and domiciled Euro-peans.	Sikhs.	Indian Christians.	Other classes.	Total.	Total number on the Railway (column 11 plus 18).	Hindus.	Muslims.	Anglo-Indians and domiciled Euro-peans.	Sikhs.	Indian Christians.	Other classes.	Total.	Total number on the Railway (column 20 plus 27).						
State-managed Railways.	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			
Burma	90	3	..	..	..	..	12	15	105	82	3	..	10	..	..	20	102	78	3	..	..	..	..	..	..	..
Eastern Bengal	70	31	..	..	..	..	12	46	125	56	42	..	11	..	..	66	121	57	45	..	..	..	..	..	..	..
East Indian	227	45	12	..	..	..	26	87	314	174	78	14	34	3	2	133	307	169	83	17	37	3	..	..	..	..
Great Indian Peninsula	175	18	..	..	..	..	23	46	221	145	85	11	59	7	6	208	213	150	36	12	10	..	..	..	..	..
North Western	192	60	13	..	..	..	28	101	293	136	80	22	14	10	5	131	267	183	74	28	13	11	..	..	..	..
Railway Board and Miscellaneous Offices.	59	8	3	..	..	..	14	25	84	38	10	6	6	..	..	24	62	39	17	5	5	..	..	..	..	..
TOTAL	822	169	36	..	..	..	115	320	1,142	631	248	59	84	15	118	441	1,072	626	258	68	83	16	21	18	464	1,090	
Company-managed Railways.	52	6	1	..	..	..	2	9	61	39	15	6	7	1	..	28	67	36	15	5	7	1	..	..	..	..
Assam Bengal	170	27	5	..	..	..	19	61	221	125	42	7	14	2	..	68	110	41	9	9	17	2	..	..	..	..
Bengal Nagpur	55	3	1	..	..	..	..	4	59	59	7	4	2	..	..	13	68	61	37	4	3	..	..	..	..	..
Bombay and North-Western	159	14	..	..	..	..	21	85	194	123	32	3	2	1	3	48	171	119	34	5	2	..	..	..	..	..
Madras and Southern Mahratta	122	15	1	..	..	..	6	22	144	106	27	..	6	2	..	43	139	91	30	5	5	..	..	..	..	..
Kolhkund and Kumaon	12	1	..	..	..	..	..	1	13	10	2	..	..	..	..	5	15	10	2	..	..	..	..	..	..	..
South Indian	93	17	1	..	..	..	3	21	114	73	45	1	9	..	..	56	129	69	50	2	..	..	..	..	..	..
TOTAL	643	83	9	..	..	..	51	143	806	525	170	23	40	6	8	261	786	505	179	28	43	6	10	16	282	787	
GRAND TOTAL	1,485	252	45	..	..	..	166	463	1,948	1,156	449	82	124	21	226	331	1,702	1,131	437	96	126	22	31	34	746	1,877	

Statement showing the percentages of the relative strength of Europeans and Indians of various communities.

Name of Railway.	1925.*		1934.		1935.	
	Europeans	Indians	Europeans	Indians	Europeans	Indians
State-managed Railways.	71.98	28.02	58.86	41.14	57.43	42.57
Company-managed Railways.	82.26	17.74	66.79	33.21	64.17	35.83
TOTAL	76.23	23.77	62.22	37.78	60.26	39.74
State-managed Railways.	14.80	85.20	23.13	76.87	23.67	76.33
Company-managed Railways.	10.30	89.70	21.63	78.37	22.74	77.26
TOTAL	12.94	87.06	22.50	77.50	23.23	76.77
State-managed Railways.	3.15	96.85	5.50	94.50	6.24	93.76
Company-managed Railways.	1.12	98.88	2.93	97.07	3.66	96.34
TOTAL	2.31	97.69	4.41	95.59	5.12	94.61
State-managed Railways.	..	100.00	7.84	92.16	7.61	92.39
Company-managed Railways.	..	100.00	5.00	95.00	5.46	94.54
TOTAL	..	100.00	6.67	93.33	6.71	93.29

* Anglo-Indians, Sikhs, and Indian Christians included in "Other classes" in 1925.

† Revised figures.

PART II.

Statement of subordinates on scales of pay rising to Rs. 250 per mensem and over on Class I Railways (excluding H. E. H. the Nizam's State and Jodhpur Railways), on the 1st April 1925, 31st March 1934 and 31st March 1935.

Name of Railway.	1st April 1925.										31st March 1934.										31st March 1935.										
	Europeans.					Indians.					Total number on the Railway (columns 2 plus 9).					Europeans.					Indians.					Total number on the Railway (column 11 plus 18).					
	Hindus.	Muslims.	Anglo-Indians.	Sikhs.	Indian Christians.	Other Classes.	Total.	Hindus.	Muslims.	Anglo-Indians and domiciled Euro-peans.	Sikhs.	Indian Christians.	Other Classes.	Total.	Hindus.	Muslims.	Anglo-Indians and domiciled Euro-peans.	Sikhs.	Indian Christians.	Other Classes.	Total.	Hindus.	Muslims.	Anglo-Indians and domiciled Euro-peans.	Sikhs.	Indian Christians.	Other Classes.	Total.			
State-managed Railways.	28	143	859	286	401	328	942	1,717	231	3,464	5,181	1,151	91,386	8915	92,305	148	152	160	170	18	19	20	21	22	23	24	25	26	27	28	
Burma	88	106	300	125	286	328	942	1,717	231	3,464	5,181	1,151	91,386	8915	92,305	148	152	160	170	18	19	20	21	22	23	24	25	26	27	28	
Eastern Bengal	143	106	300	125	286	328	942	1,717	231	3,464	5,181	1,151	91,386	8915	92,305	148	152	160	170	18	19	20	21	22	23	24	25	26	27	28	
East Indian	859	300	125	286	401	328	942	1,717	231	3,464	5,181	1,151	91,386	8915	92,305	148	152	160	170	18	19	20	21	22	23	24	25	26	27	28	
Great Indian Peninsula	286	125	286	401	328	942	1,717	231	3,464	5,181	1,151	91,386	8915	92,305	148	152	160	170	18	19	20	21	22	23	24	25	26	27	28	28	
North Western	401	328	942	1,717	231	3,464	5,181	91,386	8915	92,305	148	152	160	170	18	19	20	21	22	23	24	25	26	27	28	28	28	28	28	28	28
North Western Railway Board and miscellaneous offices.	328	942	1,717	231	3,464	5,181	91,386	8915	92,305	148	152	160	170	18	19	20	21	22	23	24	25	26	27	28	28	28	28	28	28	28	28
Company-managed Railways.	22	140	383	115	263	381	1,004	1,822	46	1,868	2,641	1,618	42,084	3,889	45,973	23	70	135	161	82	99	17	34	4	38	2	1	8	82	99	
Assam Bengal	22	140	383	115	263	381	1,004	1,822	46	1,868	2,641	1,618	42,084	3,889	45,973	23	70	135	161	82	99	17	34	4	38	2	1	8	82	99	
Bengal Nagpur	140	383	115	263	381	1,004	1,822	46	1,868	2,641	1,618	42,084	3,889	45,973	23	70	135	161	82	99	17	34	4	38	2	1	8	82	99		
Bombay and North-Western	383	115	263	381	1,004	1,822	46	1,868	2,641	1,618	42,084	3,889	45,973	23	70	135	161	82	99	17	34	4	38	2	1	8	82	99	17	34	
Bombay, Baroda and Central India	115	263	381	1,004	1,822	46	1,868	2,641	1,618	42,084	3,889	45,973	23	70	135	161	82	99	17	34	4	38	2	1	8	82	99	17	34	4	
Madras and Southern Mahratta	263	381	1,004	1,822	46	1,868	2,641	1,618	42,084	3,889	45,973	23	70	135	161	82	99	17	34	4	38	2	1	8	82	99	17	34	4	38	
Rohtak and Kumaon	381	1,004	1,822	46	1,868	2,641	1,618	42,084	3,889	45,973	23	70	135	161	82	99	17	34	4	38	2	1	8	82	99	17	34	4	38	2	
South Indian	1,004	1,822	46	1,868	2,641	1,618	42,084	3,889	45,973	23	70	135	161	82	99	17	34	4	38	2	1	8	82	99	17	34	4	38	2	1	
GRAND TOTAL	696	540	48	239	2,412	1,482	1,482	2,412	3,689	5,410	7,822	1,618	42,084	3,889	45,973	23	70	135	161	82	99	1,368	2,143	391	3,578	181	218	289	6,800	8,168	

Statement showing the percentages of the relative strength of Europeans and Indians of various communities.

Name of Railway.	1925.			1934.			1935.		
	State-managed Railways.	Company-managed Railways.	TOTAL.	State-managed Railways.	Company-managed Railways.	TOTAL.	State-managed Railways.	Company-managed Railways.	TOTAL.
Europeans	33.14	26.32	30.84	20.49	17.76	19.62	16.84	16.55	16.75
Indians	18.18	20.44	18.95	24.68	26.55	25.27	25.74	27.29	26.24
Hindus	3.69	1.82	3.05	5.61	2.82	4.79	5.69	2.85	4.79
Muslims	1.82	3.05	4.79	1.82	3.05	4.79	1.82	3.05	4.79
Anglo-Indians and domiciled Euro-peans.	†	†	†	†	†	†	†	†	†
GRAND TOTAL	†	†	†	†	†	†	†	†	†

† Not available. † Anglo-Indians, Sikhs and Indian Christians included in "Other classes" in 1925. † Revised figures.

It will be observed that the Indian element in the superior services has risen from 28·02 per cent. on State-managed and 17·74 per cent. on Company-managed Railways in 1925 to 42·57 per cent. on State-managed and 35·83 per cent. on Company-managed Railways in 1935. Among the Indians the percentage increase by communities in 1935 as compared with 1925 is shown below :—

	State-managed.		Company-managed.	
	Percentages.		Percentages.	
	1925.	1935.	1925.	1935.
Hindus	14·80	23·67	10·30	22·74
Muslims	3·15	6·24	1·12	3·56
Anglo-Indians and domiciled Europeans.	*	7·61	*	5·46
Sikhs	*	1·47	*	0·76
Indian Christians	*	1·93	*	1·27
Other classes	10·07*	1·65	6·32*	2·04

* Anglo-Indians, Sikhs and Indian Christians included under "other classes" in 1925.

Turning to the subordinate staff on scales of pay rising to Rs. 250 per mensem and over, the corresponding figures are as under :—

	State-managed.		Company-managed.	
	Percentages.		Percentages.	
	1925.	1935.	1925.	1935.
Europeans	33·14	16·84	26·32	16·55
Indians--				
Hindus	18·18	25·74	20·44	27·29
Muslims	3·69	5·69	1·82	2·85
Anglo-Indians and domiciled Europeans.	*	43·41	*	44·65
Sikhs	*	2·82	*	0·92
Indian Christians	*	2·75	*	2·50
Other classes	44·99*	2·75	51·42*	5·24
Total Indians	66·86	83·16	73·68	83·45

* Anglo-Indians, Sikhs and Indian Christians included under "other classes" in 1925.

74. Representation of minority communities in railway services.— In the report for 1933-34 it was stated that mention would be made in the following year's report of the orders that had been issued by the Government of India in regard to the representation of minority communities in railway services. These orders were issued in July 1934 by the Government of India, with the approval of the Secretary of State, reserving in the superior services

25 per cent. of all vacancies to be filled by direct recruitment for Muslims and 8½ per cent. for other minority communities, namely, Anglo-Indians and Domiciled Europeans, Sikhs, Indian Christians and Parsis, provided candidates of these communities possessing the minimum qualifications prescribed were available.

In accordance with these orders, regulations for recruitment to the superior State railway services in India have been modified so as to provide for the reservation of 25 per cent. vacancies to be filled by direct recruitment for Muslims and 8½ per cent. for other minorities and Company-managed Railways (except His Exalted Highness the Nizam's and Jodhpur Railways) have been asked to adopt these percentages in superior services recruitment on their railways.

In the subordinate railway services, it was decided that 25 per cent. of all vacancies to be filled by direct recruitment on Class I Railways as a whole (excluding the Burma, His Exalted Highness the Nizam's and Jodhpur Railways) should be reserved for Muslims, 8 per cent. for Anglo-Indians and Domiciled Europeans, and 6 per cent. for other minority communities, provided candidates possessing the minimum qualifications necessary were available from these communities. And in order that difficulty in the application of these orders should be minimised as far as possible, it was decided at the same time to fix separate percentages on different railways, taking into consideration so far as Muslims were concerned, their population ratio in the area served by a railway and in the case of Anglo-Indians and Domiciled Europeans and other minority communities their existing percentages on each railway, in such a manner that on Class I Railways taken together Muslims would secure 25 per cent., Anglo-Indians and Domiciled Europeans 8 per cent. and other minority communities 6 per cent. of vacancies, in future direct recruitment.

Statistics were obtained from railways and percentages to be reserved for all minority communities on each railway were worked out in the Railway Board's office and in accordance with an undertaking which had been given by Government that final orders would not be issued unless the Central Advisory Council for Railways had been consulted, the percentages which the Railway Board proposed to fix were placed before that body prior to the issue of orders to railways. This and the preparation of a detailed memorandum, amplifying the rules contained in the Government of India resolution on the subject, to ensure that there would not be a serious difficulty in the practical application of the orders, entailed such an enormous amount of work in the Railway Board's office that it was not possible to issue detailed instructions to railways before the beginning of December 1934.

The following percentages were fixed for Muslims in all future direct recruitment to the subordinate railway services:—

North Western Railway	60
Eastern Bengal Railway	45
East Indian Railway	19
Great Indian Peninsula Railway	10
Rohilkund and Kumaon Railway	55
Assam Bengal Railway	35
Bengal and North-Western Railway	19
Bombay, Baroda and Central India Railway	12
Bengal Nagpur Railway	12
Madras and Southern Mahratta Railway	11
South Indian Railway	6

In order to arrive at the 8 per cent. reservation fixed for the Anglo-Indians and Domiciled Europeans, their percentage recruitment on each railway was fixed at 10 per cent. less than their existing representation. It was also made clear to railways that the future recruitment of Anglo-Indians and Domiciled Europeans must take place in the categories or departments

in which they were already principally employed. Railways were asked to maintain for other minority communities their existing percentages because it was found on calculation that if this was done they would be able to secure 6 per cent. of vacancies.

The above orders were made applicable to both permanent and temporary vacancies on the State-managed Railways (excluding Burma Railways in the case of the subordinate staff) and the Company-managed Railways (excluding His Exalted Highness the Nizam's and Jodhpur Railways) were asked to adopt the percentages fixed for them.

In the Railway Board's office and the offices attached or subordinate to the Railway Board, instructions were issued reserving 25 per cent. of all vacancies to be filled by direct recruitment for Muslims and $8\frac{1}{2}$ per cent. for other minority communities, provided candidates of these communities possessing the minimum qualifications prescribed were available.

The following figures show community-wise the number and percentages of subordinate staff (excluding labourers and inferior servants) recruited direct during the year under review :—

State-managed Railways.

	Hindus.	Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Parsis.	Others.	Total.
Number .	1,231	367	213	24	41	7	20	1,903
Percentage .	64·69	19·29	11·19	1·26	2·15	0·37	1·05	100·0

Company-managed Railways.

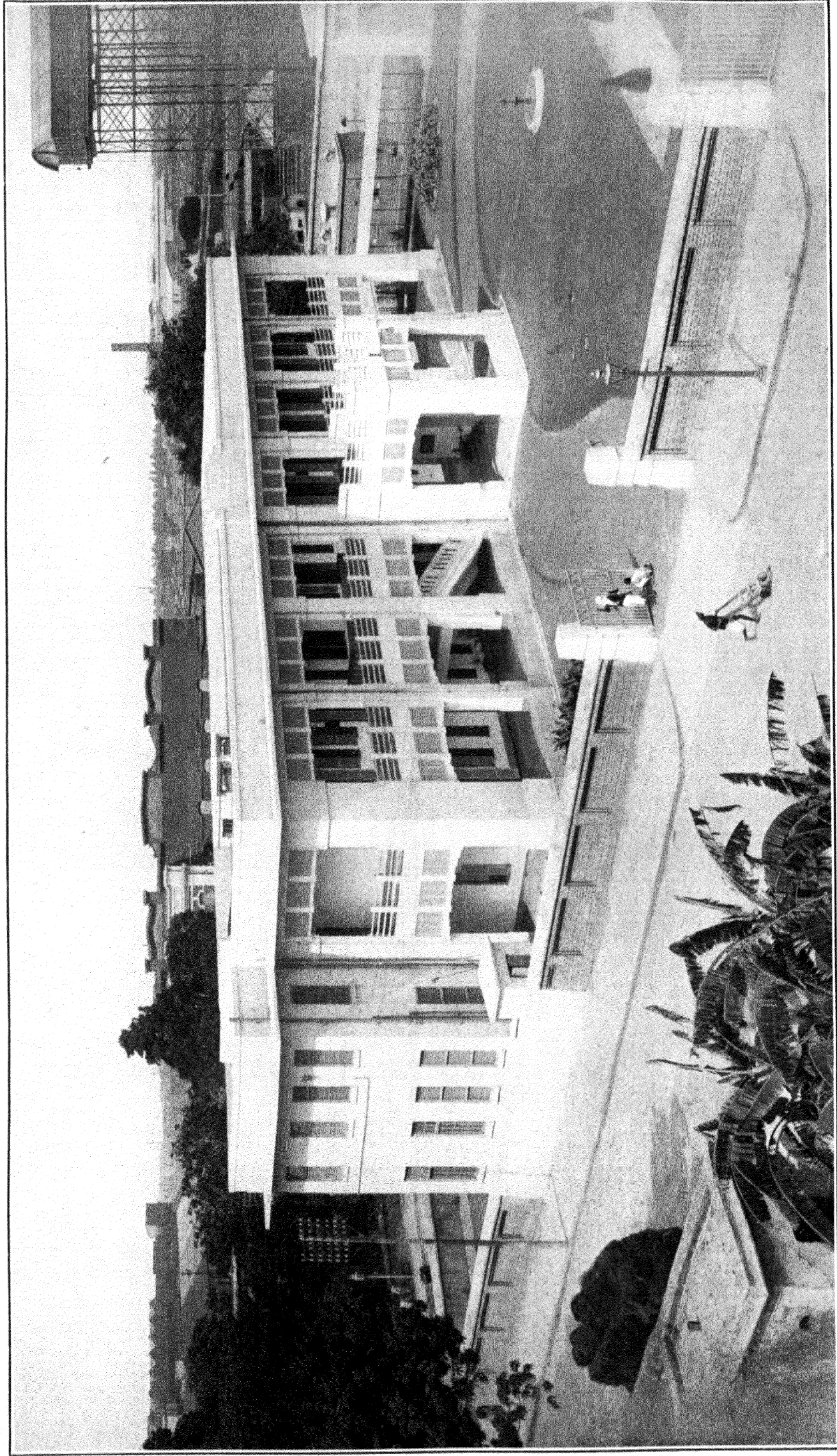
	Hindus.	Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Parsis.	Others.	Total.
Number .	1,243	295	247	15	71	18	2	1,891
Percentage .	65·73	15·60	13·06	0·80	3·75	0·95	0·11	100·0

For reasons already given it was not possible for the Railway Board to issue detailed instructions to railways until about five months after the issue of the Government of India's orders. Considering that these orders were not in force for the first quarter and were not communicated to railways during the second and third quarters of the period under review and that, on their receipt at the end of the third quarter, the railways had to issue detailed instructions to different departments under their control, which naturally occupied some time, the results for the year under review cannot be regarded as unsatisfactory. Instructions have, however, been issued to Agents of Railways to make good the arrears of shortage in the Muslim recruitment during the current year and the position is being carefully watched by the Railway Board.

75. Training of staff.—*Area Schools*—(a) *East Indian Railway—Railway School of Transportation, Chandausi.*—During the year 1934-35, the courses of instruction were much on the same lines as in the previous year. Two fresh courses, *viz.*, Commercial Refresher (for coaching staff only) and special Telegraph Instructors' course were introduced. Owing to a heavy demand for Probationary Assistant Station Masters, the number of students to be trained was increased to meet the requirements of the Divisions. Refresher courses for Assistant Station Masters continued to be held regularly. One European or Anglo-Indian Assistant Station Master, Assistant Yard Master or Platform Assistant from each Division was added to the number for this course. The total number of student days was 37,829 for 917 students in attendance during 1934-35 as compared with 25,490 student days for 667 students in 1933-34.

(b) *North Western Railway—Walton Training School, North Western Railway, Lahore Cantonment.*—During the period under report the school continued the training of staff for the North Western Railway. The total number who attended the school in 1934-35 was 1,320 which included

EASTERN BENGAL RAILWAY.



General view of the B. R. Singh Hospital, Sealdah.

some *ex-station* masters and commercial group students who, although trained in 1931, could not be provided with appointments due to retrenchment. Refresher courses for Permanent-way Inspectors, Train Examiners, Guards and Locomotive staff suitable for promotion to Locomotive Inspectors were introduced.

The school now supervises the theoretical and practical training of all probationers.

The scope of this institution is being gradually enlarged so as to embrace all the important categories of staff on the railway and the beneficial results of refresher courses for those already in service are becoming more marked as the number passing through the school increases. The activities of the school are undoubtedly of great advantage to the administration in improving the efficiency of operation.

76. Improvement in the service conditions of the staff.—*Hours of Employment Regulations.*—The Hours of Employment Regulations have already been given statutory effect on four of the State-managed Railways, *viz.*, North Western, Eastern Bengal, East Indian and Great Indian Peninsula Railways. The question of extending the application of these Regulations to the Burma and Company-managed Railways continued to engage the attention of the Railway Board during the period under review with particular reference to their application to the Madras and Southern Mahratta and Bombay, Baroda and Central India Railways in the light of certain estimates received from those railways. It was decided to give statutory effect to the Hours of Employment Regulations on these two Railways from the 1st November 1935. With the extension of the Hours of Employment Regulations referred to above, six railway systems employing about 71 per cent. of railway workers in India would by the 1st November, 1935 have been brought within the scope of these regulations.

77. Welfare.—(i) *Assistance from Railway funds to Railway employees for the education of their children.*—It was stated in the Report for the year 1932-33 that an officer of the Indian Educational Service was placed on special duty to make a detailed estimate of the cost of the introduction of the new rules for the grant of assistance to railway employees towards the education of their children, as well as the cost, as it would be, if the rules were liberalised in certain directions, and further to report on the administration of the schools maintained by the State-managed Railways. It was also stated therein that the reports submitted by this officer on the Eastern Bengal, East Indian, Great Indian Peninsula and North Western Railways were under consideration by the Railway Board. Since then, these reports, and certain suggestions connected with the grant of educational facilities put forward by the All-India Railwaymen's Federation at the seventh half-yearly meeting between the Railway Board and the Federation held in November 1933, have received the most careful consideration of the Railway Board and the Government of India. The Government of India have arrived at certain conclusions on the recommendations contained in the reports submitted by the officer on special duty and on the suggestions of the All-India Railwaymen's Federation. Before orders are actually issued giving effect to these conclusions, it is proposed to discuss the matter at a meeting of the Central Advisory Council for Railways.

(ii) *Staff Benefit Fund.*—The Staff Benefit Funds established on State-managed Railways continued to function during the period under review and from the reports received from railways it was found that these funds continued to play a prominent part in providing certain amenities and affording certain forms of relief to subordinate and lower paid staff on Railways. In connection with a suggestion received from the All-India Railwaymen's Federation, the question of giving greater publicity to the discussions in the Staff Benefit Fund Committees and the publication, in the railway weekly gazettes, of resolutions arrived at such meetings of the Committees is under consideration by the Railway Board.

(iii) *Railway Sports*.—The seventh annual Inter-Railway Athletic Tournament was held in the Irwin Amphitheatre at New Delhi on the 22nd and 23rd March 1935. The Bombay, Baroda and Central India, Eastern Bengal, East Indian, Great Indian Peninsula, His Exalted Highness the Nizam's State, North Western and South Indian Railways and the Railway Board entered their teams. The tournament was won by the North Western Railway for the seventh year in succession, the Eastern Bengal Railway being the runners-up.

For the field games a hockey tournament was held in Delhi from the 18th to 21st March 1935. The teams from the following railways competed:—

Bombay, Baroda and Central India, East Indian, Great Indian Peninsula, Madras and Southern Mahratta and North Western. The East Indian Railway won the tournament, the Madras and Southern Mahratta Railway being the runners-up.

A Boxing Tournament was also held at Calcutta on the 14th and 15th of February 1935. Teams from the East Indian, Great Indian Peninsula, Madras and Southern Mahratta and North Western Railways took part, the East Indian Railway winning the tournament.

78. Report of the Royal Commission on Labour.—The recommendations of the Royal Commission on Labour concerning railways continued to engage the attention of the Railway Board during the period under review. Orders were issued by the Railway Board to the Agents of State-managed Railways, with an invitation to Agents of Company-managed Railways to follow a similar procedure, in respect of certain recommendations of the Commission of minor importance, particularly those relating to leave rules, the raising and recovery of debits, indebtedness, health and welfare of the industrial workers.

Other recommendations of the Royal Commission on Labour of major importance, *viz.*, those relating to the establishment of a Joint Standing Machinery for the settlement of disputes on railways and other cognate matters such as grant of facilities to recognised Unions, etc., continued to receive attention though final decisions were not reached during the period under review.

Emergency cut in pay.—In the last year's report, it was mentioned that the emergency reduction in pay, not exceeding 5 per cent., would continue during the year 1934-35 in respect of all Government servants including those of the Railway Department. During the year under review it was decided that the cut in the salaries of Government servants would not be reimposed after the 31st March 1935.

The Company-managed Railways agreed to adopt the same procedure.

79. Revision of the scales of pay of future entrants into the superior and subordinate services.—Mention was made in the last year's report that the revised scales of pay for Superior services had been announced in October 1933 and that the revised scales of pay for the Subordinate services were under examination with the intention of introducing them during the year 1934-35. The revised scales for subordinate services were finally adopted by the various railway administrations during the year under report.

A considerable saving in working expenses is expected to result from the introduction of these revised scales. As, however, a large majority of staff who were in service before the introduction of the revised scales of pay will continue on the old scales, the amount of savings ultimately accruing from this measure will not actually materialise for some considerable time. When the entire staff on railways have come under the new scales of pay the approximate savings on State and Company-managed Railways, will amount to much more than one crore of rupees.

80. Security of Service.—*Rules regarding the discharge and dismissal of State Railway non-gazetted Government servants.*—Mention was made in the last year's report that Agents of State-managed railways had been asked to submit reports on the working of the rules regulating the discharge and

dismissal of State Railway non-gazetted Government servants and to furnish their recommendations in regard to certain proposals which the Railway Board had under contemplation for the amendment of these rules in connection with the recommendations of the Royal Commission on Labour. The reports have been received from the Agents and are under examination by the Railway Board.

81. Meetings with the All-India Railwaymen's Federation.—During the period under review the Railway Board met the representatives of the All-India Railwaymen's Federation on two occasions, once in July 1934 and a second time in December 1934. The main subjects discussed at the meeting held in July related to amendments to new leave rules, disciplinary enquiries, wage cuts for short timers, etc., exclusion of inferior staff from Provident Fund and house-rent for low paid staff, while Staff Benefit Fund Rules, Compulsory membership of Institutes on the Eastern Bengal Railway, charging of house-rent from low paid staff, revised scales of pay, and the Hours of Employment Regulations formed the main subjects discussed at the meeting held in December 1934. The suggestions put forward by the Federation at these two meetings are under consideration by the Railway Board.

CHAPTER VII.

AMENITIES FOR PASSENGERS.

82. In previous reports information in regard to action taken for the greater comfort and convenience of passengers was embodied in the "Miscellaneous" Chapter. In order, however, to give more information on such matters, it is proposed in this and future reports to have a complete chapter for this subject which will indicate in greater detail what has been done during the year under report.

In addition to improvements in train services, progress was made so far as funds permitted, on the programme for providing better coaching stock and improving the existing stock. Programmes were also drawn up for the provision of additional waiting rooms and waiting halls, covered and raised platforms, refreshment rooms for Mohammedans and for Hindus and vendors' stalls. Improvements were also effected in the arrangements for the supply of drinking water, and for ensuring the cleanliness of carriages including latrines on running trains. Additional restaurant car services were also introduced.

The existing position on railways in regard to certain matters, and the particular steps for improvement that have been taken during the year on the principal railways are briefly summarised in the following paragraphs:—

(i) *Booking offices.*

Assam Bengal Railway.—Temporary additional booking offices were opened at Sitakund, Barabakund, Baraiyadhala, Shambhuganj and Badarpur Ghat during *melas*. The provision of an additional booking office at Ganga-sagar was sanctioned.

Bengal and North-Western Railway.—In order to meet the requirements of pilgrim traffic, sixty temporary booking offices were opened at sixteen stations.

Bombay, Baroda and Central India Railway.—Additional temporary booking offices were opened for certain big fairs such as the Mahim Urs and the Khwaja and Pushkar Fairs at Ajmer.

Eastern Bengal Railway.—A booking office joint with the East Indian Railway was opened at the premises of the *Amrita Bazar Patrika*, for the outward booking of parcels of newspapers and joint arrangements were effected with the combined East Indian and Bengal Nagpur Railways' city booking office at Kidderpore, where booking of all classes of passengers, luggage and parcels over both railways and steamer services was attended to. Work was commenced on a booking office in the new third class waiting hall at Siliguri.

East Indian Railway.—As an experimental measure an intermediate class booking office was opened on the city side of Cawnpore Central station.

Madras and Southern Mahratta Railway.—An office was opened in Guntur Town for booking of passengers and another at Bangalore City Market for the booking of passengers, luggage and parcels.

His Exalted Highness the Nizam's State Railway.—Additional booking offices were opened temporarily during the important jathras and fairs.

North Western Railway.—Moga Hospital City booking office was reopened temporarily for booking of intermediate and third class passengers. A city booking office for passengers and luggage was opened on the Mall at Simla during the down-hill move.

Rohilkund and Kumaon Railway.—A separate booking office was temporarily opened at Kathgodam for third class passengers during the summer months.

(ii) *Waiting rooms and waiting halls.*

Assam Bengal Railway.—At Sylhet the building of a waiting hall for third class passengers was begun and adequate arrangements were provided for passengers waiting for trains during the Astami Snan Mela at Shambhuganj.

Bengal and North-Western Railway.—One waiting room for first and second class passengers was provided at Rasra and waiting halls for third class passengers at Rasra, Naikot and Manigachi.

Bengal Nagpur Railway.—The waiting hall at Burnpur was extended to provide more accommodation and the waiting hall for third class passengers at Lohardaga was cemented.

Bombay, Baroda and Central India Railway.—One additional upper class waiting room was provided at Baroda. A waiting hall was built at Sadanapura. Work in connection with the provision of a waiting hall at Bhilad, improvements to the hall at Agra Fort (broad gauge), extension of the third class waiting hall at Beawar together with a waiting room for ladies and cement concrete tile flooring of the waiting hall at Muktsar, was in progress during the year.

Burma Railways.—A waiting room for first and second class passengers was provided at Sagaing.

Eastern Bengal Railway.—The waiting rooms and halls for third class passengers at Arariya Court and Purnea, which were damaged by earthquake, were in course of replacement. A new station building including a spacious third class waiting hall was under construction at Barpeta Road, and the construction of a third class waiting hall at Siliguri was in hand. Two passenger shelters at Poradaha were completed.

East Indian Railway.—One waiting room for first and second class passengers and eight each for intermediate and third class passengers were provided.

Great Indian Peninsula Railway.—The third class waiting hall at Kurla was extended. The cast iron sheet walling of the waiting hall at Chikni Road was raised to the top of the roof and four ventilators provided, also an additional bay was enclosed with cast iron sheets. The floor of the waiting hall at Madan Mahal was paved with flag stones.

Jodhpur Railway.—Separate waiting rooms for first and second class passengers were provided at Jhudo and Jamesabad and a waiting hall for third class passengers at Jamesabad.

Madras and Southern Mahratta Railway.—Waiting halls for third class passengers were provided at Aravalli, Tanuku, Vendra and Palakol; and the existing hall at Kirloskarvadi and Godavari were extended.

His Exalted Highness the Nizam's State Railway.—Improvements were made to the lavatory arrangements in certain waiting rooms.

North Western Railway.—An upper class waiting room at Nok-Kundi, a first and second class ladies' waiting room at Nawabshah, intermediate class ladies' waiting rooms at Ambala Cantonment, Kalka and Saharanpur and third class waiting halls at Mithiani and Jammu (Tawi), were provided during the year. The flooring of the third class waiting hall at Khudabad was renewed and the verandah of the existing third class waiting hall at Hazurpur was extended.

Rohilkund and Kumaon Railway.—An upper class waiting room was provided at Manpur Nagaria.

South Indian Railway.—Additional waiting rooms for first and second class passengers were provided at Mettupalaiyam and Punkunnam. Third class waiting halls were built at Ariyalur, Bikshandarkovil, Narthamalai, Karaimadai, Tiruppur, Tellicherry, Palni, Sikkil and Tilladi and that at

Irinjalakuda was extended. Temporary waiting halls were also provided at Ravanasamudram and Tiruvadamarudur.

The statement reproduced below shows in a summarised form the number of waiting rooms and waiting halls provided on each Class I railway for the use of intermediate and third class passengers.

Statement showing intermediate and third class waiting rooms and waiting halls.

	A. B.	B. & N. W.	B. N.	B. & O. I.	Burma.	E. B.	E. I.	G.I.P.	Jodhpur.	M. & S. M.	N. S.	N. W.		R. & K.	S. I.
												C.	S.		
1. Total number of stations open for passenger traffic.	295	351	510	649	453	450	750	560	144	539	210	877	190	97	599
2. Number of stations at which waiting rooms or halls have been provided for intermediate class passengers :—															
(i) generally	10	5	11	1	..	8	38	NW	NW	NW	NW	13	3	NW	NW
(ii) for women	58	10	14	1	..	4	37	NW	NW	NW	NW	14	..	2	NW
3. Number of stations at which third class waiting rooms or halls have been provided :—															
(i) generally	238	251	459	474	453	423	333	467	92	491	210	684	113	94	577
(ii) for women only	127	35	69	1	NW	325	170	13	3	14	2	49	11	12	13
4. Percentage of stations at which waiting rooms or halls have been provided as compared with the total number of stations open for passenger traffic :—															
(i) for intermediate class, generally .	3.39	1.42	2.16	0.15	..	1.78	5.07	NW	NW	NW	NW	1.48	1.58	NW	NW
(ii) for intermediate class, women only.	19.66	2.85	2.75	0.15	..	0.89	4.93	NW	NW	NW	NW	1.60	..	2.06	NW
(iii) for third class, generally	80.68	71.51	90.00	73.04	100.00	94.00	44.40	83.89	63.90	91.09	100.00	72.29	59.47	96.91	96.33
(iv) for third class, women only . . .	43.05	9.97	13.53	0.15	NW	72.22	22.67	2.32	2.08	2.60	0.95	5.59	5.79	12.37	2.17

C. — Commercial.
S. — Strategic.

(iii) *Covered and raised platforms.*

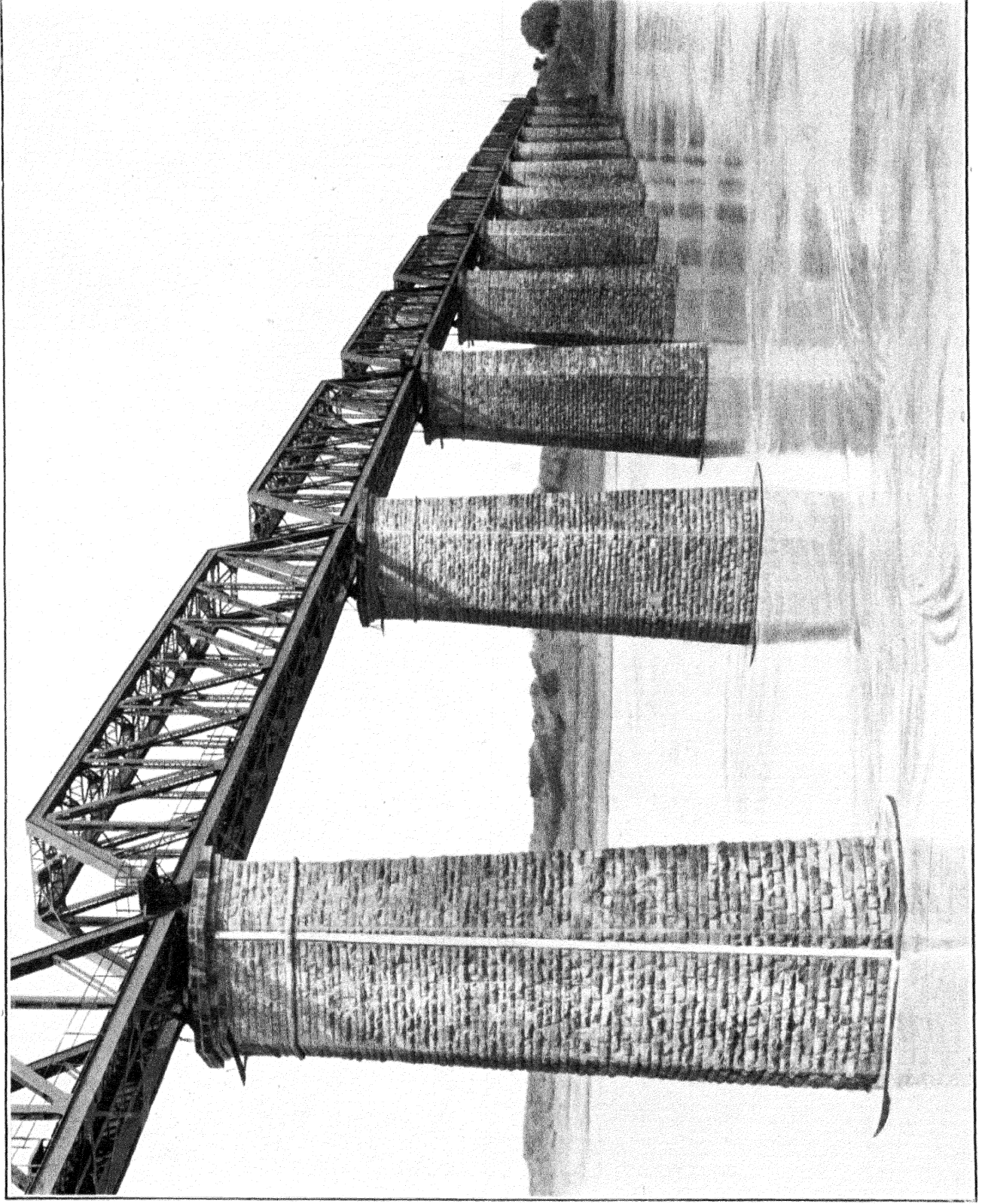
The following statements show the present position in regard to platforms generally :—

(a) *Statement showing number of stations provided with covered platforms.*

	A. B.	B. & N. W.	B. N.	B. & O. I.	Burma.	E. B.	E. I.	G.I.P.	Jodhpur.	M. & S. M.	N. S.	N. W.		R. & K.	S. I.
												C.	S.		
1. Total number of stations open for passenger traffic.	295	351	510	649	453	450	750	560	144	539	210	877	190	97	599
(i) Class D (or flag stations)	98	23	64	116	92	126	121	84	57	86	58	212	39	5	141
(ii) Other than class D (or flag) stations.	197	328	446	533	361	324	629	476	87	453	157	665	151	92	458
2. (i) Number of stations at which there are two or more platforms.	22	27	33	109	77	83	389	190	5	55	25	232	9	3	79
(ii) Total number of platforms at such stations.	53	68	176	260	153	222	962	452	18	153	59	579	23	11	215
(iii) Total number of covered platforms at such stations.	4	NW	4	154	73	43	210	125	NW	66	11	181	3	6	91
(iv) Percentage of (iii) to (ii)	7.55	NW	2.27	59.23	46.20	19.37	21.83	27.65	NW	43.14	18.64	31.26	13.04	54.54	42.33
3. (i) Number of stations other than class D at which there is only one platform.	175	307	373	350	296	250	238	312	82	393	147	456	143	84	379
(ii) Number of such stations at which there are covered platforms.	NW	NW	1	1	4	NW	37	9	NW	22	NW	10	1	NW	6
(iii) Percentage of (ii) to (i)	NW	NW	0.27	0.29	1.35	NW	15.55	2.33	NW	5.53	NW	2.19	0.70	NW	1.58

C. — Commercial.
S. — Strategic.

GREAT INDIAN PENINSULA RAILWAY.



New Chambal Bridge Superstructure. Standard H. M. Loading 1934.

(b) Statement showing number of stations provided with platforms above rail level.

	A. B.	B. & N. W.	B. N.	B., B. & C. I.	Burma.	E. B.	E. I.	G.I.P.	Jodhpur.	M. & S. M.	N. S.	N. W.		E. & K.	S. I.
												C.	S.		
1. Total number of stations open for passenger traffic.	295	351	510	649	453	450	750	560	144	539	210	877	190	97	509
(i) Class D (or flag) stations	98	23	64	116	92	126	121	84	57	86	58	212	39	5	141
(ii) Other than class D (or flag) stations.	197	328	446	533	361	324	629	476	87	453	157	665	151	92	458
2. (i) Number of stations other than flag stations at which there are more than one platform.	22	27	75	99	62	82	369	163	5	55	11	209	8	8	79
(ii) Total number of platforms at such stations.	53	68	153	246	128	219	923	398	18	153	32	533	21	23	215
(iii) Total number of platforms at such stations above rail level.	5	54	132	226	50	194	603	315	18	153	31	380	17	18	145
(iv) Percentage of (iii) to (ii)	9.43	79.41	83.54	91.87	39.06	88.58	64.98	79.14	100.00	100.00	96.88	71.29	80.95	78.26	67.44
3. (i) Number of stations at which there is only one platform.	278	322	423	507	376	287	361	345	139	484	135	645	181	88	520
(ii) Number of such stations at which platforms are above rail level.	6	166	123	201	39	135	154	197	7	320	71	182	90	28	273
(iii) Percentage of (ii) to (i)	2.20	51.55	28.74	39.64	10.37	47.04	42.66	57.10	5.04	66.12	33.33	28.22	49.72	31.82	53.46

C. = Commercial.
S. = Strategic.

(iv) Refreshment rooms for Hindus and Mohammedans.

The following statement shows the number of refreshment rooms provided for Mohammedans and Hindus previous to year under report, and the additions made during 1934-35 :—

The table below shows the details of number of stations on Class I Railways, provided with refreshment rooms for Hindus and Mohammedans on 31st March, 1935.

Name of Railway.	NUMBER OF STATIONS PROVIDED WITH REFRESHMENT ROOMS FOR THE USE OF			NUMBER OF REFRESHMENT ROOMS WHICH WERE PROVIDED DURING THE YEAR.		
	Hindus and Moham-medans.	Hindus only.	Moham-medans only.	Hindus and Moham-medans.	Hindus only.	Moham-medans only.
Assam Bengal	3	..	..	..	..	..
Bengal and North-Western . . . . .	..	9	9	..	..	..
Bengal Nagpur	13	..	..	..	..	..
Bombay, Baroda and Central India . . . . .	..	8	5	..	..	..
Eastern Bengal	21	12	7	..	..	..
East Indian	12	4	4	..	1	2
Great Indian Peninsula . . . . .	..	5	5	..	..	..
Jodhpur	3	1	..	..	..	..
Madras and Southern Mahratta . . . . .	..	36 (17 broad gauge + 19 metre gauge)	7	..	..	..
His Exalted Highness the Nizam's State . . . . .	..	10	11	..	..	..
North Western	21	..	..	2	..	..
Bohilkund and Kumaon	1	..	..	..	..	..
South Indian	33	..	6	1	..	..

(v) Vendors' stalls in waiting halls and on platforms.

Assam Bengal Railway.—62 Hindu stalls, 3 Marwari stalls and 40 Mohammedan stalls were in use at 50 stations.

Bengal and North-Western Railway.—There are stalls at 38 stations.

Bengal Nagpur Railway.—No addition was made to the number of stalls, *i.e.*, 65 that were in use during the previous year. The Hindu stall at Vizianagram was extended so as to provide separate accommodation for Brahmans and non-Brahmans.

Bombay, Baroda and Central India Railway.—78 stations on the broad gauge and 32 stations on the metre gauge had stalls. Four stalls, *viz.*, one each at Mahalakshmi, Fort Songhad, Kora and Umalla, were provided during the year.

Burma Railways.—260 stalls were open at the end of the year.

Eastern Bengal Railway.—Tea and light refreshment stalls were previously provided at 79 stations. New stalls were provided during the year at Kalchini, Majbat and Godagari Ghat.

East Indian Railway.—Stalls were previously in existence at 114 stations. During the year four stalls were opened, one each at Barka Kana, Madhupur, Kashi and Sandila.

Great Indian Peninsula Railway.—There were stalls previously at 132 stations. During the year, 11 stalls were provided as follows:—

2 at Kareli; and

1 each at Chandur, Dholpur, Gwalior, Jeur, Mumbra, Pusad, Raja-ki-Mandi, Sohagpur and Yeola.

Jodhpur Railway.—Vendors' stalls were in existence at five stations. Stalls for ice and aerated waters were opened temporarily at Luni Junction, Jamesabad, Pithoro and Mirpur Khas.

Madras and Southern Mahratta Railway.—No addition was made to the number of stations, *viz.*, seven at which stalls were previously provided.

His Exalted Highness the Nizam's State Railway.—There are stalls at 134 stations.

North Western Railway.—Stalls were previously in use at 126 stations. During the year under review, 11 new stalls were provided, *viz.* :—

2 each at Kalka, Bhatinda and Batala, and

1 each at Tando Adam, Rahim Yarkhan, Khanpur, Ruk and Quetta.

In addition, 18 tea tables were provided on the platforms and in the waiting halls of 10 important stations.

Rohilkund and Kumaon Railway.—There are two tea stalls at Kathgodam and one at each of the following stations:—

Lucknow City, Sitapur, Pilibhit, Bhojeeपुरa, Lakhimpur Kheri, Mailani, Izatnagar and Bareilly City.

South Indian Railway.—At the end of the year, 190 stalls were open. During the year, 26 new stalls were provided at the following stations:

(a) Fruit stalls—Mandapam, Kodambakkam, Vadamadura and Madras Beach (Goods Shed).

(b) Combined fruit and tea stall—Punkunnam.

(c) Light refreshment stalls—Conjeeveram, Olavakkot, Virudhunagar and Palni.

(d) Pan Stalls—Chingleput, Chidambaram, Vriddhachalam, Mayavaram, Tiruvarur, Tiruturaipundi, Tanjore, Dindigul, Manamadurai, Madura, Trivandrum Central, Palni, Mettupalaiyam, Shoranur, Calicut and Cannanore.

(e) Tea stalls—Walajabad.

The following statement summarises the number of stations on Class I Railways, at which vendors' stalls were open during the year 1934-35.

Railway.	Number of stations at which stalls were in service on 31st March, 1935.	Number of stalls opened during the year.
Assam Bengal	50	..
Bengal and North-Western	38	1
Bengal Nagpur	65	..
Bombay, Baroda and Central India	110	4
Burma	260	..
Eastern Bengal	79	3
East Indian	114	4
Great Indian Peninsula	132	11
Jodhpur	5	4
Madras and Southern Mahratta	8	..
His Exalted Highness the Nizam's State	134	..
North Western	126	11
Rohilkund and Kumaon	11	10
South Indian	190	26

(vi) *Water supply for passengers.*

Assam Bengal Railway.—(a) *Large stations.*—Water taps are provided on platforms. Watermen are also employed at a number of stations to supply drinking water to passengers at train times. Clean chlorinated water is made available in earthen chatties at all stations, in addition to European type filters installed at 21 stations.

(b) *Small stations.*—Earthen chatties on wooden stands supply clean chlorinated water.

(c) 29 watermen were permanently employed at 27 stations. Hindu staff were also deputed to help watermen during rush periods.

Bengal and North-Western Railway.—(a) *Large stations.*—Hydrants are provided at suitable places on station platforms. Water is also provided to passengers in trains by watermen provided with wheeled water tanks and buckets.

(b) *Small stations.*—Water is kept ready in buckets in the station verandahs, whence watermen and other staff supply water to passengers in trains. At engine watering stations, taps are also provided for the supply of water to passengers.

(c) 128 watermen were permanently employed at 94 stations and 106 temporary additional watermen were engaged for the hot weather months.

Bengal Nagpur Railway.—(a) *Large stations.*—Water shelters are provided at 90 stations.

(b) *Small stations*.—Drums on wheels are provided for supplying water at many stations. Tube wells are being provided according to a programme where the existing supply is not adequate.

(c) 176 watermen were employed permanently at 136 stations, and 100 additional watermen were engaged during the hot weather months.

Bombay, Baroda and Central India Railway.—(a) *Large stations*.—Water taps are provided on platforms; in addition, permanent Hindu watermen supplemented by temporary men during summer attend to passengers. At the majority of stations, water huts and *piaos* are provided, where cool water is stored in earthen *gharas*.

(b) *Small stations*.—Hydrants are provided at certain small stations, and at others permanent watermen, supplemented by temporary men in summer, supply water to passengers.

(c) At 29 stations on the broad gauge and 304 stations on the metre gauge, 44 and 453 watermen respectively were employed permanently. In addition, 91 and 38 temporary watermen were provided during the hot weather months. One water tap at Samni and one at Baroda were provided during the year.

Burma Railways.—(a) *Large stations*.—Hydrants are provided on platforms and in waiting sheds.

(b) *Small stations*.—Earthen pots containing drinking water are placed in special stands on platforms.

(c) 20 watermen were permanently employed at 14 stations and 5 watermen temporarily during the hot weather months. During the year, a water tank was provided in the third class waiting hall at Thazi.

Eastern Bengal Railway.—(a) *Large stations*.—A connection was made from the water tank to the station platform at Dacca.

(b) *Small stations*.—Tube wells were sunk at four stations, a water tap provided at one station and pipe connection at another.

(c) 132 watermen were permanently employed at 74 stations and 39 temporarily during the hot weather months.

East Indian Railway.—(a) *Large stations*.—In addition to hydrants on platforms, galvanised tanks on wheels or trollies with earthen pots, were used for supplying water to passengers. During the year, re-inforced concrete tanks with a number of taps were provided at two stations and separate trellis kiosks, containing earthen pots or buckets, of drinking water, were provided at 51 stations.

(b) *Small stations*.—Trellis kiosks were in use at 88 stations.

(c) 703 watermen were permanently employed at 431 stations and 504 temporarily during the hot weather months.

Great Indian Peninsula Railway.—(a) *Large stations*.—Watermen were permanently employed to supply water to passengers and, in addition, a sufficient number of chatties containing cool drinking water were kept in cages. Two drinking water fountains were provided at Harda during the year.

(b) *Small stations*.—Sufficient number of *Kankharies* and chatties containing cool drinking water were placed in shelters.

(c) 281 permanent watermen were employed at 208 stations and 382 temporarily during the hot weather.

Jodhpur Railway.—(a) *Large stations*.—Water taps were provided on platforms, in addition to *piaos* and Hindu watermen.

(b) *Small stations*.—Hindu watermen were engaged and *piaos* provided at the majority of stations.

(c) 101 watermen were permanently employed at 98 stations; and 13 temporarily during the hot weather months.

Madras and Southern Mahratta Railway.—An additional water tap was provided at Kottur and Hagaribommanahalli stations.

His Exalted Highness the Nizam's State Railway.—(a) *Large stations.*—Water taps were provided on the platforms.

(b) *Small stations.*—Drinking water was supplied to passengers in trains by watermen employed at stations.

(c) There were 38 stations at which one waterman each was employed. The total number of watermen employed throughout the year was 44. During the hot weather, a third class compartment was reserved for a travelling waterman on all passenger and mixed trains for the supply of drinking water to passengers.

North Western Railway.—In addition to water taps, hand barrows containing earthen pots filled with cool water, were provided for supplying water to passengers. Water shelters containing a sufficient number of 'mutkas', were also provided during summer.

1,414 watermen were permanently employed at 892 stations. During the hot weather months, 732 additional watermen were employed temporarily at important stations. Travelling watermen were also in service on certain sections. Extra water taps were installed on passenger platforms and in the third class waiting halls at certain stations.

Rohilkund and Kumaon Railway.—(a) *Large stations.*—Sixteen water carts of improved pattern, were in use for the supply of water to passengers. Two double-stand pipes were provided at Gola Gokaran Nath for use during *melas*.

(b) *Small stations.*—In addition to cold drinking water placed in buckets for the use of passengers, one station was fitted with Gujranwala pumps and three more were in course of being so fitted.

(c) 42 permanent watermen were employed at 42 stations and 37 watermen temporarily during the hot weather. In addition, 11 bhisties were employed at important stations.

South Indian Railway.—(a) *Large stations.*—In addition to the provision of hydrants, water tubs and drums on platforms, water carriers were also detailed to supply water to passengers in trains.

(b) *Small stations.*—Hydrants were provided on the platforms at the more important stations. In addition, water was stored in drums which were kept in a cage or box. Additional hydrants and water tanks were provided at seven stations during the year.

(c) 165 permanent water carriers were employed at 106 stations.

(vii) *Restaurant or buffet car services.*

Assam Bengal Railway.—One restaurant car was in regular service on the Assam Mail trains between Hojai and Furkating.

Bengal Nagpur Railway.—Restaurant cars on the European style were run on the Up and Down Bombay and Madras Mail trains. On excursion specials, a kitchen car was provided.

Bombay, Baroda and Central India Railway.—Restaurant cars catering in European style were in service on the Frontier Mail trains between Bombay Central and Delhi and on 1 Up and 2 Down between Ahmedabad and Ajmer and 3 Up and 4 Down between Ahmedabad and Delhi.

Third class carriages catering for Hindus and Muslims were provided on 15 Down and 16 Up between Bombay Central and Viramgam and 19 Down and 20 Up between Bombay Central and Delhi.

Eastern Bengal Railway.—Restaurant cars catering in European style were run on the Assam Mail trains (3 Up and 4 Down) between Calcutta and Parbatipur.

East Indian Railway.—Restaurant cars catering in European style, were provided on 8 services :—

Nos. 1 Up and 2 Down—Calcutta-Delhi-Kalka Mails.

Nos. 3 Up and 4 Down—Bombay Mails.

Nos. 7 Up and 8 Down—Howrah-Delhi Expresses.

Nos. 5 Up and 6 Down—Calcutta-Punjab Mails.

Five restaurant cars for catering in Indian style, were being built.

Great Indian Peninsula Railway.—Restaurant cars catering in European style, were run on sixteen trains.

Restaurant cars catering in Indian style, were run on two trains.

Buffet cars were run on four trains.

Jodhpur Railway.—Restaurant cars catering in European style, were run on 3 Up and 4 Down between Marwar and Hyderabad (Sind).

Refreshment cars catering in Indian style were run on the following services :—

3 Up and 4 Down between Marwar and Hyderabad (Sind).

9 Up and 10 Down between Jodhpur and Hyderabad (Sind).

29 Up and 30 Down between Sujangarh and Degana.

Buffet cars providing light Indian refreshments were run on 73 Up and 74 Down trains between Jodhpur and Phalodi.

Madras and Southern Mahratta Railway.—Restaurant cars catering in European style were running on nine mail and express trains.

His Exalted Highness the Nizam's State Railway.—A buffet car for the supply of meals and other refreshments to Hindu and Mohammedan passengers, was run between Bezwada and Wadi by Nos. 1 Up and 2 Down passenger trains.

North Western Railway.—Restaurant cars catering in European style, were run on the following trains :—

7 Up and 8 Down between Lahore and Rohri.

9 Up and 10 Down between Rohri and Karachi.

3 Up and 4 Down between Lahore and Rawalpindi.

Dining and vending cars for Hindus and Mohammedans were run on the following trains :—

57 Up and 58 Down between Lahore and Delhi.

7 Up and 8 Down between Lahore and Rohri.

Three dining cars for catering in Indian style were constructed during the year to replace vending cars.

Rohilkund and Kumaon Railway.—Restaurant cars, catering in European style, were run on three trains.

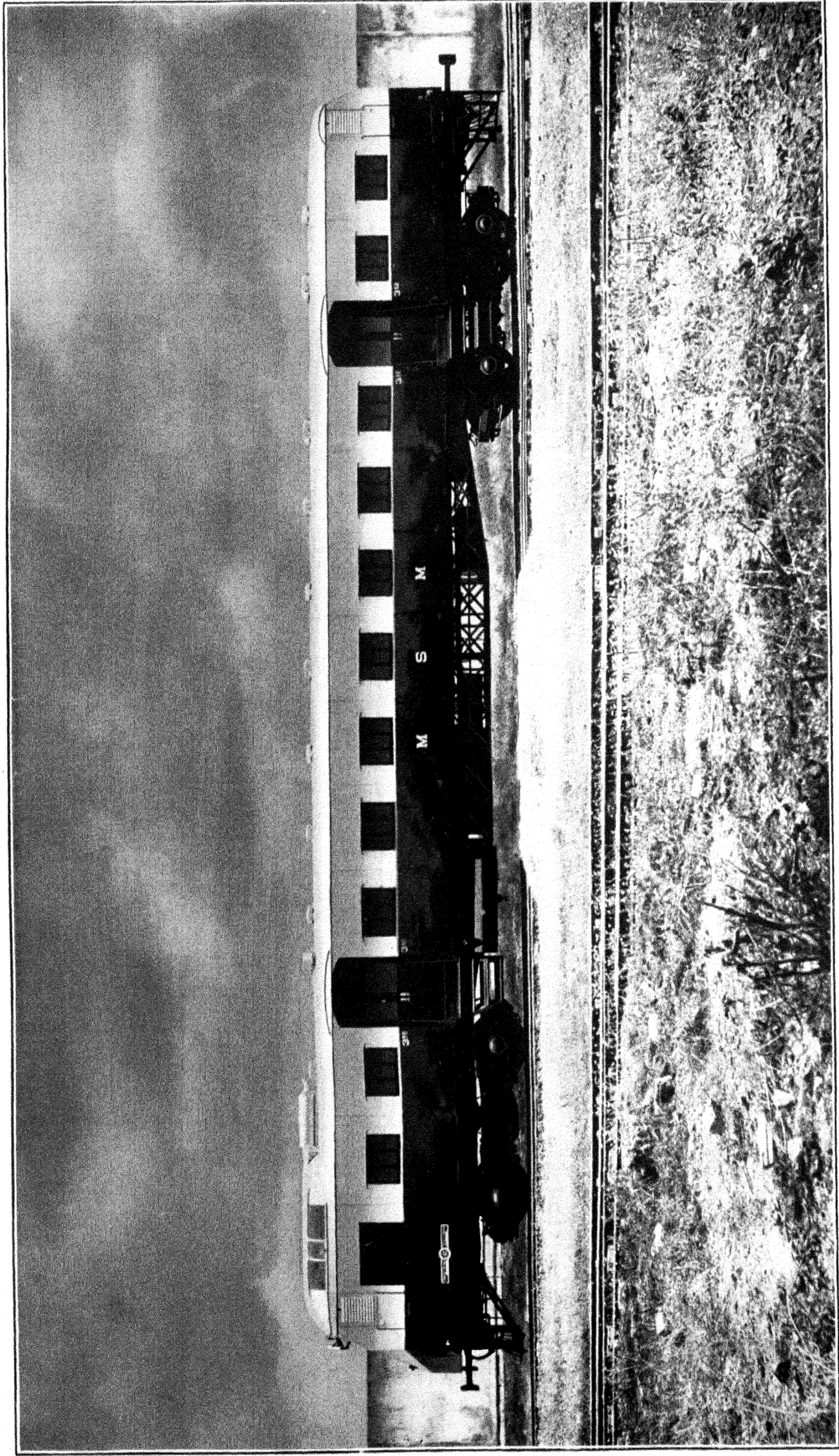
South Indian Railway.—Dining cars catering in European style were run on 1 Up and 2 Down (Indo-Ceylon Express trains) between Trichinopoly and Dhanushkodi and on the Up and Down Blue Mountain Express trains between Erode Junction and Mettupalaiyam during the hill season only. Buffet cars, providing light refreshments, were run on :—

Nos. 7 and 8—Dhanushkodi Fast Passengers.

Nos. 9 and 10—Trivandrum Fast Passengers.

Nos. 11 and 12—Shencottah Passengers.

MADRAS AND SOUTHERN MAHRATTA RAILWAY.



III Class Diesel Rail Car—Side view.

The following summarises the restaurant car services during 1934-35 :—

Railway.	Number of trains on which restaurant cars were run, catering in		Number of trains on which buffet cars were run.	Remarks.
	European Style.	Indian Style.		
Assam Bengal	2	..	..
Bengal Nagpur	4	..	..
Bombay, Baroda and Central India	6	4	..	
Eastern Bengal	2	..	..
East Indian	8	..*	..	* 5 cars for catering in Indian style were being built.
Great Indian Peninsula	16	2	4	
Jodhpur	2	6†	2	† Refreshment cars.
Madras and Southern Mahratta	9	..	..
His Exalted Highness the Nizam's State.	..	..	2	
North Western	6	4	..	
Rohilkund and Kumaon	3	..	..
South Indian	4	..	6	

(viii) *Improvements carried out in existing lower class carriages.*

The improvement in regard to the provision of amenities for the comfort and convenience of passengers in the existing lower class carriages has been maintained.

Electric lighting in lower class carriages on the Assam Bengal, Eastern Bengal, East Indian and Great Indian Peninsula Railways has been improved. 7 metre gauge bogie coaches on the Jodhpur Railway have been fitted with dynamo and cells. 7 broad gauge bogie coaches previously provided with oil lights on the South Indian Railway have been fitted with electric lights.

Seat backs in 59 metre gauge bogie third class coaches on the South Indian Railway have been raised to provide additional comfort. The seats in the new carriages on the Bengal Nagpur Railway are of an improved type and they are appreciated by the travelling public.

Hat pegs and hooks have been provided in lower class stock on the Assam Bengal and South Indian Railways.

61 glass frames and 107 louvre frames and windows have been provided in third class compartments of 13 coaches on the North Western Railway.

88 third class carriages with female compartments on the Assam Bengal Railway have been provided with communication windows in the partition between male and female compartments.

All Class I Railways have taken steps to provide means to readily identify at night compartments set apart for women.

(ix) *Improvements carried out in the latrines of third class carriages.*

This matter continues to engage the attention of all railways.

Electric lights have now been provided in third class latrines of all the seven main line mail rakes on the Burma Railways. Electric lights have also

been installed in the latrines of 196 carriages on the North Western Railway and 107 carriages on the Bengal and North-Western Railway. Arrangements for fitting electric lights in the latrines in other lower class carriages of the latter two railways are in hand. Electric lights in third class latrines on the Assam Bengal and Great Indian Peninsula Railways have been improved.

Arrangements are in hand to increase the size of latrines in lower class carriages which are below the standard size on the Bengal and North-Western, Eastern Bengal, Jodhpur, North Western and Rohilkund and Kumaon Railways.

Iron coat hooks and shelves for holding *lota* and soap have been provided in latrines of the new and rebuilt lower class carriages on the Assam Bengal Railway. Similar shelves have been provided in latrines of 214 existing lower class coaches on the North Western Railway, which are also being modified so as to prevent water finding its way into main compartments. On the Jodhpur Railway, 16 latrines in third class carriages have been provided with water tanks. Minor improvements such as coat hooks, electric light and frosted glass have also been introduced in third class latrines of this Railway. Automatic electrical equipments for improving the flushing arrangements of third class latrines fitted by the North Western Railway are under trial.

(x) *Arrangements to ensure cleanliness of latrines in passenger trains.*

Assam Bengal Railway.—Train examiners at terminals and intermediate train examining stations were required to give special attention to cleaning and disinfecting lavatories and latrines in all carriages. At terminal stations train examiners were made personally responsible for seeing that the roof tanks of carriages were clean and filled with water before each trip. District officers inspected all coaches at regular intervals. Overhead watering arrangements for carriages were provided at Badarpur, Luming, Akhaura and Shaistaganj.

Bengal and North-Western Railway.—At all junctions, starting and terminal stations, overhead water tanks were cleaned and filled with fresh water. At these stations latrines were cleaned and disinfected whenever necessary.

Bengal Nagpur Railway.—Large stations—Khargpur, Chakardharpore, Raj Kharsawan, Jharsuguda, Bilaspur, Dongargarh and Khurda Road were provided with portable steel tanks containing disinfectants for use in intermediate and third class latrines, in running trains. All latrines were properly cleaned and disinfected unless, as was sometimes experienced, passengers objected to a sweeper entering the compartment. The importance of keeping latrines in running trains in a clean state was constantly impressed upon the staff concerned. To provide adequate facilities for filling lavatory tanks with clean water, overhead watering arrangements were available at important centres—Chakardharpore, Bilaspur, Dongargarh, Khurda Road and Adra and ground hydrants were provided at Kantabanji and Rayaghada. At stations not equipped with overhead watering arrangements, special wheeled tanks were used for filling lavatory tanks.

Bombay, Baroda and Central India Railway.—Tanks of carriages were filled at starting stations and replenished at large stations *en route* by special staff. Notices were also exhibited in the lavatories of third class carriages on the broad gauge advising the public to inform the guard or station staff, when the services of a sweeper were required. The names of stations, where sweepers were specially provided for the purpose, were also detailed in these notices. On the metre gauge, lavatories in carriages were cleaned *en route* by sweepers provided at certain stations.

Burma Railways.—Extra sweepers for cleaning latrines in third class carriages were posted at important stations, where through trains had a sufficiently long halt.

Eastern Bengal Railway.—In accordance with the general instructions issued, the staff of the carriage examining stations saw that roof tanks of carriages were filled at starting stations and *en route* where special facilities and time permitted. They also saw to the washing, cleaning and disinfecting of latrines in all carriages at starting stations. Sweepers were also kept in readiness to attend to latrines of carriages on arrival of trains.

East Indian Railway.—The tanks of carriages were filled at all starting stations and also *en route* when necessary. At terminal stations each rake was thoroughly cleaned and washed. At the larger stations *en route* staff were detailed for cleaning carriages and attending to latrines. All Head Train Examiners had instructions to inspect trains and see that the orders issued were complied with. Similarly, all Divisional Officers were required to inspect trains and report on the cleanliness of carriages and latrines. These reports were summarised and submitted monthly to the Chief Operating Superintendent, together with action taken to rectify defects brought to light.

Great Indian Peninsula Railway.—All latrines were flushed with water, then scrubbed down with soap and water, flushed again with water and finally disinfected at the starting stations. At intermediate stations sweepers were detailed to clean lavatories in each unoccupied compartment and those in the occupied compartments, with the permission of passengers.

Water tanks were provided to supply water for the tanks in third class lavatories both at starting stations and at stations *en route*.

Jodhpur Railway.—At terminal stations and at intermediate engine changing stations, staff were instructed to fill carriage tanks. At stations where trains stopped for a sufficiently long time, the staff attend to the latrines, if and when desired by passengers.

Madras and Southern Mahratta Railway.—The carriage tanks on all trains are filled with water and latrines cleaned at starting stations and at suitable stations *en route*. At all important stations, sweepers are detailed to attend to each train to clean latrines.

His Exalted Highness the Nizam's State Railway.—At all starting stations and at junctions, staff are instructed to fill up water tanks of all passenger carriages and to sweep and clean all latrines.

North Western Railway.—Instructions were issued to the staff to give particular attention to the cleanliness of lavatories in passenger carriages and to see that tanks in carriages were filled both at the starting station and at stations *en route*. Station Masters and Train Examiners are required to arrange for the cleaning of lavatories at stations *en route*.

Rohilkund and Kumaon Railway.—All tanks of passenger and mixed trains are filled at starting stations and at suitable intermediate stations. At all carriage examining stations sweepers are detailed to clean latrines.

South Indian Railway.—All carriage latrines are cleaned and disinfected at each train examining station. Train Examiners at stations are responsible for supervising this work and for seeing that water tanks are full. Rolling Stock Inspectors and Locomotive Inspectors were also specially instructed to watch this matter. District Officers carried out periodical inspections. Special instructions were issued for the tanks of all carriages to be filled as frequently as possible between 6 and 8 both in the morning and in the evening. In addition to paying individual attention to complaints brought to notice, Guards are also responsible for seeing that lavatories are properly cleaned and water tanks filled. Printed notices are exhibited in lavatories, requesting passengers to report deficiencies to the guard. Station Masters are also required to keep a sufficient number of buckets of water ready on the platform to fill carriage tanks on arrival should this be necessary. As an experimental measure, carriages of all trains passing through Trichinopoly Junction, are cleaned during their halt.

(xi) *Reserved lower class compartments for women. Arrangements made to distinguish women's compartments at night.*

On most principal railways intermediate and third class compartments reserved for women have either a glass panel bearing the figure of a woman, illuminated at night, or a plaque or board with a similar distinguishing figure, and in some cases with the addition of the words 'For women only' in English and a vernacular. These boards are also usually illuminated at night.

On the Bengal and North-Western, Jodhpur and Rohilkund and Kumaon Railways compartments for women have the figure of a woman painted on the door or on a white enamel plate affixed to the door of the compartment reserved.

On the Bombay, Baroda and Central India and East Indian Railways compartments for women are generally in the rear of trains, near the guard's compartment, an arrangement which is generally familiar to passengers travelling on those lines.

(xii) *Overcrowding in third class carriages.*

All class I Railways took a census of the number of passengers in third class carriages at least once in the year—during the busiest period—and more often when circumstances required it, so as to make certain that the number of trains run and the stock in use was sufficient for public requirements. The results of these censuses were placed before Local Advisory Committees in practically all cases. That the stock provided was generally adequate appears to be clear from the figures obtained. Occasionally a train was found to contain more passengers than the seating accommodation available, but such instances were rare, and the excess was almost always due to a sudden rush which could not have been foreseen, *i.e.*, an abnormal number of marriage parties, etc. If the results of a census indicated the desirability of a further census, this was arranged so that the question of remedial measures could be considered.

CHAPTER VIII.

MISCELLANEOUS.

83. Accidents.—(a) The following table shows the number of railway servants and other persons killed and injured in accidents on Indian Railways, excluding casualties in railway workshops during the year 1934-35 as compared with the previous year :—

Cause.	KILLED.		INJURED.	
	1933-34.	1934-35.	1933-34.	1934-35.
<i>A.—Passengers.</i>				
In accidents to trains, rolling-stock, permanent-way, etc.	21	15	160	74
In accidents caused by movements of trains and railway vehicles exclusive of train accidents.	204	189	785	794
In accidents on railway premises in which the movement of trains, vehicles, etc., was not concerned.	7	5	19	38
Total .	232	209	964	906
<i>B.—Railway servants.</i>				
In accidents to trains, rolling-stock, permanent-way, etc.	9	10	123	107
In accidents caused by movements of trains and railway vehicles exclusive of train accidents.	177	183	1,975	2,269
In accidents on railway premises in which the movement of trains, vehicles, etc., was not concerned.	33	24	6,357	6,071
Total .	219	217	8,455	8,447
<i>C.—Other than passengers and railway servants.</i>				
In accidents to trains, rolling-stock, permanent-way, etc.	45	32	86	42
In accidents caused by movements of trains and railway vehicles exclusive of train accidents.	2,307	2,545	679	790
In accidents on railway premises in which the movements of trains, vehicles, etc., was not concerned.	23	28	798	67
Total .	2,375	2,605	1,563	899
GRAND TOTAL .	2,826	3,031	10,982	10,252

(b) Out of the total of 3,031 persons killed, 2,019 were trespassers; 460 were reported to be suicides and 57 were killed on railway premises otherwise than during the movement of trains, vehicles, etc. The increase in the number killed, as compared with the previous year, is principally under the heads "trespassers" (187) and "suicide" (67). The number of persons injured decreased by 730. The number of passengers killed, decreased by 23 and of passengers injured by 58 although there was an increase of 2.4 million passenger train miles in comparison with the previous year.

(c) The following statement shows the number of passengers killed and injured on all railways during each of the last 5 years :—

Year.	PASSENGERS.	
	Killed.	Injured.
1930-31	337	1,037
1931-32	255	912
1932-33	231	843
1933-34	232	964
1934-35	209	906

(d) On class I Railways the number of railway servants killed in accidents which occurred during the movement of trains and railway vehicles, exclusive of train accidents, increased by 3 and the number injured by 302.

The following table analyses the main causes of these accidents :—

Cause.	KILLED.		INJURED.	
	1933-34.	1934-35.	1933-34.	1934-35.
Misadventure or accidental	122	124	1,771	2,022
Want of caution or misconduct on the part of the injured person.	47	45	140	182
Want of caution or breach of rules, etc., on the part of servants other than the person injured.	..	3	22	30
Defective apparatus or system of working, dangerous places, dangerous condition of work or want of rules or systems of working.	..	..	..	1
Total .	169	172	1,933	2,235

(e) The following statement analyses the accidents which occurred during the last two years, grouped under the principal causes. A statement showing

the accidents in greater detail for each railway will be found in Appendix D of Volume II of this report :—

	1933-34.	1934-35.
1. Running over cattle	9,701	9,362
2. Derailments not involving passenger trains .	3,174	3,217
3. Accidents due to failure of couplings and draw gear	1,917	2,029
4. Accidents due to failure of engines owing to faulty material, workmanship and operation arising from the working of the running staff	1,401	1,406
5. Accidents due to failure of other rolling-stock	345	748
6. Accidents due to failure of engines owing to faulty material and workmanship in the Mechanical Department	521	556
7. Broken rails	355	323
8. Derailment of passenger trains	234	274
9. Fires in trains or at stations or bridges .	186	215
10. Running over obstructions on the lines other than those at level crossings . .	193	189
11. Collision involving goods trains or goods vehicles	148	133
12. Flooding of permanent-way	188	107
13. Attempted train wrecking	116	107
14. Trains running over obstructions or vehicles at level crossings	94	73
15. Passenger trains running in the wrong direction through points but not derailed .	55	72
16. Land slips	74	52
17. Accidents due to failure of axles	44	51
18. Collisions involving passenger trains . .	65	47
19. Collisions between light engines	43	33
20. Accidents due to failure of tyres or wheels .	12	33
21. Train wrecking	20	17
22. Accidents due to failure of brake apparatus .	13	15
23. Failure of bridges or tunnels	6	5
24. Miscellaneous	326	315
Total	19,231	19,379

(f) The total number of accidents shows an increase of 148 as compared with the previous year: against this the increase in total train miles was 6·8 millions—

- (i) “Running over cattle” still accounts for the largest number of accidents, *i.e.*, 48 per cent. of the whole. Next in order, are “derailments not involving passenger trains” (17 per cent.), “accidents due to failure of couplings and draw gear” (10 per cent.), “accidents due to failure of engines owing to faulty working of the running staff” (7 per cent.), “accidents due to failure of other rolling stock” (4 per cent.), “accidents due to failure of engines owing to faulty material, etc., in the mechanical department” (3 per cent.) and “broken rails” (2 per cent.).
- (ii) In spite of an increase in the number of trains run there was a decrease in accidents under the heads “Trains running over obstructions or vehicles at level crossings” and “Collisions involving passenger trains”.
- (iii) Accidents in railway workshops accounted for the death of 12 and injuries to 7,342 railway servants, or an increase of 4 in

the former and a decrease of 1,447 in the latter head as compared with the previous year.

84. Brief details are given below of the more serious accidents which occurred during the year.

On the 10th April, 1934, while No. 143 Up Parcels Express (Bengal and North-Western Railway) was shunting to a dead siding to detach two parcels vans it side-collided with the engine of No. 50 Down Mixed train (Rohilkund and Kumaon Railway) which was being received at the station. There were no casualties but the estimated cost of damage to the two engines and the permanent way approximated to Rs. 7,500.

On the 25th May, 1934, a motor lorry collided with the leading vehicle of No. 370 Up Goods train at a level crossing close by the catch siding points at the entrance to Bara Jamda station on the Bengal Nagpur Railway. One female cooly in the lorry and the lorry driver were killed.

On the 15th June, 1934, while an Up Light train was proceeding from Hatta Road to Balaghat on the Bengal Nagpur Railway, due to a violent storm, the complete train consisting of five bogies, with the exception of the engine, capsized at mile 641/10-11. Fourteen passengers were injured slightly and the Permanent Way Inspector, Balaghat, was seriously injured.

On the 16th August, 1934, a motor lorry, with a trailer, collided with No. 27 Up Goods train at a "C" class unmanned level crossing between Margherita and Powai on the Dibru Sadiya Railway, resulting in the death of three persons, including the driver of the lorry, and serious injury to another passenger on the lorry.

On the 20th September, 1934, No. 46 Up Passenger train derailed between Kesinga and Rupra Road stations on the Raipur-Vizianagram section of the Bengal Nagpur Railway, due to the bank having been washed away leaving the rails and sleepers unsupported; thirteen persons were killed.

On the 8th October, 1934, the engine and tender of No. 29 Up Fast Passenger train derailed between Rao and Indore stations on the Bombay, Baroda and Central India Railway, due apparently to the removal of a rail by some unknown persons, resulting in slight injuries to nine persons and damage of approximately Rs. 24,000 to the permanent way and rolling-stock.

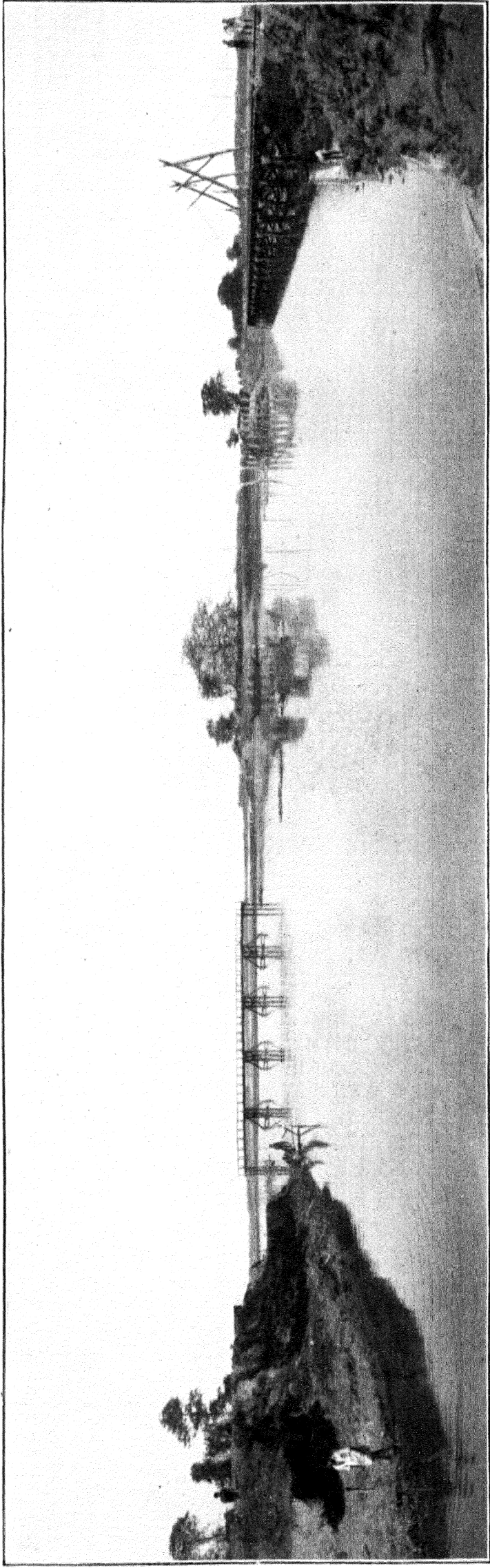
On the 10th October, 1934, a collision occurred between a goods train and a rake of tramway wagons on the Kymore siding of the Great Indian Peninsula Railway, causing damage to rolling stock approximating to Rs. 15,300.

On the 17th October, 1934, No. 26 Passenger train derailed between Puttur and Nagari stations on the north-west line of the Madras and Southern Mahratta Railway due to the unsupported and unpacked pots under the rail—the permanent way staff who were lowering a rail leaving insufficient support for the train to pass in safety. As a result of the accident four of the staff and a leper who was travelling without a ticket in an empty third class bogie received slight injuries.

On the 15th December, 1934, No. 3 Up Mail derailed at bridge No. 173 between Penwagon and Tawgywein on the Rangoon-Mandalay main line of the Burma Railways due to some unknown persons having removed both pairs of fishplates from the joints immediately preceding the bridge. One female third class passenger died of injuries, the driver and both firemen were seriously injured and twelve other passengers received injuries. The damage to engine and rolling-stock amounted to approximately Rs. 36,800.

On the 18th February, 1935, No. 55 Up Passenger train derailed near Vadali station on the Bombay, Baroda and Central India Railway, causing damage to permanent way and rolling stock amounting to Rs. 6,650. The three members of the engine crew were injured. The accident was ascribed to the excessive speed at which the train was travelling on a curve, combined with instability of the engine at speed.

ASSAM BENGAL RAILWAY.



Washout of Ranthali Bridge on Chaparmukh Silghat Railway.

85. Damage by earthquake, floods and cyclones.—The year under review on the whole, proved a more fortunate one than the preceding year, in that railways were not subjected to any cataclysms of the magnitude of the earthquake experienced in January, 1934. The monsoons, however, took their usual toll in the shape of breaches of the permanent way, destruction of bridges and other structures and interruptions to traffic. The more important of these are given below :—

Assam Bengal Railway.—Unusually heavy rains in the Khasi and Jaintia hills in the second half of June, caused the Kopili and other rivers to rise to an unprecedented height and caused extensive damage to the Gauhati and part of the Chaparmukh-Silghat branches, including the washing away of a 3 × 60' bridge; as a result the branches remained closed to traffic for a period of between 2 to 3 months.

The line was also visited by 3 cyclones of some severity, which caused damage to quarters and signals at various places, and capsized 3 passenger coaches at Sylhet, fortunately of an empty rake.

Bengal and North-Western Railway.—Due to the simultaneous rise of the Sone, Gogra and Ganges rivers, severe floods occurred on the section Sonapore to Chupra between the 23rd and the end of August. The line between Goldinganj and Dighwara was breached by the flood at seven places, while that between Dighwara and Sonapore was cut and breached by villagers at eight places on the night of the 24th August, inspite of the efforts of the permanent way staff and of a small police patrol to prevent them.

Certain other sections of the line were also damaged during the same period and through communication was suspended over the various sections for periods ranging from ten days to about three months.

86. Publicity.—The Central Publicity Bureau at Delhi and its branches in London and New York continued their efforts to foster and develop tourist traffic. The Central Publicity Bureau also co-operates in the publicity work of individual railways. Some of the more important features of publicity work undertaken by railways are detailed in the following paragraphs :—

Bombay, Baroda and Central India Railway.—The experiment of catering for small parties of pilgrims and tourists at reduced rates was continued. Extensive propaganda was carried out by means of posters, leaflets and press advertisements. Several boards, with advertisements in Gujerati and Hindi painted thereon, were put up in conspicuous positions in Ahmedabad, Ajmer, Baroda and Bombay. Places worth visiting in Kashmir were advertised by means of leaflets, posters and in newspapers.

Publicity on a large scale was undertaken to advertise *melas* and fairs of All-India importance, such as the Rath Jatra Fair at Puri, Pushkar Fair at Ajmer, Magh Mela at Allahabad, etc.

In connection with pilgrim special trains a certain amount of propaganda was carried out. 30 special trains were run (14 originating on this railway and 16 on other railways), as against 17 run during the previous year.

Experience of the arrangements made for the excursion tour of the mill hands of the Delhi cloth mills in April, 1933, apparently led to a special train again being chartered in April, 1934, this time with a larger number of passengers, to visit Jaipur and Ajmer.

Eastern Bengal Railway.—Pictorial and letter-press posters were issued in connection with the different local *melas*, fairs, bazar specials, race meetings at Barrackpore and excavations at Paharpur.

Folders and handbills were also issued notifying the running of conducted excursions, the Pujah Bazar Special, the Barrackpore race meetings and the introduction of third class ordinary return tickets.

A wider scope for publicity was also sought by enlisting the co-operation of local bodies for the display of posters and leaflets.

Reciprocal arrangements for the exhibition of posters, pamphlets, etc., of the different railways both Indian and overseas, and other public bodies were continued. Towards the close of the year, the Posts and Telegraphs Department also joined in this arrangement.

Publicity was also given through lantern slides advertising conducted excursions, *melas*, races and the cheap mid-day fares and emphasizing the "Live in the suburbs" idea.

*East Indian Railway.—Letter-press posters and coloured handbills.—*These were issued in English and the vernaculars in connection with all important *melas*, fairs, concessions, special trains, hot weather resorts, facilities of train travel, introduction of third class daily return tickets at reduced fares over certain sections, reduction of freight charges on certain commodities, co-ordinated Rail-cum-Bus Service *via* Digha Ghat and Patna Junction and Fast Express Goods service.

*Folders.—*Cheap illustrated folders in English and the vernaculars were issued giving publicity to the introduction of the Fast Goods service, third class return tickets at reduced fares, Buddhist pilgrim traffic and the more important *melas*.

*Road Competition.—*The special measures taken to combat road motor competition, such as the introduction of short period daily return tickets at reduced fares, introduction of additional train services, improved train connections, etc., were widely advertised in areas where motor bus competition was felt, through the media of coloured composite handbills, folders and posters in vernacular.

Advertisements featuring the advantages of railway travel from the health point of view were also inserted in health journals.

*Important Melas.—*Publicity propaganda was systematically carried out in connection with 55 *melas*. The method adopted in connection with the Magh Mela at Allahabad from 14th January to 18th February, 1935, illustrates what is generally done. In collaboration with the Central Publicity Officer and other railways, a joint publicity campaign was undertaken. Illustrated folders in Hindi, Bengali, Urdu and composite handbills in Hindi, Bengali, Urdu, Gurmukhi and Gujerati were distributed through religious organisations, station masters, district boards, foreign railways, etc.

Letter-press posters in the various vernaculars featuring extended week-end return tickets available during the important bathing days were displayed at all important stations.

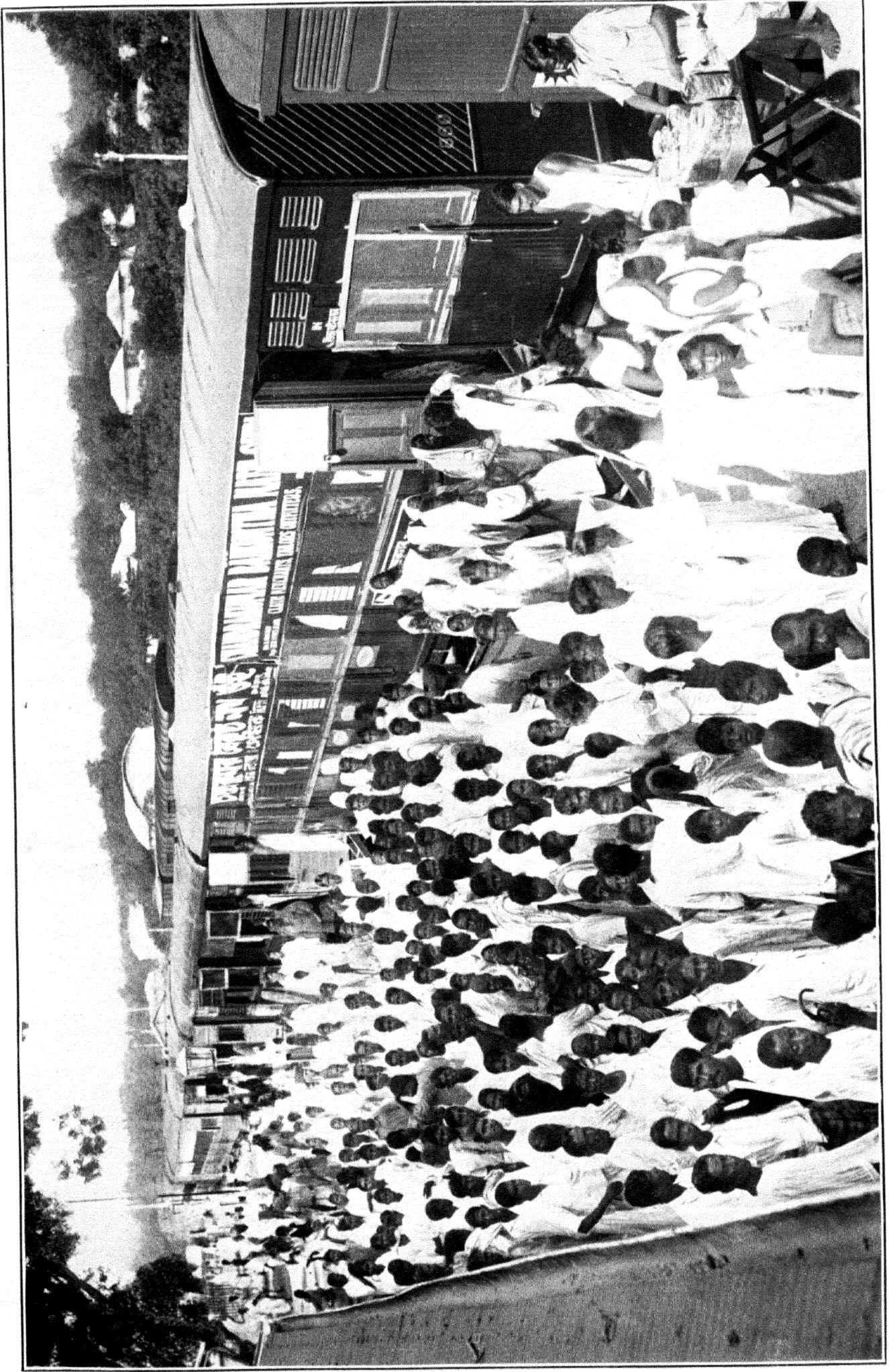
On the most important bathing day, *viz.*, 3rd February, 100,000 illustrated composite handbills in Hindi and Urdu featuring the facilities and merits of rail travel and third class fares from Allahabad and Prayag to important stations, were distributed to pilgrims returning from the *sangam*.

This occasion was further utilised to give publicity to other places of historical and religious interest served by the East Indian Railway by means of a procession of sandwichboard men wearing decorative caps and displaying pictorial posters. This procession was preceded by an elephant also displaying pictorial posters and drummers were engaged to draw the attention of pilgrims while handbills were distributed from the elephant throughout the *mela* area.

*Great Indian Peninsula Railway.—Cheap Third Class Return Tickets between Agra and Delhi.—*In order to stimulate local public interest in these cheap tickets, letter-press posters in Hindi and Urdu were displayed at stations between Agra and Delhi and 10,000 vernacular handbills were distributed through station masters.

*Cheap Third Class Return Tickets between Bombay and Pandharpur.—*To test the demand for such week-end tickets, a letter-press poster was liberally displayed at stations. This was supported by advertisements in vernacular newspapers published in Bombay and in the monthly time-tables. Slides were also shown at certain cinema houses in Bombay.

EASTERN BENGAL RAILWAY.



Pujah Bazar Special 1934.

Ashadi Fair at Pandharpur.—Concession tickets were advertised in Marathi newspapers circulating in Bombay, Poona and Nagpur areas. Pictorial Pandharpur posters were widely displayed in the Maharashtra areas and special letter-press posters drawing attention to the concession tickets were exhibited. An information bureau was opened in Pandharpur City to assist pilgrims.

Dussarah Fair at Datia.—As a large number of people from Jhansi City attend this one-day fair 10,000 handbills were printed and distributed, drawing attention to the reduced return tickets between Jhansi and Datia and to the special train which it was proposed to run for the convenience of visitors.

Bande Nawaz Fair at Gulburga.—In addition to the usual display of coloured posters at stations on the South-East line, a special campaign was undertaken in Bombay to induce Memons to visit the fair. Reduced third class return tickets were offered for individual passengers and efforts were made to organise large parties to travel by special trains.

Two railway representatives were deputed to carry out intensive personal canvassing near the principal mosques in Bombay and its suburbs. The results were disappointing.

Third Class Return Tickets.—200,000 vernacular handbills advertising third class return tickets in the following cases were produced for distribution :—

Dhulia-Shirud.	Katol-Nagpur.
Jalgaon-Paldhi.	Wardha-Paunar.
Nagpur-Amraoti.	Ellichpur-Akola.
Poona-Kedgaon.	Warora-Chanda.
Pulgaon-Arvi-Nagpur.	Ahmednagar-Vambhori.
Poona-Dhond.	New Delhi-Palwal.

New Diesel Rail Car Service.—The new Diesel Rail Car service on the Pulgaon-Arvi Railway was advertised by a wide distribution of leaflets and the issue of a special pocket time-table in colours, showing the revised services.

Information Bureau at Victoria Terminus.—The Bureau has continued to serve a wide public, both local and all-India. The total number of enquiries received and dealt with amounted to 42,000, giving an average of 140 per day, of which about 30 per cent. were dealt with by letter.

Madras and Southern Mahratta Railway.—The following details give some idea of the volume of publicity work done :—

	<i>Copies.</i>
Handbills distributed	544,600
Pamphlets distributed	85,000
Posters exhibited	12,150
Press notices	668
Cinema slides	83
Broadcasting announcements	91

The chief events on account of which publicity was undertaken were festivals at the principal pilgrim centres and also local festivals, races and other occasions such as tennis tournaments, etc. There are seven open air loud speaking distribution stations in Madras, where programmes are broadcast daily. The railway publicity matter for broadcasting is usually printed in advance and copies distributed shortly before announcements are made.

Publicity in respect of local festivals was effected by posters and distribution of handbills in towns. Local bands are also employed, and in the towns sandwichmen paraded with posters and distributed handbills. In one case a taxi plastered with posters was used over a distance of 184 miles in the interior. This proved very effective. Local shop-keepers were also asked to

act as agents for a small fee for distributing publicity matter in small towns and villages. An attempt was made to popularise the historical ruins of Vizianagar near Hospet station, by the distribution of a special pamphlet to schools, colleges, libraries and reading rooms, firms, clubs, military messes, etc. A "Travel Facility" pamphlet giving details of all concession fares was similarly distributed. The co-operation of the staff in the publicity campaign was encouraged and suggestions invited for improving existing and introducing new methods. Local talent is being encouraged to produce pictorial posters and a series advertising the attractions of Madras City likely to be of special appeal to mofussil residents was under consideration.

North Western Railway.—Publicity and salesmanship.—General.—A Sales Branch was inaugurated and new methods of advertising adopted.

Cinema car.—The working of the cinema car was re-introduced in a modified form by the conversion of an old 4-wheeler surgery-van as against a bogie coach which was formerly in use. The cinema equipment carried included a movable power unit on wheels which was utilized for giving shows in places away from the railway line where it was found necessary to advertise concessions.

South Indian Railway.—Stimulation of third class traffic.—Efforts continue to be made to advertise as widely as possible fairs and festivals so as to attract third class traffic—also the several facilities introduced during the year by way of reduced fares, improved train service and festival arrangements.

All important festivals and concessions were advertised on an extensive scale through illustrated posters and leaflets and through the press. Reduced fares quoted to meet road competition were specially advertised in towns and villages. Due to the great importance attached to the 'Ardhodayam' festival which occurred on the 3rd February, 1935, an intense publicity campaign, which included the issue of litho posters, illustrated leaflets, handbills, etc., was arranged.

An illustrated folder containing useful information for tourists, and another regarding the newly opened Metur Dam were issued.

87. Anti-malarial measures.—During the year under review anti-malarial measures were continued on railways with good results both to the staff and the railway administrations.

Assam Bengal Railway.—There was a little change in the number of cases at Lumding during 1934-35 as compared with 1933-34. At Pahartali, however, the steps taken as reported last year to reduce the incidence of malaria there, have been successful and the improvement hoped for in this direction has been achieved.

Bengal Nagpur Railway. This year malaria incidence was lower than normal. Anti-malarial works were carried out at various centres with great success. The standard was well maintained, there being about 26 per cent. less total incidence than in 1933 with an increased saving of some 1,900 men days.

Bombay, Baroda and Central India Railway.—Anti-malarial measures, such as filling up small pools, draining large ones, spraying cess pools, etc., were carried out nearly at all important stations particularly at Freelandgunj where 21 low-lying places were levelled up and 326 pits and trenches were filled up and 87 pools of water which were potential breeding places were obliterated. The anti-malarial gang was active throughout the year paying weekly visits to potential breeding places including staff quarters and workshops. At Ajmer the measures adopted last year were continued with considerable success.

Eastern Bengal Railway.—Anti-malarial activities described in the last year's report were continued with the result that stations under control have continued to maintain steady improvement in the reduction of malarial incidence. Of late, there has been an increasing demand on the railway by

various public bodies for the institution of anti-malarial measures in railway areas adjoining their own. In such cases where the public bodies have given practical proof of their intentions, the railway has also co-operated.

East Indian Railway.—About Rs. 8,300 were spent for anti-malarial operations in Lhaksar, Barwadih and Burdwan. The results of these measures were most satisfactory. In Burdwan, there has been a saving of approximately 50 per cent. working days that were hitherto lost on account of malaria. At Barwadih the number of cases of malaria has been reduced by 75 per cent. Lillooah and Belur were attacked in June 1934 by *Anopheles Ludlowi* but the timely warning of the Director, Public Health, Bengal, and prompt action taken by the railway authorities saved these places from the invasion of this dangerous mosquito. No *Ludlowi* has since been discovered at these places.

Madras and Southern Mahratta Railway.—Anti-malarial activities continued with the same vigour as heretofore but it was not possible to reduce the number of listed “unhealthy stations” although no new addition was made to the list.

Great Indian Peninsula Railway.—The percentage of malarial cases decreased from 8·84 per cent. to 7·87 per cent. The usual anti-malarial activities such as oiling of all drains, draining of pools of stagnant water, filling up of low lands were carried out on the line throughout the year.

APPENDIX A.

Railway Administrations in India alphabetically arranged in three classes according to their gross earnings showing the working agencies and ownership.

NOTE.—Indian Railway Systems have been classified under three classes for statistical purposes—

Class I—Railways with gross earnings of Rs. 50 lakhs and over a year.

Class II—Railways with gross earnings of less than Rs. 50 lakhs a year, but exceeding Rs. 10 lakhs a year.

Class III—Railways with gross earnings of Rs. 10 lakhs and under a year.

[NOTE.—Railways under construction or sanctioned for construction on the 31st March 1935, are shown in italics.]

RAILWAY SYSTEM.		LINES COMPRISED IN THE SYSTEM.		
Name.	Worked by	Name.	Gauge.	Owned by
1	2	3	4	5
CLASS I.—RAILWAYS.				
1. Assam Bengal . . .	Assam Bengal Railway Company.	(a) Assam Bengal . . .	3' 3½"	State.
		(b) Chaparmukh Silghat	3' 3½"	Branch line Company under guarantee terms.
		(c) Katakhal Lalabazar .	3' 3½"	Ditto.
		(d) Mymensingh Bhairab Bazar.	3' 3½"	Branch line Company under guarantee and rebate terms.
2. Bengal and North-Western.	Bengal and North-Western Railway Company.	(a) Bengal and North-Western.	3' 3½"	Company subsidized by the Government of India*.
		(b) Mashrak-Thawe . . .	3' 3½"	State.
		(c) Tirhoot	3' 3½"	Do.
3. Bengal Nagpur . . .	Bengal Nagpur Railway Company.	(a) Bengal Nagpur . . .	5' 6"	Do.
		(b) Anuppur-Manendragarh.	5' 6"	Do.
		(c) Mayurbhanj	2' 6"	Branch line Company under rebate terms.
		(d) Parlakimedi Light . .	2' 6"	Private body.
		(e) Purlia-Ranchi	2' 6"	State.
		(f) Raipur-Dhamtari . . .	2' 6"	Do.
		(g) Satpura	2' 6"	Do.
4. Bombay, Baroda and Central India.	Bombay, Baroda and Central India Railway Company.	(a) Bombay, Baroda and Central India.	5' 6"	Do.
		(b) Nagda-Ujjain	5' 6"	Indian State.
		(c) Petlad-Cambay (Anand-Tarapur Section).	5' 6"	Ditto.
		(d) Petlad-Cambay (Tarapur-Cambay Section).	5' 6"	Ditto.
		(e) Tapti-Valley	5' 6"	Branch line Company under rebate terms.
		(f) Bombay, Baroda and Central India.	3' 3½"	State.
		(g) Ahmedabad-Parantij	3' 3½"	Branch line Company under rebate terms.
		(h) Dhrangadra	3' 3½"	Indian State.
		(i) Jaipur State	3' 3½"	Ditto.
		(j) Palanpur State.	3' 3½"	Ditto.
		(k) Bombay, Baroda and Central India.	2' 6"	State.
		(l) Champaner-Shivrajpur-Pani Light.	2' 6"	Branch line Company under rebate terms.
		(m) Godhra-Lunavada . . .	2' 6"	Ditto.
		(n) Nadiad-Kapadvanj . . .	2' 6"	Ditto.
		(o) Piplod-Devgad-Baria	2' 6"	Indian State.
		(p) Rajpipla State	2' 6"	Ditto.
5. Burma	State	(a) Burma	3' 3½"	State.

* Receives land only from Government.

RAILWAY SYSTEM.		LINES COMPRISED IN THE SYSTEM.		
Name.	Worked by	Name.	Gauge.	Owned by
1	2	3	4	5
CLASS I—RAILWAYS—contd.				
6. Eastern Bengal	State	(a) Eastern Bengal (b) Sara Sirajganj (c) Eastern Bengal (d) Cooch Behar State (e) Eastern Bengal (f) Khulna-Bagerhat	5' 6" 5' 6" 3' 3½" 3' 3½" 2' 6" 2' 6"	State. Branch line Company under rebate terms. State. Indian State. State. Branch line Company under rebate terms.
7. East Indian	State	(a) East Indian (b) Hardwar-Dehra (c) South Bihar (d) Cawnpore-Burhwal link.*	5' 6" 5' 6" 5' 6" 3' 3½"	State. Branch line Company under guarantee terms. Branch line Company. State.
8. Great Indian Peninsula.	State	(a) Great Indian Peninsula. (b) Bhopal-Itarsi (Indian State Section). (c) Bhopal-Ujjain (d) Bina-Goonna-Baran (e) Dharwa-Pusad (f) Dhond-Baramati (g) Ellichpur-Yeotmal (h) Pachora-Jamner (i) Pulgaon-Arvi	5' 6" 5' 6" 5' 6" 5' 6" 2' 6" 2' 6" 2' 6" 2' 6" 2' 6" 2' 6"	State. Indian State. Ditto. Ditto. State. Branch line Company under rebate terms. Ditto. Ditto. Ditto.
9. Jodhpur	Indian State	(a) Jodhpur (b) Jodhpur-Hyderabad (British Section). (c) Mirpur Khas-Khadro	3' 3½" 3' 3½" 3' 3½"	Indian State. State. Company subsidized by the Government of India.†
10. Madras and Southern Mahratta.	Madras and Southern Mahratta Railway Company.	(a) Madras and Southern Mahratta. (b) Kolar Goldfields (c) Tenali-Repalle (d) Madras and Southern Mahratta. (e) Alnavar-Dandeli (Provincial). (f) Bangalore-Harihar (g) Bezwada-Masulipatam. (h) Hindupur (Yesvantpur-Mysore Frontier). (i) Kolhapur State (j) Sangli State (k) West of India Portuguese.	5' 6" 5' 6" 5' 6" 3' 3½" 3' 3½" 3' 3½" 3' 3½" 3' 3½" 3' 3½" 3' 3½" 3' 3½" 3' 3½"	State. Indian State. District Board. State. Do. Indian State. District Board. Indian State. Ditto. Ditto. Foreign Country.
11. Nizam's State	Nizam's State Railways.	(a) Nizam's State (b) Bezwada Extension (c) Nizam's State (d) Dronachellam (Dhone)-Kurnool-British Frontier.	5' 6" 5' 6" 3' 3½" 3' 3½"	Indian State. State. Indian State. State.

* Under running power agreement the B. and N.-W. Railway Company run and haul their trains and traffic over this line.

† Receives land only from Government.

RAILWAY SYSTEM.		LINES COMPRISED IN THE SYSTEM.		
Name.	Worked by	Name.	Gauge.	Owned by
1	2	3	4	5

CLASS I.—RAILWAYS—concl'd.

12. North Western	State	(a) North Western	5' 6"	State.
		(b) Amritsar Patti	5' 6"	Branch line Company under rebate terms.
		(c) Bahawalnagar Baghdad.	5' 6"	Indian State.
		(d) Hoshiarpur Doab (Jullundur Mukerian).	5' 6"	Branch line Company under rebate terms
		(e) Hoshiarpur Doab (Phagwara-Rahon).	5' 6"	Ditto.
		(f) Jammu and Kashmir (Indian State Section).	5' 6"	Indian State.
		(g) Jind Panipat (Indian State Section).	5' 6"	Ditto.
		(h) Khanpur-Chachran	5' 6"	Ditto.
		(i) Ludhiana-Dhuri Jakhal	5' 6"	Ditto.
		(j) Mandra-Bhaun	5' 6"	Branch line Company under rebate terms.
		(k) Rajpura Bhatinda	5' 6"	Indian State.
		(l) Sirhind Rupar	5' 6"	Ditto.
		(m) Sialkot Narowal	5' 6"	Branch line Company under rebate terms.
		(n) Jacobabad-Kashmor.	2' 6"	Ditto.
		(o) Kalka-Simla	2' 6"	State.
		(p) Kangra-Valley	2' 6"	Do.
		(q) Kohat-Thal	2' 6"	Do.
(r) Larkana-Jacobabad	2' 6"	Branch line Company under rebate terms.		
		(s) Trans-Indus (Kalabagh-Bannu).	2' 6"	State.
		(t) Zhob Valley (Fort Sandeman khanai).	2' 6"	Do.
13. Rohilkund and Kumaon.	Rohilkund and Kumaon Railway Company.	(a) Rohilkund and Kumaon.	3' 3½"	Company subsidized by the Government of India.
		(b) Lucknow-Bareilly	3' 3½"	State.
14. South Indian	South Indian Railway Company.	(a) South Indian	5' 6"	Do.
		(b) Shoranur-Cochin	5' 6"	Indian State.
		(c) South Indian	3' 3½"	State.
		(d) Nilgiri	3' 3½"	Do.
		(e) Peralam-Karaikkal	3' 3½"	Foreign Country.
		(f) Podanur-Pollachi	3' 3½"	District Board.
		(g) Pondicherry	3' 3½"	Foreign Country.
		(h) Tinnevely-Tiruchendur.	3' 3½"	District Board.
		(i) Travancore (British Section).	3' 3½"	State.
		(j) Travancore (Indian State Section).	3' 3½"	Indian State.
		(k) Morappur-Hosur	2' 6"	State.
		(l) Tirupattur-Krishnagiri.	2' 6"	Do.

CLASS II.—RAILWAYS.

1. Barsi Light	Barsi Light Railway Company.	Barsi Light	2' 6"	Company subsidized by the Government of India.*
2. Bengal Dooars	Bengal Dooars Railway Company.	(a) Bengal Dooars	3' 3½"	Company subsidized by District Board.
		(b) Bengal Dooars Extensions.	3' 3½"	Company subsidized by the Government of India.*
3. Bhavnagar State	Indian State	Bhavnagar State	3' 3½"	Indian State.
4. Bikaner State	Ditto	Bikaner State	3' 3½"	Ditto.

* Receives land only from Government.

RAILWAY SYSTEM.		LINES COMPRISED IN THE SYSTEM.		
Name.	Worked by	Name.	Gauge.	Owned by
1	2	3	4	5

CLASS II.—RAILWAYS—concl'd.

5. Darjeeling Himalayan	Darjeeling Himalayan Railway Company.	(a) Darjeeling Hima- layan.	2' 0"	Company subsidized by Local Govern- ment.
		(b) Darjeeling Hima- layan Extensions.	2' 0"	Branch line Company under rebate terms.
6. Dibru-Sadiya . . .	Assam Railways and Trading Company.	(a) Dibru-Sadiya . . .	3' 3½"	Company subsidized by Local Govern- ment.
		(b) Ledo and Tikak-Mar- gherita Colliery.	3' 3½"	Unassisted Company.
7. Gaekwar's Baroda State.	Indian State . . .	(a) Gaekwar's Mehsana. .	3' 3½"	Indian State.
		(b) Khijadiya Dhari	3' 3½"	Ditto.
		(c) Prachi Road Kodinar	3' 3½"	Ditto.
		(d) Gaekwar's Baroda State.	2' 6"	Ditto.
		(e) Bodeli Chhota Udai- pur.	2' 6"	Ditto.
8. Gondal	Ditto	(a) Gondal	3' 3½"	Ditto.
		(b) Jetalsar Rajkot . .	3' 3½"	Ditto.
9. Jamnagar and Dwarka	Jamnagar and Dwarka Railway Company.	(a) Jamnagar	3' 3½"	Indian State.
		(b) Jamnagar-Dwarka . .	3' 3½"	Branch line Company under guarantee and rebate terms.†
		(c) Okhamandal	3' 3½"	Indian State.
10. Junagad State . . .	Indian State	Junagad State	3' 3½"	Ditto.
11. Morvi	Ditto	Morvi	3' 3½"	Ditto.
12. Mysore	Ditto	(a) Mysore	3' 3½"	Ditto.
		(b) Bangalore-Chik Ballapur Light.	2' 6"	Company guaranteed by Indian State.
		(c) Kolar District	2' 6"	Indian State.
		(d) Tarikere-Narasimha- rajpura Light.	2' 0"	Ditto.
13. Shahdara (Delhi) Saharanpur Light.	Shahdara (Delhi) Saharanpur Light Railway Company.	Shahdara (Delhi) Saha- ranpur Light.	2' 6"	Company subsidized by the Government of India.*

CLASS III.—RAILWAYS.

1. Ahmedpur-Katwa . .	Ahmadpur-Katwa Railway Company.	Ahmadpur-Katwa . . .	2' 6"	Branch line Company under guarantee terms.
2. Arrah-Sasaram Light	Arrah-Sasaram Light Railway Company.	Arrah-Sasaram Light . .	2' 6"	Company subsidized by District Board.
3. Bankura-Damoodar River.	Bankura-Damoodar River Railway Com- pany.	Bankura-Damoodar River.	2' 6"	Branch line Company under guarantee terms.
4. Baraset-Basirhat Light.	Baraset-Basirhat Railway Company.	Baraset-Basirhat Light .	2' 6"	Company subsidized by District Board.
5. Bengal Provincial . .	Bengal Provincial Railway Company.	(a) Bengal Provincial . .	2' 6"	Unassisted Com- pany.
		(b) Daaghara Jamalpur- gunj.	2' 6"	Branch line Company under guarantee terms.
6. Bukhtiarpur-Bihar Light.	Bukhtiarpur-Bihar Light Railway Com- pany.	Bukhtiarpur-Bihar Light	2' 6"	Company subsidized by District Board.
7. Burdwan-Katwa . . .	Burdwan-Katwa Rail- way Company.	Burdwan-Katwa	2' 6"	Branch line Company under guarantee terms.
8. Cutch State	Indian State	Cutch State	2' 6"	Indian State.

† Financed on rebate terms given by the Jamnagar Durbar.
* Receives land only from Government.

RAILWAY SYSTEM.		LINES COMPRISED IN THE SYSTEM.		
Name.	Worked by	Name.	Gauge.	Owned by
1	2	3	4	5
CLASS III.—RAILWAYS—concl.				
9. Dehri-Rohtas Light	Dehri-Rohtas Light Railway Company.	Dehri-Rohtas Light	2' 6"	Company subsidized by the Government of India.
10. Dholpur State	Indian State	Dholpur State	2' 6"	Indian State.
11. Futwah-Islampur	Futwah-Islampur Light Railway Company.	Futwah-Islampur	2' 6"	Branch line Company under guarantee terms.
12. Gwalior Light	Indian State	Gwalior Light	2' 0"	Indian State.
13. Howrah-Amta Light	Howrah-Amta Light Railway Company.	Howrah-Amta Light	2' 0"	Company subsidized by District Board.
14. Howrah-Sheakhala Light.	Howrah-Sheakhala Light Railway Company.	Howrah-Sheakhala Light	2' 0"	Ditto.
15. Jagadhri Light	Jagadhri Light Railway Company.	Jagadhri Light	2' 0"	Unassisted Company.
16. Jessore-Jhenidah	Jhenidah Railway Syndicate.	Jessore-Jhenidah	2' 6"	Ditto.
17. Jorhat (Provincial)	River Steam Navigation Company and India General Navigation and Railway Company.	Jorhat (Provincial)	2' 0"	State.
18. Kalighat-Falta	Kalighat-Falta Railway Company.	Kalighat-Falta	2' 6"	Branch line Company under guarantee terms.
19. Kulasekarapatnam Light.	East India Distilleries and Sugar Factories.	Kulasekarapatnam Light	2' 0"	Unassisted Company.
20. Matheran Light	Matheran Steam Tramway Company.	Matheran Light	2' 0"	Company subsidized by the Government of India. *
21. Porbandar State	Indian State	Porbandar State	3' 3½"	Indian State.
22. Tezapore-Balipara Light.	Tezapore-Balipara Steam Tramway Company.	Tezapore-Balipara Light	2' 6"	Company subsidized by District Board.
23. Trivellore Light	T. Namberumal Chetty and Sons.	Trivellore Light	2' 0"	Unassisted Company.
24. Udaipur-Chitorgarh	Indian State	Udaipur-Chitorgarh	3' 3½"	Indian State.

* Receives land only from Government.

APPENDIX B.

Relations of the Government to Railways in India.

(Reprinted from the Report for 1914-15 and brought up to date.)

Diversity of Relations between the State and Railways.—One of the special features of the Indian Railway system is the diversity of conditions that prevails in the relation of the State to the various lines in respect of ownership and control. Of the important lines situated in British India or in which the Government of India is interested, five [the North-Western,* Eastern Bengal, East Indian (with which has been amalgamated the Oudh and Rohilkhand Railway from the 1st July 1925), Great Indian Peninsula and Burma Railways] are owned and worked by the State; five (the Bombay, Baroda and Central India, Madras and Southern Mahratta, Assam-Bengal, Bengal-Nagpur and South India) are owned by the State but worked on its behalf by companies enjoying a guarantee of interest from the Government; two important lines (the Bengal and North-Western, and Rohilkund and Kumaon) and many of less importance are the property of private companies, some being worked by the owning companies and some by the State or by the companies that work State-owned systems; several minor lines are the property of District Boards or enjoy a guarantee of interest granted by such Boards.

The diversity of conditions is in certain respects less important than might at first appear for the following reasons:—

The Government of India exercises under the Indian Railways Act, 1890, in respect of all Railways in British India (and also, by virtue of arrangements with Indian States, in respect of certain railways passing through such States), certain general powers. Thus a railway may not be opened until a Government Inspector has certified that it has been constructed so as to comply with requirements laid down by the Government and can be used for the public carriage of passengers without danger to them. The Government of India can also, in the interest of the safety of passengers, require a railway to be closed, or the use of particular rolling-stock to be discontinued, or may prescribe conditions for the use of the railway or the rolling-stock. They can appoint a Railway Commission to investigate complaints on certain matters such as the withholding of reasonable traffic facilities or the grant of undue preference.

In addition, the Government of India (or in some cases Local Governments) exercise under the provisions of contracts detailed control over the management of all Railways in British India greatly exceeding that which is secured by the Indian Railways Act. They also have a certain financial interest in all companies in British India, and a preponderating interest in most of the railways which are of the first importance.

History of Relations of the Government and Companies.—The main causes which have led to the present diversity of conditions in regard to the agency by which railways are managed, and the relations of the Government with the various classes of companies now in existence, are summarised in the following paragraphs:—

The first proposals for the construction of railways in India were submitted in 1844 to the East India Company in England by Mr. R. M. Stephenson, afterwards Chief Engineer of the East Indian Railways, and others; they included the construction of lines by railway companies to be incorporated for the purpose and the guarantee by the East India Company of a specified return. A contract for the construction by the East Indian Railway Company of an experimental line of 100 miles from Calcutta towards Mirzapore or Rajmehal at an estimated cost of 1,000,000*l.* was made in 1849, and a return of 5 per cent. was guaranteed by the East India Company on the Capital; and a similar contract was made in the same year with the Great Indian Peninsula Railway Company for a line from Bombay to Kalyan at an estimated cost of 500,000*l.* But the policy of entrusting generally the construction of Indian railways to guaranteed companies was not adopted until 1854 on the recommendation of Lord Dalhousie, who, in a minute, dated 20th April 1853, explained his reasons for preferring the agency of companies, under the supervision and control of the Government, to the construction of lines on behalf of the Government by its own officers. He held that the State Engineer officers would make railways as well, and possibly as cheaply, and as expeditiously as companies; but that the withdrawal from other duties of the large number

* Includes the Delhi, Umballa, Kalka and Southern Punjab Railways which are purchased by the Secretary of State on 31st March 1926 and 1st January 1930 respectively.

of officers required would be detrimental to the public interest, that the conduct of commercial undertakings did not fall within the proper functions of any Government and least of all within the functions of the Government of India, since the dependence of the population on the Government was, in India, one of the greatest drawbacks to the advance of the country, and that the country would therefore benefit by the introduction of English energy and English capital for railway purposes, with the possibility that such energy and capital would in due course be encouraged to assist in the development of India in other directions.

Old Guaranteed Railways.—The policy supported by Lord Dalhousie was adopted, between 1854 and 1860 contracts for the construction of Railways in India were made by the East India Company, or (after 1858) by the Secretary of State for India with the East Indian, Great Indian Peninsula, Madras, Bombay, Baroda and Central India, Sind (afterwards, the Sind, Punjab and Delhi), Eastern Bengal, Great Southern of India (afterwards, when amalgamated with the Carnatic Railway Company—see below—the South Indian) and Calcutta and South-Eastern Railway Companies. Under these contracts the railway companies undertook to construct and manage specified lines, while the East India Company (or the Secretary of State for India) agreed to provide land and guaranteed interest on the capital, the rate fixed being in various cases 5, $4\frac{3}{4}$ and $4\frac{1}{2}$ per cent. according to the market rates prevailing when the various contracts were made. Half of any surplus profits earned was to be used towards repaying to the Government any sums by which it had been called upon to supplement the net earnings of any previous period in order to make good the guarantee of interest; and the remainder was to belong to the shareholders. In practically all matters of importance except the choice of staff, the companies were placed by the contracts under the supervision and control of the Government which had power to decide on the standard and details of construction; the rolling-stock to be provided, the number, time and speed of train; the rates and fares to be charged; the expenditure to be incurred; the standard of maintenance; and the form of accounts. The railways were to be held by the companies on leases terminating at the end of 99 years, and on such termination the fair value of their rolling-stock, plant and machinery was to be paid to them. But provision was also made to enable the Government to purchase the lines after 25 or 50 years on terms calculated to be the equivalent of the companies interest therein and also to enable the companies to surrender their lines to the Government and to receive in return their capital at par.

Early Attempts to Secure Funds for Railway Construction without a Guarantee.—An attempt to secure the construction of railways in India, on terms more favourable to the Government than those of the contracts with the original guaranteed companies, was first made in 1862, when a subsidy, but not a guarantee, was granted to the Indian Branch Railway Company which proposed to make feeders to the trunk lines in Northern India, and did actually make one such line. Similar assistance was granted later to the Indian Tramway Company, which made a short line in Madras. In 1864, the terms granted to the two companies mentioned were taken as a standard for general adoption with a view to the encouragement of similar companies. The chief provisions were that the Government, besides giving the necessary land free of costs, would grant an annual subsidy for 20 years at a rate not exceeding £100 per mile of line with an addition in respect of large bridges costing more than £10,000. These terms failed to attract capital, and the two unguaranteed companies which had begun work found themselves after a few years unable to proceed without further assistance from the Government. Consequently, in 1867, a contract was entered into with the Indian Branch Railway Company (which soon after changed its name to the "Oudh and Rohilkhand Railway Company") by which the company was guaranteed interest at 5 per cent. per annum on the cost of certain lines to be carried out by it, on conditions similar to those laid down in the contracts of the period 1854—1860. Similarly, the Indian Tramway Company, after having been given in 1868 a guarantee of 3 per cent. per annum, went into liquidation in 1870, and became absorbed in a new company called the Carnatic Railway Company (afterwards amalgamated with the Great Southern of India Railway Company to form the South Indian Railway Company), with which the Secretary of State entered into a contract guaranteeing interest on its capital at 5 per cent. per annum. In 1869, Sir John Lawrence summed up the result of the experiment of the construction of railways by unguaranteed companies as follows:—"The Government of India has for several years been striving to induce capitalists to undertake the construction of railways in India at their own risk, and on their responsibility with a minimum of Government interference. But the attempt has entirely failed, and it has become obvious that no capital can be obtained for such undertakings otherwise than under a guarantee of interest fully equal to that which the Government would have to pay if it borrowed directly on its own account."

The attempt to encourage unguaranteed companies having thus been unsuccessful, it became necessary to decide whether the old practice of relying on guaranteed companies, of the type that had provided capital for, and had constructed, the first railways

in India, should be continued. The Government of India expressed their objections to this course. They doubted whether their power of control over such companies secured the greatest possible economy in construction. They also disliked the arrangements under which they guaranteed the interest on the capital of companies, and thus became responsible for loss on working while having only a comparatively remote prospect of profiting by the result of successful working. Two important changes were consequently made in the practice that had been followed since the beginning of railway construction in India:—

1. Arrangements were made with some of the most important of the guaranteed companies that, in lieu of the provision that half of any surplus profits was to be applied in repayment of sums advanced by the Government under the guarantee of interest, half of the surplus profits for each half-year should be the property of the Government. In consideration of this modification, the Government relinquished, in the case of three companies, the Great Indian Peninsula, the Bombay, Baroda and Central India and the Madras, its right to purchase the lines at the end of the first 25 years from the dates of the respective contracts.
2. It was decided by the Secretary of State that the time had arrived when in both raising and expending such additional capital as might be required for new lines in India, the Government should secure to itself the full benefit of its own credit and of the cheaper methods which it was expected that it would be able to use. Accordingly, for several years after 1869, the capital expenditure on railway was chiefly incurred direct by the State and no fresh contracts with guaranteed companies were made except for small extensions. Among the lines constructed or begun by State agency and from State capital between 1869 and 1880 were the Indus Valley, Punjab Northern, Rajputana-Malwa, Northern Bengal, Rangoon and Irrawady Valley and Tirhoot.

Progress in the Construction of Railways.—By the end of 1879, in about 25 years from the introduction of railways in India, 6,128 miles of railway had been constructed by companies which had expended, approximately, £97,872,000 (these figures include the Calcutta and South-Eastern and Nalhati Railways which were constructed by companies but were purchased by the Government in 1868 and 1872, respectively). By the same date 2,175 miles of railway had been constructed by the Government at a cost of £23,695,226.

Introduction of Modified Guarantee Terms.—In 1880, the necessity for great and rapid extension of the railway system was urged by the Famine Commissioners, appointed after the great famine of 1878, who estimated that at least, 5,000 miles were still necessary for the protection of the country from famine. It was held by the Government of the time that a limit was necessary on the capital borrowed annually; and it was clear that the limit fixed was not high enough to allow of such progress in railway construction as was desirable. With reference to this difficulty the Famine Commissioner remarked: "that there would be manifest advantages in giving free scope to the extension of railways by private enterprise if it were possible; and, though the original form of guarantee has been condemned, it may not be impossible to find some substitute which shall be free from its defects, and may secure the investment of capital in these undertakings without involving the Government in financial or other liabilities of an objectionable nature."

Action in the direction suggested by the Commission was taken by the formation of three companies without a guarantee (the Bengal Central in 1881 and the Bengal and North-Western and Rohilkund and Kumaon in 1882), and three new guaranteed companies (Southern Mahratta in 1882, the Indian Midland in 1885, and the Bengal-Nagpur in 1887). The Bengal and North-Western and the Rohilkund and Kumaon Railway Companies are referred to more fully, in a later paragraph. The Bengal Central Railway Company's operations were not successful at the outset, and a revised contract was entered into with the company, with effect from the 1st July 1885, under which the Secretary of State guaranteed interest at $3\frac{1}{2}$ per cent. on the company's capital the balance of net earnings remaining after payment of interest on advances by the Secretary of State and debenture capital (but not the share capital) being divided between the Secretary of State and the company in the proportions of three-quarters to the former and one-quarter to the latter. The new contract gave the Secretary of State the right to take possession of the line on the 30th June 1905, or subsequently at intervals of 10 years, on repaying the company's capital at par. The rate of interest guaranteed to the Southern Mahratta Railway Company was also $3\frac{1}{2}$ per cent.; in this case the balance of net earnings remaining after payment of interest on advances by the Secretary of State (but not on share or debenture capital) was divisible in the same way as in the case of the Bengal Central Railway Company. The guarantee to the Indian Midland and Bengal-Nagpur Railway Companies was 4 per cent.; and the Secretary of State was entitled to three-quarters of the surplus profits in excess of all interest charges. The lines constructed by the three companies last mentioned were declared to be the property

of the Secretary of State, who had the right to determine the contracts at the end of approximately 25 years after their respective dates, or at subsequent intervals of 10 years, on repaying at par the capital provided by the companies.

The Assam-Bengal Railway Company was formed on similar lines in 1892, except that any surplus profits were to be divided between the Secretary of State and the company in proportion to the capital provided by each. The rate of guarantee in this case was $3\frac{1}{2}$ per cent. for the first six years and thereafter 3 per cent.

The terms of guarantee given to the companies formed since 1880 have thus been much more favourable to the Government than in the case of those formed before 1869.

Termination of Contracts of the Old Guaranteed Companies.—In dealing with the guaranteed companies formed before 1869 and with those formed in 1881 and subsequently, it has been the practice (except in the cases mentioned above, when the purchase of some of the old guaranteed lines was postponed in order to secure to the Government a share in surplus profits) to use in some way or other at the earliest possible date the right reserved by the Government of terminating the contracts of the various companies. The method of making use of this right has differed in different cases. The Eastern Bengal, the Oudh and Rohilkhand, the Sind-Punjab and Delhi and the Southern Punjab lines were purchased and transferred to State management, the last two now forming part of the North-Western Railway. Similarly, the Bengal Central line was purchased and made part of the Eastern Bengal Railway. The Madras and the Indian Midland lines were acquired but left, after acquisition, under the management of companies working other lines with which it was advantageous to amalgamate them. In the cases of South Indian, Bombay, Baroda and Central India, Southern Mahratta, and Bengal-Nagpur, the course adopted has been to arrange for the continuance of management by the original company (or by a new company closely related to the old one), but to secure more favourable financial conditions for the State by one or more of the following methods:—reduction of the amount of capital retained by the companies in the undertakings, reduction of the rate of interest guaranteed by the State on such capital and modification in favour of the Government of the clauses relating to the division of surplus profits. This method was adopted also in regard to the East Indian and the Great Indian Peninsula Railways, but the contracts under which they were being worked having terminated on the 31st December 1924 and the 30th June 1925 respectively, the management of these lines has been taken over by the State from those dates. Similarly the management of the Burma Railways was taken over by the State on the termination of the contract with the Burma Railways Company on the 31st December 1928.

Arrangements between the Government and Companies at present.

—The relations between the Government and the guaranteed companies now working railways may be summarised as follows:—

The lines that they work are the property of the State.

The greater part of the capital is the property of the Government, either through having been originally supplied by it or through the acquisition by the Government of the greater part of the companies' interest on the termination of old contracts.

When funds are required for further capital expenditure, the Government has the option either of providing them or of calling on the company to provide them. Both the Government and the company usually receive interest at a fixed rate on their capital and surplus profits are divided between the Government and the company in the various proportions provided for by the contracts. The company's share is in most cases only a small proportion of the total amount.

All the contracts are terminable at the option of the Secretary of State, at specified dates; and on termination the company's capital is repayable at par.

The administrative control exercised by the Government over the companies is as follows:—

The company is bound to keep the line in good repair, in good working condition, and fully supplied with rolling-stock, plant, and machinery; to keep the rolling-stock in good repair and in good working condition; and to maintain a sufficient staff for the purposes of the line;—all to the satisfaction of the Secretary of State.

The Secretary of State may require the company to carry out any alteration or improvement in the line, or in the working that he may think necessary for the safety of the public or for the effectual working of the line.

The Secretary of State may require the company to enter into agreements, on reasonable terms and conditions, with the administrations of adjoining railways for the exercise of running powers, for the supply to one another of surplus rolling-stock, for the interchange of traffic and rolling-stock and

the settlement of through rates, and for additions and alterations to, or the redistribution of, existing accommodation in junctions or other stations in view to their convenient mutual use.

The train service is to be such as the Secretary of State may require. In order to secure a general control over the rates quoted by companies, the Secretary of State has retained power to settle the classification of goods and to authorise maximum and minimum rates within which the companies shall be entitled to charge the public for the conveyance of passengers and goods of each class.

The company has to keep such accounts as the Secretary of State may require, and these are subject to audit by the Secretary of State.

In all other matters relating to the line the company is made subject to the supervision and control of the Secretary of State, who may appoint such persons as he may think proper for the purpose of inspecting the line, auditing the accounts, or otherwise exercising the powers of supervision and control reserved to him. In particular, the Secretary of State has the right to appoint a Government Director to the Board of the company, with a power of veto on all proceedings of the Board. All the moneys received by the company in respect of the undertaking, whether on capital or revenue account, have to be paid over to the Secretary of State.

All expenditure by the company has to be stated and submitted for the sanction of the Secretary of State.

Thus, the Government has the preponderating financial interest in the lines worked by the two classes of guaranteed companies, those formed before 1869 and retained as working agencies with reduced capital after purchase, and those formed on terms more favourable to the State after 1880; it has exceedingly wide control over the methods of working; and it has the right of taking possession of the lines at specified times on repayment at par of the capital of the companies.

Other Lines Worked by Companies.—In addition to the lines referred to above, and apart from lines constructed by Branch line companies, District Boards and Indian States, two lines of some importance have been constructed by companies which receive no direct assistance by the Government, namely, the Bengal and North-Western Railway and the Rohilkund and Kumaon Railway. (The Rohilkund and Kumaon Railway Company was guaranteed interest at 4 per cent. during construction and received for 10 years thereafter a subsidy of Rs. 20,000 per annum. This ceased in 1894). While, however, these companies have no guarantee or other direct payment from the Government, they derive some advantage (partly through direct participation in profits and partly through reduction of expenses) from the fact that the working of certain State lines has been entrusted to them, the Tirhoot Railway to the former company and the Lucknow-Bareilly Railway to the latter. Their lines can be purchased by the State in 1937 or 1942 on terms which are different in respect of the different sections of the lines, but are, on the whole, much more favourable to the companies than those provided for in the contracts with the guaranteed companies. Failing purchase in 1937 or 1942, the lines will become the property of the State in 1981 on payment of certain amounts. The general administrative control exercised by the State over these companies and the control over expenditure are similar to that which is exercised, as explained above, over guaranteed companies.

APPENDIX C.

The Organisation for Government control.

The initial policy of the Government of India for the construction and working of railways was the establishment of guaranteed railway companies of English domicile. Control over the operations of these companies was at first secured through the appointment of a consulting Engineer of Guaranteed Railways. Some years later local Consulting Engineers were appointed for the exercise of control over guaranteed railways and over State-owned railways in the construction of which the State had been financially interested and which had been leased to companies for working. These officers combined the duties of supervision and control on behalf of the Government of India and of an Inspector under the Government of India Railway Act. The Government of India were not directly concerned with the ownership of railways until 1868 when the Calcutta and South Eastern Railway was surrendered to the Indian Government under the terms of the contract between the Secretary of State and the Company.

Owing to the Government of India having in 1869 definitely adopted the policy of direct construction and ownership of railways, a period of rapid development of railway construction ensued and it became necessary to relieve the Public Works Department Secretariat of the Government of India in some measure of the detailed control of railways. Accordingly in 1874 a State Railway Directorate was established and the greater portion of the State Railway establishment and business connected with State Railway Administration was transferred to the control of the Director of State Railways, an officer who functioned on much the same lines as the head of a department under the Government of India. The Consulting Engineer to the Government of India for State Railways was at the same time associated with him but all important matters had still to be referred to the Public Works Department. A special Deputy Secretary in the Railway Branch of the Secretariat of the Public Works Department was also appointed to conduct the correspondence between the Government of India and these officers.

Early in 1877 a further change was made in the organisation responsible for the administration and control of State Railways and in the place of one Director of State Railways three Directors of territorial systems and one Director of State Railways Stores were appointed. These territorial divisions comprised the following systems:—

Central	1,179 miles,
Western	927 miles,
and North Eastern	830 miles.

This division of the administration on a territorial basis proved unsatisfactory in practice as it resulted in the issue of conflicting orders as far as the management of open lines was concerned although no difficulty was experienced in the supervision of new construction.

As the number of lines under construction had decreased and in order to remedy the defect just mentioned, it was decided in 1880 to abolish the Directors of the Central and Western Systems and to transfer the work allotted to them to the Consulting Engineers of the neighbouring guaranteed railways. The abolition of these two appointments resulted in an increase in the administrative work of the Secretariat and it was found necessary to raise the status of the Deputy Secretary to whom the powers previously exercised by the Directors had been entrusted, to that of Director General of Railways.

In the revised organisation the Consulting Engineer to the Government of India for State Railways was associated with the Director General of Railways and assisted the latter primarily in an advisory capacity in matters of civil engineering while the Director of Stores similarly acted in matters concerning stores and rolling-stock and at the same time was an adviser in matters affecting establishment. The Director of Traffic was appointed at the same time as an adviser on traffic problems and the accounts work of the department was placed under the Accountant General, Public Works Department.

Government control and supervision of the Guaranteed Railways continued to be exercised by the Local Consulting Engineers to Government. There were five such officers at the time with headquarters at Bombay, Madras, Calcutta, Lahore and Lucknow. The Consulting Engineers at Madras and Bombay worked directly under the Government of these Presidencies, while those at Calcutta, Lahore and Lucknow were under the immediate orders of the Government of India. Under this arrangement practically all powers affecting the finances and day to day management of the

railways were vested either in the Consulting Engineers or in the Government, both for the guaranteed railway companies and later on for State Railways which had been leased for working to railway companies.

The following is a list of the administrative appointments that existed in 1881:—

1. Member of the Governor General's Council, Public Works Department.
2. Secretary, Public Works Department.
3. Deputy Secretary, Railway Branch.
4. Under Secretary, Railway Branch.
5. Consulting Engineer of State Railways.
6. Director General of Railways.
7. Director of Construction.
8. Accountant General, Public Works Department.
9. Director of State Railways, Stores.
10. Three Assistants to the Director General of Railways.
11. Consulting Engineers for Guaranteed Railways at Calcutta, Lahore and Lucknow.
12. Deputy Consulting Engineers for Guaranteed lines, Calcutta, Lahore and Lucknow.

Madras and Bombay.

13. Joint Secretary, Railway Branch and Consulting Engineer for Railways.
14. Deputy Secretary, Public Works Department.

Punjab.

15. Secretary, Public Works Department.

By this time also Local Governments and Administrations had been induced to take a practical interest in the management of railways and in a few cases short extensions had been constructed from funds the interest of which Local Governments had accepted responsibility to pay. Such lines were controlled by the Local Governments concerned under the general supervision of the Government of India.

After 1881 further alterations of a more or less detailed character were made in the administrative organisation and by 1890 the following changes had taken place. Instead of a Deputy Secretary and Under Secretary, Railway Branch, there were then only an Under Secretary and an Assistant Secretary, Railways, in the General Branch. The posts of Director of State Railways, Stores, and Director of Construction had disappeared and in their place there was an Under Secretary, who was an *ex-officio* Deputy Director General of Railways. The post of Accountant General, Railways, had also been abolished and the Accountant General, Public Works Department, was once more made responsible for this work.

Further changes were made in 1897. In that year the post of Director General of Railways was abolished and the post of a Secretary to the Government of India in the Public Works Department was created in its place. The other administrative and secretariat appointments at the headquarters of the Government of India at the time were:—

- (1) Director of Railway Construction, and Deputy Secretary and *ex-officio* Director of Stores.
- (2) Director of Railway Traffic, and Deputy Secretary and *ex-officio* Director of Railway Statistics.
- (3) Two Under Secretaries.
- (4) Two Assistant Secretaries.
- (5) One Mechanical Assistant.

The post of Consulting Engineer for State Railways was also abolished and his duties transferred to the two Directors. The supervision of the accounts work of the Department, however, still remained under the Accountant General, Public Works Department, who was also an *ex-officio* Deputy Secretary to the Government of India.

In October 1901, Sir Thomas Robertson, C.V.O., was appointed by His Majesty's Secretary of State for India in Council as Special Commissioner for Indian Railways to enquire into and report on the administration and working of Indian Railways. In his report, which became available in 1903, Sir Thomas recommended that the administration of the railways in India should be entrusted to a small Board consisting of a President or Chief Commissioner who should have a through practical knowledge of railway working, and should be a member of the Viceroy's Council for railway

matters, and two other Commissioners who should be men of high railway standing and should have a similar training to that of the President. He recommended that the Board should, in addition to the necessary office establishment, be provided with—

- (1) A Secretary who should have received a suitable training in the practical working of railways, and who should be *ex-officio* a Secretary to the Government of India.
- (2) A Chief Inspector of Railways, to advise on all technical, engineering and mechanical questions.
- (3) A suitable number of Government Inspectors.

Sir Thomas Robertson's recommendations were carefully considered by the Governor General in Council and the Secretary of State, and early in 1905 it was decided that the Railway Branch of the Public Works Department of the Government of India should be abolished and that the control of the railway systems in India should be transferred to a Railway Board consisting of three persons, a Chairman and two Members. The Chairman of the Board was vested with the general control of all questions committed to the Railway Board with power to act on his own responsibility subject to confirmation by the Board. The Railway Board were authorised to delegate to the Chairman or a member the power of settling questions which might arise on any tour of inspection, such decision to be recorded subsequently as an act of the Railway Board. The Board was made subordinate and directly responsible to the Government of India in the Department of Commerce and Industry.

The Railway Board assumed office in March 1905 and were provided with the following establishment:—

1. Secretary.
2. Examiner of Accounts.
3. Under Secretary, Construction.
4. Under Secretary, Traffic.
5. Registrar.
6. Director of Railway Construction.

Certain changes were, however, made in the following year and the establishment then consisted of:—

- 1 Secretary.
- 3 Assistant Secretaries; one each for Establishment, Construction and Traffic.
- 1 Registrar.
- 1 Director of Railway Construction.
- 1 Railway Accounts Officer.

Sir Thomas Robertson had further suggested in his detailed recommendations that extended powers, both administrative and financial, should be delegated to Boards of Directors of Companies, that the appointments of Consulting Engineers should be abolished and that the work which they performed under the Railways Act should be entrusted to a body of Government Inspectors to be appointed for the purpose. These recommendations were given effect to in a modified form in 1908.

Within a short time after the constitution of the Railway Board, it was found that work was being hampered by having the Commerce and Industry Department between the Railway Board and the Governor General in Council and in October 1908 on the recommendations of the Railway Finance Committee presided over by Sir James Mackay (now Lord Inchcape), the following changes were introduced:—

- (1) The appointment of the Chairman of the Railway Board was changed into that of President of the Railway Board and enhanced powers were vested in the President.
- (2) The Board with its staff became collectively the Railway Department distinct from and independent of the Department of Commerce and Industry, though remaining under the administrative charge of the Hon'ble Member, Commerce and Industry Department, as the Railway Member.
- (3) The President of the Board was given direct access to the Viceroy as if he were a Secretary to the Government of India.

At the same time in consequence of the amalgamation of the Public Works Department Accounts and Civil Audit Establishments under the control of the Finance Member of the Government of India the appointment of Accountant General, Public Works Department, was abolished and the appointment of Accountant General, Railways, was revived.

In 1909 the post of Director of Railway Construction was abolished and the appointment of Chief Engineer with the Railway Board for the purpose of advising the Railway Board on technical matters connected with Civil Engineering was created.

In January 1914, it was decided that the importance of financial and commercial considerations in connection with the control of Indian railway policy justified a modification of the rule that the President and Members of the Railway Board should all be men of large experience in the actual working of railways. It was then decided that in future one member who equally with the others might be appointed President should be selected for commercial and financial experience and a member with the necessary qualifications was appointed.

This arrangement was, however, altered in 1920 when it was decided that all the three members of the Board should possess railway experience. To assist the Board however, in the consideration of financial questions, the post of Financial Adviser to Railway Board was created.

Owing to the expansion of railways in India and the increased work thrown on the Board a second Assistant Secretary, Engineering, was appointed in 1914, and in 1916 the duties of the Construction Branch were divided between one branch dealing with Projects under an Assistant Secretary and a second branch dealing with Way and Works which was sometimes under a separate officer and at other times under the Secretary or Chief Engineer. In 1922 the charge of the Way and Works branch was divided between the Assistant Secretary in charge of Projects and the Assistant Secretary in charge of Stores.

In November 1922, the Board's establishment was strengthened by the appointment of a Chief Mechanical Engineer. This appointment was created to enable the Board to have at headquarters a reliable adviser on matters connected with mechanical engineering.

During 1921 a Committee presided over by Sir William Acworth visited India and one of the questions referred to was the evolution of a satisfactory authority for the administration of the varied functions which the Railway Board had to perform as:—

- (a) the directly controlling authority of the three State-worked systems aggregating 9,028 miles,
- (b) representative of the predominant owning partner in systems aggregating 22,949 miles,
- (c) the guarantor of many of the smaller companies,
- (d) the statutory authority over all railways in India.

The Acworth Committee recommended in their report:—

- (1) that a new Department of Communications responsible for railways, ports and inland navigation, road transport and posts and telegraphs under a Member of Council in charge of Communications should be created,
- (2) that under the Member of Council for Communications there should be a technical staff consisting on the railway side of a Chief Commissioner and four Commissioners and that of the four one should be in charge of finance and the organisation and staff of the office and the other three Commissioners should be in charge of three respective divisions, Western, Eastern and Southern,
- (3) that the technical staff attached to the Commission should be strengthened specially on the traffic side.

The Government of India, though they did not accept the first recommendation of the Acworth Committee, agreed to the re-organisation of the Railway Board being undertaken on the principles underlying the report of the Acworth Committee. The appointment of a Chief Commissioner was accordingly sanctioned in November 1922, and in accordance with the recommendations of the Acworth Committee he is solely responsible, under the Government of India, for arriving at decisions on technical questions and advising the Government of India on matters of Railway policy; he is not liable to be over-ruled, as the President was, by his colleagues in the Railway Board.

The first duty of the Chief Commissioner was to work out detailed proposals for the re-organisation of the Railway Board and as a first step he made recommendations to the Government of India for the immediate appointment of a Financial Commissioner. This recommendation was strongly endorsed by the Indian Retrenchment Committee and the appointment of the Financial Commissioner was made in April 1923 with the sanction of the Secretary of State. The further proposals of the Chief Commissioner for the re-organisation of the Railway Board were accepted by the Government of India and the Secretary of State and were introduced from the 1st April 1924. It was decided, however, for reasons connected with the present statutory position of the Railway Board, and to avoid confusion with the provisions for a Railway Commission under Chapter V of the Railways Act, to retain the name "Railway Board" for the headquarters organisation of the Railway Department instead of "Railway Commission" as recommended by the Acworth Committee.

The Railway Board as then reconstituted consisted of the Chief Commissioner as President, the Financial Commissioner and two Members, the Chief Commissioner being Secretary to the Government of India in the Railway Department. The proposal of the Acworth Committee that the Indian Railways should be sub-divided into three territorial divisions with a Commissioner in charge of each was not accepted, and the work of the Members of the Board was divided on the basis of subjects and not on a territorial basis. One Member dealt with technical subjects and the other with general administration, personnel and traffic subjects, the Financial Commissioner representing the Finance Department on the Board and dealing with all financial questions.

The re-organisation carried out in 1924 had for one of its principal objects the relief of the Chief Commissioner and the Members from all but important work so as to enable them to devote their attention to larger questions of railway policy and to enable them to keep in touch with Local Governments, railway administrations and public bodies by touring to a greater extent than they had been able to do in the past. This object was effected by placing a responsible Director at the head of each of the main branches of the Board's work, namely Civil Engineering, Mechanical Engineering, Traffic and Establishment. The former Chief Engineer and the Chief Mechanical Engineer who had been employed mainly in consultative work, became Directors and together with the Directors of Traffic and Establishment have been made responsible for the direct disposal of the work of their branches under the general orders of the Railway Board.

The posts of Joint Secretary and 4 Assistant Secretaries were replaced by 6 Deputy Directors working under the Directors and in charge of branches dealing with Establishment, Works, Projects, Stores, Statistics and Traffic. One Assistant Director was also added to supervise the Technical Branch and the Drawing Office. The disposal of the general work of the Railway Board was provided for by the continuance of the post of Secretary in whose name all letters and orders of the Board are issued. The position of the Board as a Department of Government of India has been maintained and it works under the Member for Commerce and Railways. As already stated the Chief Commissioner is the Secretary to the Government of India in the Railway Department and orders issued by the Board over the signature of the Secretary are orders of the Government of India.

Experience of the working of this organisation during 1924-25 and the decision agreed to by the Legislative Assembly in September 1924 to separate railway finances from the general finances of the country made it necessary to appoint a Deputy Director and an Assistant Director of Finance. An Assistant Director of Statistics was also added during that year. Later a Director of Finance was added to the establishment occupying, as regards disposal of work, the same position as the Directors referred to above.

Further experience of the reduction of work resulting from the large delegation of powers and responsibility to the Agents of State-managed Railways and the Board of Directors of Company-managed railways enabled a re-arrangement of work to be made during 1925-26 accompanied by a reduction in the staff. Under this re-arrangement the posts of 3 Deputy Directors, an Assistant Director and the Assistant Secretary were held in abeyance. The personnel work was transferred from the Director of Establishment to the Secretary and a temporary post of Deputy Secretary was created. Further a separate technical office was established to take charge of the technical work of the engineering branches. The Technical Officer also acted as *ex-officio* Secretary to the permanent Standardisation Committees which were appointed to deal progressively with all questions of standards of equipment.

This arrangement was found, however, to be inadequate. In addition to the general increase in work in the Railway Board's Office consequent on the taking over of the East Indian, Great Indian Peninsula and Burma Railways under State control labour problems had assumed such importance and were so rapidly increasing in number and complexity that it was not possible to deal with them effectively without the appointment of additional staff. Accordingly it was decided to create an additional post of Member of the Railway Board to deal with staff and labour questions; leaving the Member in charge of Traffic, who had hitherto been dealing with establishment matters, to devote his whole time to questions relating to the Transportation and Commercial aspects of Railway work.

It was also decided to revive the post of Deputy Director, Establishment, so as to free the Director of Establishment from this work, and thus enable him to give his time to the study of problems of railway labour. Of the two posts of Deputy Directors of Traffic and Statistics one was held in abeyance from 1925 and the two posts have since been amalgamated.

In October 1930 the compilation of statistical information which used previously to be done in the Board's office was entrusted to the Controller of Railway Accounts, and with the transfer of this work, the post of Assistant Director of Statistics was also transferred from the Railway Board's office to that of the Controller of Railway Accounts.

In 1931-32, in view of the decline in traffic earnings and in the number and magnitude of Engineering works owing to financial stringency, the possibility of making temporary reductions in the organisation of the Board was explored and as a result of this examination and with the approval of the Secretary of State for India the following superior posts have been held in abeyance with effect from the dates noted below:—

- Member, Traffic—29th March 1932.
- Member, Engineering—5th May 1932.
- Director, Civil Engineering—4th December 1931.
- Director, Mechanical Engineering—1st April 1932.
- Deputy Secretary—1st March 1932.
- Assistant Director of Finance—31st July 1931.

It was also decided, for so long as the post of Member Traffic, was held in abeyance, to create an additional temporary post of Deputy Director, Traffic, with effect from the 1st April 1932.

The re-organisation was complete in May 1932, and then the superior staff in the office of the Railway Board consisted of the Chief Commissioner, the Financial Commissioner, 1 Member, 3 Directors, 6 Deputy Directors and 1 Secretary.

Shortly after this, however, it was recognised that unless the work was to be seriously delayed, it would be impossible for the Chief Commissioner who had taken over the duties of the Member Engineering, after that post had been held in abeyance, to devote the time that was necessary for the disposal of Civil Engineering business in the Railway Board's office and it was accordingly decided to revive the post of Director of Civil Engineering, which was being held in abeyance since December 1931, with effect from November 1932, from which date the post of Deputy Director, Civil Engineering is being held in abeyance. It was also decided in October 1932 to convert the post of Chief Superintendent to that of Assistant Secretary.

The existing superior staff in the Railway Board's office consists of the Chief Commissioner, the Financial Commissioner, 1 Member, 4 Directors, 5 Deputy Directors, 1 Secretary and 1 Assistant Secretary.

For the conduct of the work connected with the production of standard designs and specifications for all classes of materials, plant and rolling stock in use on Indian Railways, a Central Standards Office for Railways was formed in January 1930 for a period of 5 years as an experimental measure. On the formation of the above office the post of Technical Officer with the Railway Board was abolished.

APPENDIX D.

Resolution regarding the separation of railway from General Finances, adopted by the Legislative Assembly on the 20th September 1924.

“ This Assembly recommends to the Governor General in Council that in order to relieve the general budget from the violent fluctuations caused by the incorporation therein of the railway estimates and to enable railways to carry out a continuous railway policy based on the necessity of making a definite return to general revenues on the money expended by the State on Railways.

- (1) The railway finances shall be separated from the general finances of the country and the general revenues shall receive a definite annual contribution from railways which shall be the first charge on the net receipts of railways.
- (2) The contribution shall be based on the capital at charge and working results of commercial lines, and shall be a sum equal to one per cent. on the capital at charge of commercial lines (excluding capital contributed by companies and Indian States) at the end of the penultimate financial year *plus* one-fifth of any surplus profits remaining after payment of this fixed return, subject to the condition that, if in any year railway revenues are insufficient to provide the percentage of one per cent. on the capital at charge surplus profits in the next or subsequent years will not be deemed to have accrued for purposes of division until such deficiency has been made good.

The interest on the capital at charge of, and the loss in working, strategic lines shall be borne by general revenues and shall consequently be deducted from the contribution so calculated in order to arrive at the net amount payable from railway to general revenues each year.

- (3) Any surplus remaining after this payment to general revenues shall be transferred to a railway reserve; provided that if the amount available for transfer to the railway reserve exceeds in any year three crores of rupees only two-thirds of the excess over three crores shall be transferred to the railway reserve and the remaining one-third shall accrue to general revenues.
- (4) The railway reserve shall be used to secure the payment of the annual contribution to general revenues; to provide, if necessary, for arrears of depreciation and for writing down and writing off capital; and to strengthen the financial position of railways in order that the services rendered to the public may be improved and rates may be reduced.
- (5) The railway administration shall be entitled, subject to such conditions as may be prescribed by the Government of India, to borrow temporarily from the capital or from the reserves for the purpose of meeting expenditure for which there is no provision or insufficient provision in the revenue budget subject to the obligation to make repayment of such borrowings out of the revenue budgets of subsequent years.
- (6) A Standing Finance Committee for Railways shall be constituted consisting of one nominated official member of the Legislative Assembly who should be chairman and eleven members elected by the Legislative Assembly from their body. The members of the Standing Finance Committee for Railways shall be *ex-officio* members of the Central Advisory Council, which shall consist, in addition, of not more than one further nominated official member, six non-official members selected from a panel of eight selected by the Council of State from their body and six non-official members selected from a panel of eight elected by the Legislative Assembly from their body.

The Railway Department shall place the estimate of railway expenditure before the Standing Finance Committee for Railways on some date prior to the date for the discussion of the demand for grants for railways and shall, as far as possible, instead of the expenditure programme revenue show the expenditure under a depreciation fund created as per the new rules for charge to capital and revenue.

- (7) The railway budget shall be presented to the Legislative Assembly if possible in advance of the general budget and separate days shall be allotted for its discussion, and the Member in charge of Railways shall then make a general statement on railway accounts and working. The expenditure proposed in the railway budget, including expenditure from the depreciation fund and

the railway reserve, shall be placed before the Legislative Assembly in the form of demands for grants. The form the budget shall take after separation, the detail it shall give and the number of demands for grants into which the total vote shall be divided shall be considered by the Railway Board in consultation with the proposed Standing Finance Committee for Railways with a view to the introduction of improvements in time for the next budget, if possible.

- (8) These arrangements shall be subjected to periodic revision but shall be provisionally tried for at least three years.
- (9) In view of the fact that the Assembly adheres to the resolution passed in February 1923, in favour of State management of Indian Railways, these arrangements shall hold good only so long as the East Indian Railway and the Great Indian Peninsula Railway and existing State-managed railways remain under State management. But if in spite of the Assembly's resolution above referred to Government should enter on any negotiations for the transfer of any of the above railways to Company management such negotiations shall not be concluded until facilities have been given for a discussion of the whole matter in the Assembly. If any contract for the transfer of any of the above railway to Company management is concluded against the advice of the Assembly, the Assembly will be at liberty to terminate the arrangements in this Resolution.

Apart from the above convention this Assembly further recommends—

- (i) that the railway services should be rapidly Indianised, and further that Indians should be appointed as Members of the Railway Board as early as possible, and
- (ii) that the purchases of stores for the State Railways should be undertaken through the organisation of the Stores Purchase Department of the Government of India."

APPENDIX E.

Government of India, Railway Department, Resolution No. 2131-F., dated the 19th February 1925, on the subject of the financing of branch lines of Railways.

The Governor General in Council, with the sanction of His Majesty's Secretary of State for India, is pleased to issue the following orders on the subject of financing of Branch Lines, in supersession of all previous orders on the subject.

1. Branch and Feeder Lines are constructed under an agreement by which the State guarantees a minimum return on the capital, or alternatively, undertakes that the line shall receive, out of the earnings of the main line from traffic contributed by the branch, such a sum, known as a rebate, as will make up the total earnings of the branch to a given sum, while the branch in each case shares with the main line any profits exceeding the guaranteed minimum.

2. This method of encouraging the construction of lines originated 30 years ago simply because the Government of India was unable to furnish the necessary capital.

3. The Acworth Committee pointed out that this method, while enabling lines to be built which would otherwise not have been built, has no other merit. The financial terms usual before the war are now quite inadequate and if the system is to continue they will have to be revised. All the witnesses before the Committee who asked for a revision of the terms admitted that, if the main line were in a position to build a given branch itself, they would prefer that it should be done by the main line rather than that it should be done as a separate undertaking.

4. Amongst the disadvantages pointed out by the Committee are the following:—

- (i) The Branch Line Company is usually a fifth wheel to the coach. It implies in some cases a separate construction staff; it always implies a separate Board of Directors, and separate accounts.
- (ii) Where the branch is worked by the main line, if its Directors feel that the management is unsatisfactory, they not only make representations to the main line administration, but in the last resort can appeal to the Railway Board which does not make for harmony.
- (iii) Capital raised by a small private undertaking, even with a Government guarantee, will cost more than money raised by the State.
- (iv) Inconceivable confusion results from the multiplication of independent Railway Companies—each company, small or great, desires to reserve for itself a separate sphere of influence; and jealously demands that, if any new-comer intrudes into that sphere, he shall pay toll to the original concessionaire. This only complicates a situation which ought to be considered solely from the point of view of the public interest. New proposals for the extension or connection of lines by small independent companies are either refused owing to protests by the old company or only permitted on a basis of elaborate accounting between the new company and the old for the profits which hypothetically would have belonged to the old line had the new line not been opened.

5. The only arguments urged in favour of the Branch Line Companies were:—

- (i) That money had been raised which the Government of India was unable to furnish.
- (ii) That a claim was made that the Branch Line Company obtained from local sources money that would never be subscribed to a Government loan.
- (iii) That there may be cases of a Branch Line of smaller gauge worked *independently*, which the Branch Line Company can operate more economically than a main line.

6. The Acworth Committee, therefore, so far from approving of this system considered that the aim of the Government should be to reduce by amalgamation the number of existing companies and that it should only be in cases where the State cannot or will not provide adequate funds that private enterprise in the direction should be encouraged.

7. The disadvantages pointed out by the Acworth Committee required to be even further amplified. The existing Branch Line Companies have ceased for some time to raise additional capital for capital requirements. They have either obtained overdrafts from various Banks for this purpose at heavy rates of interest or issued debentures at special rates of interest (usually about 7 per cent.) or in several cases asked for money to be advanced to them by the Railway Board. So far, therefore, from reducing the amount:

that the Government of India have to raise in the open market, they are at present increasing that amount.

8. Another serious disadvantage which is not mentioned by the Acworth Committee is that the main line usually works the Feeder or Branch Line for a remuneration which, in most cases, is limited to a maximum of a fixed percentage of the gross earnings of the Branch Line (usually 40 per cent. or 50 per cent.)—terms of remuneration which at present are grossly inadequate. The result of this arrangement is that many of the main lines whose working expenses are from 60 to 80 per cent. of the gross earnings are saddled with heavy expenditure which ought to have been debited to Branch Line Companies. Where the Branch Line Companies are "successful", that is, where the shares stand at a high figure, their profits are inflated owing to their working expenses being thus artificially reduced. Again, where in the case of less "prosperous" Branch Line Companies, the Government has to make a direct subsidy in order to make up the guaranteed interest on the capital, the amount paid by way of subsidy does not reveal the true loss of the Government in connection with the Branch Line Company. To this subsidy should be added also the additional loss incurred from the main line working the Branch Line at less than the actual cost. Even this, however, does not give a complete statement of the loss sustained by Government in connection with these Companies. These Companies have been supplied with land free of charge and the cost of such land is not taken into account either in the Capital or the Revenue Accounts of the Companies concerned.

9. The only real argument in favour of these Companies is that they must be utilised in cases where the Government itself is unable or declines to raise the necessary amount of capital for new constructions. It is doubtful whether such a position is likely to recur in the future. It is admitted that to use the agency of these Companies is a far more expensive method of raising money for the construction of railways than direct Government loans can ever be. The amount of assistance given by Branch Line Companies in the past has been trivial; the total amount of capital raised through the agency of Branch Line Companies has only been about Rs. 10½ crores—an amount which in itself is less than the lapse that occurred last year in the provision for capital expenditure in the Railway Budget.

10. The difficulties and complications now experienced in connection with these Branch Line Companies are out of all proportion to the insignificant financial facilities offered by the Companies. The Government of India have therefore decided that the Branch line policy should be abandoned and that an endeavour should be made to reduce the number of the existing Branch Line Companies. If on any occasion the Government of India should be unable to find funds for construction (which is not the case at present), and should it be considered advisable to tap fresh sources for subscription to railway loans by offering terms different from those given to the ordinary Government loans, that is, by offering not only a fixed rate of interest, but a share in the profits of a particular Branch Line, there appears to be no particular advantage of using a financial half-way house specially to float a loan on such terms; there appears to be no reason why the Government should not float the loan direct. But it will probably be found sufficient to raise short term debentures at a high rate of interest—to be liquidated when the loan market is favourable—a procedure adopted now by the Branch Line Companies, but at a higher rate of interest than would be necessary for the Government.

11. There remains the case of the District Board Railways for which some of the capital or the security for the capital is secured by a special cess levied by the District Board throughout the district.

The Acworth Committee pointed out that where a District Board was the promoter of a new Branch Line, considerations other than purely commercial came into play with the result of further complications and confusion. In a footnote to the report they referred to the views expressed by the Madras Government who had drawn attention to a case in which, although no short-circuiting was involved, there had been a delay of over 10 years in arriving at a decision in regard to the terms for working a District Board Railway by the South Indian Railway Company. The amount of capital raised by District Boards for such lines has been only Rs. 137 lakhs while the amount raised by Company lines subsidised by District Boards amounts to Rs. 2½ crores. These amounts are insignificant as compared with the total capital raised by the Government and it is clear that the relief afforded to the Government of India in raising the loans is quite disproportionate to the great complications which have resulted in the working of the railway administration. Loans raised direct by the District Boards do not relieve the market of the Government of India; the money is ultimately borrowed from the Government of India.

12. The legal position regarding the powers of District and Local Boards in the matter of railway construction and management depends in part on the Indian Railways Act, 1890, which, in the absence of express exclusion of its application, extends to all District Board railways and, in part on the nature of the provision made in the matter in the District or Local Boards Act of the province concerned. It is only in the

Madras Presidency that the question has assumed prominence and it will suffice to indicate briefly the nature of the provisions contained in the Madras Local Boards Act, 1920. Action under section 113 of that Act can only be taken "with the previous sanction of the Government of India". Having obtained such sanction, a District Board may either itself construct and maintain a railway within, or partly within, the local area under the control of the Board, or may subscribe to any debenture loan raised by the Government of India or by any other local authority or by any company for the construction or maintenance of any railway which the Board considers likely to be of benefit to the district, or may guarantee the payment from the district fund of such sums as it shall think fit as interest on capital expended on any such railway (that is, whether the railway is constructed by the Government of India or by any other local authority or by a Company).

Section 236 of the same Act provides that the accumulations of a local railway cess may be utilised for all or any of the purposes specified in section 113, including the guaranteeing of payment of interest on capital spent on a railway.

A District Board in Madras, therefore, can guarantee the payment from the district fund of the money sufficient to make up minimum interest on capital expended on a railway within its area whether such railway is constructed by the Government of India or by a Company, the only disadvantage attaching to this particular form of guarantee being that the Act does not make the payment of the guaranteed interest a first charge on the District Board Fund.

13. The Government of India could not reasonably use their powers under the Indian Railways Act, 1890, or under, *e.g.*, section 113 of the Madras Local Boards Act, 1920, to prevent a District Board or a local body from constructing a light railway or a tramway which had no physical connection with any existing main line and which that local body proposed to work itself or through a local company. But as things stand at present there is no reason for continuing the practice under which District Boards are allowed to make money out of Branch Lines connected with a main line when they themselves cannot make any arrangements for the working of the lines and require to have them run by the main lines.

14. These District Board railways must not be confused with the light and feeder railways which constitute a provincial subject under the Devolution Rules. The provincial subject in question comprises "light and feeder railways and extra-municipal tramways in so far as provision for their construction and management is made by provincial legislation". That is to say, it comprises only individual light or feeder railways or extra-municipal tramways for the construction and management of which specific provision has been made by an Act of the local legislature of the province concerned. Hitherto, no such legislation has been enacted with the result that the entry in question in the provincial schedule, as also the qualifying words to entry 5 (a)* in the central schedule, have no operation, and all existing railways of every description are included in the central subject defined in the last-named entry. It should also be observed that the provincial subject in question is "subject to legislation by the Indian Legislature in the case of any such railway or tramway which is in physical connection with a main line or is built on the same gauge as an adjacent line", the effect being that a provincial bill designed to provide for the construction of a light or feeder railway or extra-municipal tramway in physical connection with a main line or built on the same gauge as an adjacent main line would require the previous sanction of the Governor General under clause (f) of sub-section (3) of section 80-A of the Government of India Act; and it may be presumed that few occasions are likely to arise in which provision will be made by local legislation for the construction of a light or feeder railway not answering one or other of these descriptions.

15. The proposal set forth in this Resolution is not designed to evade the legitimate operation of the legal position described, in the case of District Board railways, in paragraph 12 and in the case of provincial light and feeder railways, in paragraph 14; but it follows from the proposal that Local Governments and District or Local Boards should not, in the absence of special circumstances, be encouraged to build branch or feeder lines. In other words, the normal procedure will be the construction by the Government of India, or at its cost, by a Company, of a branch line which a District Board or Local Government desires to have constructed and is prepared to guarantee. But, should the railway programme not permit the construction of such a line within a reasonable time, the possibility of permitting a District Board or Local Government to construct it from its own funds would require consideration.

Unremunerative Lines.

16. The above proposals relate to the procedure adopted in the past and the procedure which it is proposed to adopt in the future for the financing of the

* "Railways and extra-municipal tramways, in so far as they are not classified as provincial subjects under entry 6 (d) of Part II of this Schedule."

construction of branch or feeder lines expected to prove remunerative from the point of view of railway earnings only. But there are cases where the Local Governments or local authorities may desire that a line should be constructed which will not be remunerative on railway earnings and the construction of which is desired by them for purely local reasons on account of the administrative advantages it is likely to confer or for the development of a particular area. It is proposed that in future the Railway Board in such circumstances should have power to arrange for the construction of the line from railway funds if the Local Government or the local authority guarantees the Railway Board against loss. The guarantee would be to the effect that the local authority would make up the difference between the net earnings and the interest and other charges payable. As it is not desirable that the Central Government should make any profit out of such contributions by local authorities; it is also proposed that where contributions have been made by a local authority for this purpose the repayment of such contributions should be a first charge on any net profits subsequently realised from the line, should the line prove remunerative.

17. The Central Government must, however, retain the power to decide whether a line is to be built or not; the proposals in the preceding paragraph must not be taken to imply that a Local Government by giving a guarantee can require the Railway Board to construct a line. Proposals of a Local Government might run counter to the general railway policy or might take the form of short-circuiting railway traffic and so lead to a reduction of receipts from existing lines.

18. These proposals have been circulated to Local Governments and have been generally welcomed by them as affording a suitable method of reconciling central and local interests and of providing for local bodies and Local Governments a method of securing the construction of railways which may be required for purely local reasons, and which, while not likely to prove remunerative on purely railway earnings, are likely to provide such indirect benefits to Local Governments and local bodies as will more than repay the amounts paid under the guarantee. Several such arrangements have already been made with Local Governments.

APPENDIX F.

L-GAZETTED OFFICERS.

L.—Statement of Gazetted Officers and Officers of corresponding rank employed on Class I Railways, Railway Board and other Railway Offices (excluding H. E. H. the Nizam's State and Jodhpur Railways) on the 31st March 1935 as compared with 31st March 1934.

Item.	A. B.		B. N.		B. & N. W.		B., B. & C. I.		BURMA.		E. B.		E. I.		G. I. P.		M. & S. M.		N. W.		R. & K.		S. I.		Rly. Board and Mis-cellaneous officers.		TOTAL.		
	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	
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	
1. Agency Department—																													
1-01. Europeans	2	3	4	4	4	3	4	4	4	4	4	4	5	6	6	6	5	5	6	9	1	1	3	3	1	2	52	59	
1-02. Indians—																													
(a) Hindus			2				1				2	2	1										3	3			10	9	
(b) Muslims												1							1								1	2	
(c) Anglo-Indians and domiciled Europeans.			1								1		3				1					1	1				5	5	
(d) Sikhs											1																1	1	
(e) Indian Christians																			1								1	1	
(f) Other classes																											2	1	
(g) Total			3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	2	2	2	2	4	4	4	4	20	18	
(g) Total	2	3	7	7	7	7	7	7	7	7	7	7	8	10	10	11	11	11	8	11	1	1	7	7	1	2	72	77	
1-02. GRAND TOTAL																													
2. Accounts Department—																													
2-01. Europeans			6	5	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	1	1	1	4	2			45	41	
2-02. Indians—																													
(a) Hindus			4	4	2	3	2	2	2	2	6	5	6	6	6	6	2	2	9	8	2	2	7	6	1	4	41	45	
(b) Muslims																			2	4					3	5	7		
(c) Anglo-Indians and domiciled Europeans.			1	3			1	1	1	1			6	8	1	1	1	1	1	1			1	1			14	17	
(d) Sikhs			1	1															1	1							2	3	
(e) Indian Christians																											2	2	
(f) Other classes																											4	5	
(g) Total			6	8	2	2	5	5	5	5	7	11	14	14	14	14	14	14	13	14	2	2	8	8	4	6	68	77	
(g) Total			12	13	8	7	13	13	13	13	7	8	14	16	16	11	11	11	14	15	3	3	12	10	4	7	113	118	
2-02. GRAND TOTAL																													
3. Engineering Department—																													
3-01. Europeans	13	9	46	44	20	20	35	33	28	26	19	18	45	48	45	44	28	24	47	47	3	3	27	24	8	8	364	348	
3-02. Indians—																													
(a) Hindus	5	5	11	10	4	4	14	16	2	3	12	12	32	31	8	8	14	16	45	43			11	14	1	2	159	164	
(b) Muslims	3	3	1	1	2	2					2	2	4	5	5	5			8	8	2	2		1			27	29	
(c) Anglo-Indians and domiciled Europeans.	2	2	7	7	1	1			2	2	3	2	3	4			1	1	9	7					1	1	29	27	
(d) Sikhs	1	1									1	1							4	4							6	6	
(e) Indian Christians																			2	2							7	11	
(f) Other classes																											8	10	
(g) Total	11	11	20	19	7	7	15	18	4	6	18	17	41	42	20	22	15	20	68	64	2	2	12	16	3	3	236	247	
(g) Total	24	20	66	63	27	27	50	51	32	32	37	35	86	90	65	66	43	44	115	111	5	5	39	40	11	11	600	595	
3-02. GRAND TOTAL																													

* Revised figures.

APPENDIX F—contd.
I.—Statement of Gazetted Officers and Officers of corresponding rank employed on Class I Railways, Railway Board and other Railway Offices (excluding H. E. H. the Nizam's State and Jodhpur Railways) on the 31st March 1935 as compared with 31st March 1934—contd.

Item.	A. B.		B. N.		B. & N. W.		B., B. & C. I.		BUREAU.		E. B.		E. I.		G. I. P.		M. & S. M.		N. W.		B. & K.		S. I.		By Board and Miscellaneous officers.		TOTAL.	
	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.
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
4. Transportation—	8	8	25	24	12	12	25	25	17	17	14	15	41	36	47	50	19	19	28	25	2	2	10	11	6	5	255	249
4-01. Europeans																												
4-02. Indians—	3	3	16	16	1	1	7	7			11	12	10	14	8	9	6	6	17	12			11	12	1	2	91	94
(a) Hindus																												
(b) Muslims	1	1	5	7	2	2	2	2			4	3	6	7	4	4			8	9	1	1	1	1	2	2	36	39
(c) Anglo-Indians and domiciled Europeans	2	2	3	3			1	1	2	2	3	4	8	6	4	4	3	3	3	3			5	5	2	2	236	26
(d) Sikhs																												
(e) Indian Christians																												
(f) Other Classes																												
(g) Total	6	6	26	28	3	4	15	15	8	8	18	19	26	29	16	18	13	13	32	29	1	1	17	18	5	6	196	194
4-02. GRAND TOTAL	14	14	51	52	15	16	41	40	25	25	32	34	67	65	63	68	32	32	60	54	3	3	27	29	11	11	441	443
5. Commercial—																												
5-01. Europeans	1	1			1	1							7	7	11	12							5	4			25	25
5-02. Indians—																												
(a) Hindus																												
(b) Muslims																												
(c) Anglo-Indians and domiciled Europeans																												
(d) Sikhs																												
(e) Indian Christians																												
(f) Other Classes																												
(g) Total																												
5-02. GRAND TOTAL	1	1			1	1							7	7	11	12							5	4			25	25
6. Mechanical Engineering—																												
6-01. Europeans	7	7	24	23	13	14	28	27	21	20	16	15	38	35	19	22	22	21	45	44	2	2	16	16	4	3	255	249
6-02. Indians—																												
(a) Hindus	2	2	5	5			3	3			5	7	12	13	5	3	1	2	4	5			5	5			43	45
(b) Muslims	1	1	1	1			1	1					2	3					2	3							6	9
(c) Anglo-Indians and domiciled Europeans	1	1							2	2	1	1	4	3	1	1				1	1						9	9
(d) Sikhs																												
(e) Indian Christians																												
(f) Other Classes																												
(g) Total	4	4	7	7			3	4	2	2	9	9	19	20	7	6	2	3	8	12			6	5			66	75
6-02. GRAND TOTAL	11	11	31	30	13	14	31	31	23	23	25	24	57	55	26	28	24	24	53	56	2	2	21	21	4	4	321	322

* Revised figure.

APPENDIX F—contd.

I.—Statement of Gazetted Officers and Officers of corresponding rank employed on Class I Railways, Railway Board and other Railway Offices (excluding H. E. H. the Nizam's State and Jodhpur Railways) on the 31st March 1935 as compared with 31st March 1934—contd.

Item.	A. B.		B. N.		B. & N. W.		B., B. & C. I.		BURMA.		E. B.		E. I.		G. I. P.		M. & S. M.		N. W.		B. & K.		S. I.		Rly. Board and Miscellaneous Offices.		TOTAL.				
	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.			
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			
10. Increase (+) and Decrease (—).																															
10-01. Europeans . . . . .	..	-3	..	..	-6	..	..	-4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	-25
10-02. Indians—																															
(a) Hindus . . . . .	..	..	..	..	-1	..	..	+2	..	..	..	..	..	+5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+19
(b) Muslims . . . . .	..	..	..	..	+2	..	..	+2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+14
(c) Anglo-Indians and domiciled Europeans . . . . .	..	..	..	..	+3	..	..	..	..	-1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+2
(d) Sikhs . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+1
(e) Indian Christians . . . . .	..	..	..	..	..	..	..	-1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+5
(f) Other Classes . . . . .	..	..	..	..	..	..	..	+1	..	+1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+2
(g) Total . . . . .	..	..	..	..	+4	..	..	+4	..	..	..	..	..	+11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+44
10-03. GRAND TOTAL . . . . .	..	-3	..	..	-2	..	..	..	..	-4	..	..	..	+6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	+19
11. Percentage of Total—																															
11-01. Europeans	55.2	56.3	64.8	62.3	81.9	81.3	71.9	69.6	80.4	79.6	46.3	47.1	56.7	54.0	68.1*	66.7	69.1	65.5	59.9	50.2	66.7	66.7	67.0	52.3	61.3	57.3	65.2	60.8			
11-02. Indians—																															
(a) Hindus	23.4	23.4	21.8	21.5	9.7	9.3	18.7	19.9	2.9	3.1	34.7	37.2	25.4	26.5	16.4*	16.0	19.4	21.6	30.0	27.9	13.3	13.3	34.4	37.9	16.1	25.0	23.5	23.8			
(b) Muslims	7.5	7.8	3.6	4.7	5.6	5.4	1.	2.9	..	..	4.9	5.0	4.6	5.4	5.2*	5.3	..	..	8.2	10.6	20.0	20.0	0.8	1.5	9.7	7.4	4.4	5.1	
(c) Anglo-Indians and domiciled Europeans	10.4	10.9	7.3	8.9	2.8	4.0	1.2	1.2	9.8	9.2	9.1	7.4	11.1	11.8	4.2*	4.4	4.3	3.6	5.2	4.9	..	..	7.0	6.8	9.7	7.3	6.7	6.7	
(d) Sikhs	1.5	1.6	1.0	1.1	..	..	0.6	0.6	..	..	1.7	1.7	1.0	1.0	..	..	1.4	1.4	3.3	4.1	..	..	..	..	..	..	..	1.1	1.2
(e) Indian Christians . . . . .	..	..	0.5	0.5	..	..	1.8	1.1	..	..	2.5	1.6	0.6	0.6	3.3	4.0	2.2	3.6	1.9	2.3	..	..	0.8	1.5	1.0*	3.0	1.4	1.6	
(f) Other Classes . . . . .	..	..	1.0	1.0	..	..	4.1	4.7	6.9	8.1	0.8	..	0.6	0.7	2.8	3.6	3.6	4.3	..	..	..	..	..	..	..	1.0*	1.7	1.8	

* Revised figures.

II.—SENIOR SUBORDINATES.

II. - Statement of Subordinates, drawing Rs. 250 per mensem and over or on scales of pay rising to Rs. 250 per mensem and over employed on Class I Railways, Railway Bengal and other Railway Offices (excluding H. E. H. the Nizam's State and Jodhpur Railways) on 31st March 1935 as compared with 31st March 1934.

Item.	A. B.		B. N.		B. & N. W.		B. B. & C. I.		BURMA.		E. B.		E. I.		G. I. P.		M. & S. M.		K. W.		R. & K.		S. I.		TOTAL.	
	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.
	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
1. Agency Department—																										
1-01. Europeans	1	1	5	6	1	1	9	10	5	4	10	11	8	11	4	3	3	5	6	1	1	3	3	3	55	60
1-02. Indians—																										
(a) Hindus	1	1	5	6	1	1	9	10	5	4	10	11	8	11	4	3	3	5	6	1	1	3	3	3	55	60
(b) Muslims							4	4	1	1															5	6
(c) Anglo-Indians and domiciled Europeans	1	1	2	1	1	1	4	4	2	2			1	2			1	1	2	1		1	1	1	15	14
(d) Sikhs																										1
(e) Indian Christians							2	2	1	1					3	3			1	2					7	8
(f) Other classes							4	3	1	1					1	1									6	5
(g) Total	2	2	7	7	2	2	23	23	10	9	10	11	9	13	8	7	4	4	8	11	1	1	4	4	88	94
1-03. GRAND TOTAL	2	2	7	7	2	2	23	23	11	9	11	12	10	16	10	9	4	4	9	11	1	1	4	4	94	100
2. Accounts Department—																										
2-01. Europeans				2			3	3			2	1	9	7	4	5			1						19	18
2-02. Indians—																										
(a) Hindus			43	21	6	6	26	25	9	9	27	29	57	59	18	19	6	7	48	52			19	19	259	246
(b) Muslims			3		2	2		1			1		7	6					18	19			1	1	32	29
(c) Anglo-Indians and domiciled Europeans			40	20	6	6	12	13	8	7	3	3	10	10	10	11	11	11	2	2			3	3	105	85
(d) Sikhs			2								1		1	1	1	1			9	10					14	12
(e) Indian Christians			2		1	1	2	1	1	1					3	4			1	1					10	8
(f) Other classes							7	8							4	5	1	1							12	15
(g) Total			90	41	15	15	47	48	18	17	32	32	75	76	36	39	18	19	78	85			23	23	432	395
2-03. GRAND TOTAL			90	43	15	15	50	51	18	17	34	33	84	83	40	44	18	19	79	85			23	23	451	413
3. Engineering Department—																										
3-01. Europeans	1	1	4	4		1	11	9	1	1	5	4	39	30	26	23	9	9	29	18	1	1	3	3	129	104
3-02. Indians—																										
(a) Hindus	11	11	58	55	5	5	66	66	24	23	30	36	106	105	58	54	19	21	103	104			17	9	497	489
(b) Muslims	3	3	5	5	3	3	15	16	2	2	2	1	9	6	16	15			62	61			2	1	122	115
(c) Anglo-Indians and domiciled Europeans	5	4	39	35	13	15	9	8	30	30	15	17	100	105	54	51	24	22	44	53			13	10	347	353
(d) Sikhs	2	2	3	2	1	1	2	1	4	3	1	1	4	9	6	7			30	32					63	58
(e) Indian Christians			3	3			7	8	3	3	1	1	1	2	13	11	1	1					3	3	32	32
(f) Other classes							28	22	3	3					14	13	2	1	3	2					45	41
(g) Total	21	20	108	100	24	24	122	121	66	64	49	56	250	227	161	151	46	45	242	252			35	23	1,096	1,086
3-03. GRAND TOTAL	22	21	112	104	24	25	133	130	67	65	54	60	259	257	187	174	55	54	271	270			38	26	1,225	1,190

Figures in italics are provisional.

APPENDIX F—contd.

II.—Statement of Subordinates, drawing Rs. 250 per mensem and over or on scales of pay rising to Rs. 250 per mensem and over employed on Class I Railways, Railway Board and other Railway Offices (excluding H. E. H. the Nizam's State and Jodhpur Railways) on 31st March 1935 as compared with 31st March 1934—contd.

Item.	A. B.		B. N.		B. & N. W.		B. E. & C. I.		BURMA.		E. B.		E. I.		G. I. P.		M. & S. M.		N. W.		E. & K.		S. I.		TOTAL.				
	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	
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			
4. Transportation—																													
4-01. Europeans	1	..	20	19	3	3	30	28	3	3	18	16	90	85	150	139	..	..	127	107	1	..	6	9	451	409		
4-02. Indians—																													
(a) Hindus	7	6	40	66	4	5	109	106	*11	11	28	30	54	63	81	84	3	3	75	83	..	..	13	12	*425	469		
(b) Muslims . . . . .	..	..	6	10	1	1	6	6	2	1	1	1	7	8	13	13	..	..	24	33	..	..	1	1	61	74		
(c) Anglo-Indians and domiciled Europeans	13	12	42	57	15	15	40	37	*67	69	54	49	167	186	429	424	30	30	63	66	5	6	23	19	*948	970			
(d) Sikhs . . . . .	..	..	1	6	..	..	..	..	..	..	2	2	1	2	1	..	..	..	*9	11	..	..	..	..	*14	21		
(e) Indian Christians . . . . .	..	..	3	3	..	..	18	17	..	..	1	1	3	3	58	52	..	..	3	5	..	..	..	..	*86	81		
(f) Other classes	1	1	..	..	..	..	38	40	*18	18	..	1	2	1	36	34	..	..	19	18	..	..	..	..	*114	113		
(g) Total	21	19	92	142	20	21	211	206	*98	99	86	84	234	233	618	607	33	33	*193	216	5	6	37	32	*1,643	1,723			
4-03. GRAND TOTAL	22	19	112	161	23	24	241	234	*101	102	104	100	324	348	798	746	33	33	*330	323	6	6	45	41	*2,090	2,137			
5. Commercial—																													
5-01. Europeans . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	1	1	13	5	..	..	5	5	..	..	..	..	19	11		
5-02. Indians—																													
(a) Hindus	3	3	..	..	..	..	..	..	..	..	..	..	34	15	27	28	..	..	13	16	..	..	4	7	71	69		
(b) Muslims . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	4	1	4	3	..	..	5	3	..	..	..	..	14	8		
(c) Anglo-Indians and domiciled Europeans	..	..	..	..	..	..	..	..	..	..	..	..	9	5	10	10	..	..	4	1	..	..	..	..	23	16		
(d) Sikhs . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	5	..	..	..	..	6	5		
(e) Indian Christians . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	10	..	..	..	..	..	..	..	..	9	10		
(f) Other classes
(g) Total	3	3	..	..	..	..	..	..	..	..	..	..	37	21	49	51	..	..	23	25	..	..	4	7	123	108		
5-03. GRAND TOTAL	3	3	..	..	..	..	..	..	..	..	..	..	38	22	62	56	..	..	33	30	..	..	4	7	141	119		
6. Mechanical/Engineering—																													
6-01. Europeans	10	11	128	110	11	8	80	70	20	18	36	34	275	210	53	54	56	52	137	114	5	4	26	23	857	793			
6-02. Indians—																													
(a) Hindus	2	3	12	16	..	..	48	52	11	11	27	29	118	127	24	25	4	5	66	66	1	..	29	33	342	367		
(b) Muslims	1	1	4	4	..	..	8	7	1	1	3	3	14	13	2	2	..	..	59	61	..	..	1	1	93	98		
(c) Anglo-Indians and domiciled Europeans	12	12	218	247	14	14	236	240	114	109	90	88	538	595	105	102	101	101	234	237	3	3	115	111	1,770	1,879			
(d) Sikhs . . . . .	..	..	7	5	..	..	2	2	4	4	..	..	9	7	2	2	..	1	31	35	..	..	..	..	..	..
(e) Indian Christians	1	1	2	3	..	..	7	7	2	2	1	1	2	2	13	11	1	1	14	19	..	..	5	5	48	50		
(f) Other classes	2	2	3	5	..	..	37	37	11	11	3	2	2	4	8	9	3	2	9	7	..	..	..	..	..	..
(g) Total	18	18	246	290	14	14	338	345	143	138	124	123	683	753	164	151	109	109	403	445	*4	3	150	150	*2,368	2,529			
6-03. GRAND TOTAL	23	29	374	390	25	22	418	415	163	156	160	157	958	963	307	305	166	161	560	559	*9	7	176	173	*3,343	3,337			

Included under Transportation.

Included under Transportation.

Included under Transportation.

Included under Transportation.

	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		
7. Stores Department—																													
7-01. Europeans								2	2					3	4	3	3	1	1	1	7			1	1	1	18	16	
7-02. Indians—																													
(a) Hindus	1	1	1	8	8			8	8	3	3	9	11	19	17	4	4	1	1	19	10			2	2	2	74	74	
(b) Muslims								1	1					4	3					8	9						13	13	
(c) Anglo-Indians and domiciled Europeans	1	1	1	11	11	1						4	2	25	24	2		3	3	7	9			1	1	1	55	51	
(d) Sikhs																				5	4						4	4	
(e) Indian Christians				2	2			3	2								1			1	1						6	6	
(f) Other classes								1	1							3	3			2	1						6	5	
(g) Total	2	2	2	21	21	1		13	12	3	3	13	13	48	44	9	8	4	4	42	43			3	3	3	150	153	
7-03. GRAND TOTAL	2	2	2	21	21	1		15	14	3	3	13	13	51	48	12	11	5	5	50	50			4	4	4	177	171	
8. Other Departments—																													
8-01. Europeans		6	5	29	36	2	2	13	11			1		59	33	1	1	2	2	5	3			1	1	1	118	93	
8-02. Indians—																													
(a) Hindus		9	9	36	37	4	4	34	34	27	21	11	11	72	75	9	8	15	15	8	9			3	3	3	237	226	
(b) Muslims				1	1			1	1	4	3	2	2	8	7					5	6			1	1	1	22	21	
(c) Anglo-Indians and domiciled Europeans	6	5	5	43	35	8	8	16	17	4	3	3	3	71	86	5	5	14	14	6	7	1		3	3	3	180	187	
(d) Sikhs				3	4					5	4			2	1					2	2						12	11	
(e) Indian Christians								3	3	7	5			1	2	1	1	2	2	3	3			2	2	2	19	18	
(f) Other classes				3	3			9	9	7	6			1	1	11	10							1	1	1	32	30	
(g) Total	16	14	14	85	80	12	12	63	64	54	42	16	16	155	172	26	24	31	31	24	27	1		10	10	10	492	493	
8-03. GRAND TOTAL	20	19	19	114	115	14	14	76	75	54	42	17	16	214	205	27	25	33	33	29	30	1		11	11	11	610	596	
9. Railway Boats and other Railway offices—																													
9-01. Europeans																											1	1	
9-02. Indians—																													
(a) Hindus																												134	143
(b) Muslims																												27	27
(c) Anglo-Indians and domiciled Europeans																												24	25
(d) Sikhs																												12	13
(e) Indian Christians																												5	5
(f) Other classes																												2	1
(g) Total																												804	214
9-03. GRAND TOTAL																												905	315

* Revised figures.

APPENDIX F—concl'd.

II.—Statement of Subordinates, drawing Rs. 250 per mensem and over or on scales of pay rising to Rs. 250 per mensem and over employed on Class I Railways, Railway Board and other Railway Offices (excluding H. E. H. the Nizam's State and Jodhpur Railways) on 31st March 1935 as compared with 31st March 1934—concl'd.

Item.	A. B.		B. N.		B. & N. W.		B. B. & C. I.		BURMA.		E. B.		E. I.		G. I. P.		M. & S. M.		N. W.		B. & K.		S. I.		TOTAL.			
	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.	1934.	1935.
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		
10. Total—																												
10-01. Europeans	17	17	181	170	16	14	139	123	25	22	63	56	477	373	252	232	64	333	254	7	5	39	37	1,618	1,368			
10-02. Indians—																												
(a) Hindus	34	34	201	209	20	21	300	301	90	82	142	157	458	472	225	225	51	337	355	2	1	90	88	2,084	2,143			
(b) Muslims	4	4	19	20	9	7	35	36	10	8	9	7	53	49	35	33	..	181	193	1	2	6	5	989	991			
(c) Anglo-Indians and domiciled Europeans	38	35	395	406	58	59	317	319	225	220	169	162	921	1,013	614	602	184	352	395	10	11	159	148	3,578	3,578			
(d) Sikhs	2	2	16	17	1	1	4	3	13	11	4	3	17	20	10	10	1	92	100	..	..	..	..	171	181			
(e) Indian Christians	1	..	12	11	1	1	42	40	14	12	3	3	7	9	100	93	4	23	31	..	..	10	10	222	218			
(f) Other classes	3	3	6	8	..	..	119	120	40	39	3	3	5	6	77	75	6	33	29	..	..	1	1	295	289			
(g) Total	82	78	649	671	89	89	817	819	392	372	330	335	1,461	1,509	1,061	1,038	245	1,018	1,104	*13	14	266	252	6,627	6,800			
10-03. GRAND TOTAL	99	95	830	841	105	103	956	942	417	394	393	391	1,938	1,942	1,313	1,270	313	1,351	1,358	*20	19	305	289	9,245	8,168			
11. Increase + Decrease—																												
11-01. Europeans	..	..	..	..	..	..	..	..	..	-3	..	-7	..	-104	..	-20	..	..	..	-79	..	..	..	..	..	..	..	..
11-02. Indians—																												
(a) Hindus	..	..	..	..	..	..	..	..	..	-8	..	+15	..	+14	..	..	..	..	..	+18	..	..	..	..	..	..	..	..
(b) Muslims	..	..	..	..	..	..	..	..	..	-2	..	-2	..	-4	..	-2	..	..	..	+12	..	..	..	..	..	..	..	..
(c) Anglo-Indians and domiciled Europeans	..	..	..	..	..	..	..	..	..	-5	..	-7	..	+92	..	-12	..	..	..	+44	..	..	..	..	..	..	..	..
(d) Sikhs	..	..	..	..	..	..	..	..	..	-2	..	-1	..	+3	..	..	..	..	..	+8	..	..	..	..	..	..	..	..
(e) Indian Christians	..	..	..	..	..	..	..	..	..	-2	..	..	..	+2	..	-7	..	..	..	+8	..	..	..	..	..	..	..	..
(f) Other classes	..	..	..	..	..	..	..	..	..	-1	..	..	..	+1	..	-2	..	..	..	-4	..	..	..	..	..	..	..	..
(g) Total	..	..	..	..	..	..	..	..	..	-20	..	+5	..	+108	..	-23	..	..	..	+86	..	..	..	..	..	..	..	..
11-03. GRAND TOTAL	..	..	..	..	..	..	..	..	..	-23	..	-2	..	+4	..	-43	..	..	..	+7	..	..	..	..	..	..	..	..
12. Percentage of total—																												
12-01. Europeans	17.2	17.9	21.8	20.2	15.2	13.6	14.5	13.1	6.0	5.6	10.0	14.3	24.6	19.2	19.2	18.3	21.7	20.7	24.6	18.7	35.0	26.3	12.3	12.3	19.6	16.8		
12-02. Indians—																												
(a) Hindus	34.4	35.8	24.2	24.9	19.0	20.4	31.4	32.0	21.5	20.8	36.1	40.2	23.6	24.3	17.1	17.7	16.3	17.8	24.9	20.1	10.0	5.3	29.6	30.4	25.3	26.2		
(b) Muslims	4.1	4.2	2.3	2.4	3.6	6.8	3.7	3.8	2.4	2.0	2.3	1.8	2.7	2.5	2.7	2.6	..	..	13.4	14.2	5.0	10.5	1.7	1.7	4.7	4.8		
(c) Anglo-Indians and domiciled Europeans	40.3	36.8	47.5	49.3	55.2	57.2	33.2	33.9	54.0	55.8	43.0	41.4	47.5	52.2	46.8	47.4	58.8	58.9	26.1	29.2	50.0	57.9	52.3	51.2	43.6	43.6		
(d) Sikhs	2.0	2.1	1.9	2.0	1.0	1.0	0.4	0.3	3.1	2.8	1.0	0.8	0.9	1.0	0.8	0.8	..	..	0.8	0.8	..	..	..	..	2.1	2.2		
(e) Indian Christians	1.0	..	1.5	1.3	1.0	1.0	4.4	4.2	3.4	3.1	0.8	0.7	0.4	0.5	0.6	0.3	1.3	1.0	1.7	2.3	..	..	..	..	2.7	2.7		
(f) Other classes	1.0	3.2	0.7	0.9	..	..	12.4	12.7	9.6	9.9	0.8	0.8	0.8	0.3	5.3	5.9	1.9	1.3	2.4	2.1	..	..	..	..	3.6	3.5		

* Revised figures.

APPENDIX G.

Statement showing the number of appointments created and vacancies which occurred among officers of Gasetted rank on State Railways and of corresponding rank on Companies' Railways (Class I) excluding H. E. H. the Nizam's State and Jodhpur Railways, and how they were filled during 1934-35.

Departments.	No. of vacancies which occurred in previous years not filled in these years remaining to be filled.	No. of new appointments created during the year.	No. of vacancies which occurred during the year.	No. of appointments abolished during the year.	No. of net vacancies to be filled.	No. of vacancies not filled up during the year.	No. of vacancies actually filled.	FIELD BY								Total.
								INDIANS.								
								Europeans.	Hindus.	Muslims.	Anglo-Indians and DOMICILED Europeans.	Sikhs.	Indian Christians.	Other classes.		
1	2	3	4	5	6 (a)	7 (b)	8	9	10	11	12	13	14	15	16	
STATE-MANAGED RAILWAYS.																
1. Agency . . . . .	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..
2. Accounts	2	..	..	..	2	2	..	..	..	..	..	..	..	..	..
3. Engineering	43	2	14	..	59	46	18	8	1	1	..	..	1	2	5
4. Transportation (Traffic) and Commercial.	29	1	7	1	36	24	12	6	1	..	4	..	..	1	6
5. Transportation (Power) and Mechanical Engineering.	18	3	10	..	26	..	26	14	4	2	2	1	1	2	12	
6. Stores Department	6	..	3	..	9	6	3	2	..	..	1	..	..	..	1
7. Other Departments	10	2	3	4	11	6	5	1	2	1	..	1	..	..	4
8. TOTAL—																
1934-35	103	9	37	5	144	85	59	31	8	4	7	2	2	5	23	
1933-34	45	16	46	4	108	108	..	..	..	..	..	..	..	..	..
9. Percentage of Europeans to number of vacancies filled—																
1934-35 . . . . .	..	..	..	..	..	..	52.6	..	..	..	..	..	..	..	..
1933-34 . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10. Percentage of Indians to number of vacancies filled—																
1934-35 . . . . .	..	..	..	..	..	..	47.4	..	..	..	..	..	..	..	..
1933-34 . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
OTHER RAILWAYS.																
<i>Assam Bengal Railway.</i>																
1. Agency	1	..	1	..	2	1	1	1	..	..	..	..	..	..	..
2. Accounts . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3. Engineering	1	..	1	..	2	2	..	..	..	..	..	..	..	..	..
4. Transportation and Commercial	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5. Mechanical . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6. Stores . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7. Other Departments . . . . .	..	..	2	..	2	1	1	..	1	..	..	..	..	..	1
8. TOTAL—																
1934-35	2	..	4	..	6	4	2	1	1	..	..	..	..	..	1
1933-34	3	1	5	..	9	2	7	3	2	2	..	..	..	..	4
9. Percentage of Europeans to number of vacancies filled—																
1934-35 . . . . .	..	..	..	..	..	..	50.0	..	..	..	..	..	..	..	..
1933-34 . . . . .	..	..	..	..	..	..	42.9	..	..	..	..	..	..	..	..
10. Percentage of Indians to number of vacancies filled—																
1934-35 . . . . .	..	..	..	..	..	..	50.0	..	..	..	..	..	..	..	..
1933-34 . . . . .	..	..	..	..	..	..	57.1	..	..	..	..	..	..	..	..

(a) As a result of a number of posts being abolished during the years 1931-32 and 1932-33 there was an excess of officers in certain Departments and consequently some of the vacancies to be filled during the year were taken as set off against the excess, in respect of columns 6 and 7.

APPENDIX H.**Officers of the Railway Department (Railway Board) and attached offices, on 31st March 1935.**

The Hon'ble Sir JOSEPH BHORE, K.C.S.I., K.C.I.E., C.B.E., I.C.S.,
Member of Council of the Governor-General.

Railway Board.

The Hon'ble Sir Guthrie Russell, Kt. . . Chief Commissioner of Railways.

Mr. P. R. Rau Financial Commissioner of Railways.

Mr. A. E. Tylden Pattenson Member.

Lt.-Col. H. L. Woodhouse, M.C., R.E. . . Director of Civil Engineering (*Offg.*).

Mr. T. S. Sankara Aiyer, B.A., B.E. . . Director of Finance.

Rai Bahadur Mathra Das Director of Establishment.

Mr. F. D'Souza Director of Traffic.

Mr. L. H. Kirkness, D.S.O., O.B.E.,
 V.D. Secretary (*on leave*).

Mr. B. Moody, V.D. Secretary (*Offg.*).

Khan Bahadur Barkat Ali Deputy Director, Finance.

Khan Sahib Z. H. Khan Deputy Director, Establishment (*Offg.*).

Mr. T. G. Creighton Deputy Director, Mechanical Engineering
 (*Offg.*).

Mr. H. M. Jagtiani Deputy Director, Traffic (Commercial)
 (*Offg.*).

Mr. J. W. C. Holt Deputy Director, Traffic (Transportation)
 (*Offg.*).

Mr. R. C. Paranjoti Temporary Additional Deputy Director,
 Mechanical Engineering.

Mr. E. C. Rundlett Assistant Secretary (*on leave*).

Mr. H. W. C. C. Smith Assistant Secretary (*Offg.*).

Attached Officers.

Mr. C. W. Scott, O.B.E., D.F.C.,
 B.Sc., I.F.S. Timber Advisory Officer.

Mr. M. E. Bartley Officer on Special Duty.

Attached Offices.

Mr. K. M. Hassan Supervisor of Railway Labour.

Central Standards Office for Railways.

Mr. J. M. D. Wrench, C.I.E. Chief Controller of Standardisation.

Mr. E. Ingoldby Deputy Chief Controller of Standardisa-
 tion.

Mr. L. H. Swain Assistant Chief Controller of Standardisa-
 tion.

Mr. T. T. Lambe Chief Mechanical Draftsman.

Mr. J. V. Stuart Edwards Chief Structural Draftsman.

Central Publicity Bureau.

Mr. G. T. Tait Central Publicity Officer.

Mr. P. W. Sullivan Assistant Publicity Officer.

Overseas Bureaux.

Mr. W. T. Biscoe Resident Manager, Indian Railways-
 Bureau, New York, U. S. A.

Mr. V. P. Bhandarkar Manager, Indian Railways Bureau,
 London.

Office of the Controller of Railway Accounts.

Mr. V. S. Sundaram, B.A. Controller of Railway Accounts.

Mr. Rang Bihari Lal, M.A. Deputy Controller of Railway Accounts.

Mr. K. K. Sen, M.A. Assistant Controller of Railway Accounts.

Mr. K. Ubaidullah, B.A. Assistant Accounts Officer.

