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LABOUR INVESTIGATION COMMITTEE

GOVERNMENT OF INDIA



REPORT

ON

AN ENQUIRY INTO CONDITIONS OF LABOUR IN THE ENGINEERING AND MINERALS AND METALS INDUSTRIES IN INDIA

BY

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PREFACE.

The Tripartite Labour Conference at its meeting in September 1943 recommended the setting up of a machinery to investigate questions of wages and earnings, employment and housing, and social conditions generally, with a view to provide adequate materials on which to plan a policy of social security for labour. In pursuance of that resolution, the Labour Investigation Committee was appointed by the Government of India by Resolution No. L 4012, dated the 12th February 1944 to carry out the investigations. The Committee was instructed to extend its investigations generally to all industrial and semi-industrial labour covered by the Royal Commission on Labour in their Report, with the addition of certain other categories. The Committee was asked by the Government of India to decide in each case the most suitable manner of conducting the enquiry. The Government, however, considered that the method of enquiry should not merely consist of sending out questionnaires to Government agencies and Employers' and Workers' Associations, but should also comprise specific enquiries in individual concerns based on representative sampling.

2. In India, in spite of the quite comprehensive enquiries made by the Royal Commission on Labour and a few Committees appointed by the Provincial Governments, there have remained large lacunae in regard to information on labour conditions in several industries. In particular, broadly speaking, the method of direct enquiry on the spot has not been adopted on a sufficiently wide scale so as to cover the entire industrial structure. Moreover, certain industries, like cotton textiles and coal mining, have received greater attention than others, and even as regards these industries, comprehensive information on an all-India basis has not been available. With a view to making up this deficiency as well as to bringing the available information up to date, the Committee decided that *ad hoc* surveys should be carried out in various industries so as to secure a complete picture of labour conditions prevailing in each. The following industries were selected for the purpose :—

A. *Mining.* (1) Coal. (2) Manganese. (3) Gold. (4) Mica. (5) Iron Ore. (6) Salt.

B. *Plantations.* (7) Tea. (8) Coffee. (9) Rubber.

C. *Factory industry.* (10) Cotton. (11) Jute. (12) Silk. (13) Woollen. (14) Mineral Oil. (15) Dockyard. (16) Engineering (17) Cement. (18) Matches. (19) Paper. (20) Carpet weaving. (21) Coir matting. (22) Tanneries and Leather Goods Manufacture. (23) Potteries (24) Printing Presses. (25) Glass. (26) Chemical and Pharmaceutical works (27) Shellac. (28) Bidi-making, Cigar and Cigarette (29) Mica Splitting. (30) Sugar. (31) Cotton Ginning and Baling. (32) Rice Mills.

D. *Transport.* (33) Transport Services (Tramways and Buses). (34) Non-gazetted Railway Staff.

E. *Other types of labour.* (35) Port Labour. (36) Municipal Labour. (37) Central P.W D. (38) Rickshaw Pullers.

3. The main conception on which the *ad hoc* surveys have been based is that information should be collected on the spot by direct enquiry conducted with the help of the Committee's own staff and that this information should as far as possible, conform to the sampling methods widely adopted in such work. Owing to great variations in the character of the different industries, however, there could not be a complete uniformity in regard to the methods which had to be adopted to suit the peculiarities of particular industries and centres. For instance, while there are only a few centres and units in certain industries such as potteries, mineral oil, gold, etc., in other industries, such as

textiles, engineering, transport services, plantations, tanneries, bidi-making, etc., a very large number of centres and units in different Provinces (and even States) had to be covered. Moreover, some of the industries are modern industries of the large-scale type, wherein factory legislation applies more or less entirely, while others are indigenous handicrafts or small-scale industries, where factory legislation is either inapplicable or partially applicable. Thus, information has not been uniformly available in advance as regards the size, location and ownership of industrial units, such as is necessary before decisions for sampling are taken. Consequently, the technique of representative sampling had to be modified and supplemented so as to obtain whatever information of a reliable character was available. As far as possible, however, in all industries important centres were covered. In each of these centres units were chosen on a sample basis, but it was possible in a few centres to cover all units. The final lists of centres of survey and individual establishments were made out in the light of the impressions gathered during the course of the preliminary tour and in consultation with local authorities. The guiding principle in the selection of centres of survey was to make the survey regionally representative so as to discover differences in the conditions of labour in the same industry in different parts of the country. The selection of individual concerns was generally based on considerations, in order of importance of (a) size, (b) ownership (private or limited) and (c) whether subject to statutory regulation or not. In this connection, it may be stated that the Committee were greatly handicapped in sampling the units owing to the lack of complete information regarding location and number of units in the selected industries. Unfortunately there are no all-India employers' organisations in some of the organised industries, nor are the statistics maintained by the Central and Provincial Governments at all complete. Moreover, in certain unorganised industries, such as shellac, carpet-weaving, bidi-making, etc., owing to their very nature no such information could have been readily available in advance. In certain cases, therefore, owing to these difficulties as well as transport difficulties and other exigencies, the sampling could not be fully adhered to. Nevertheless, the Committee have been anxious to gather in the maximum possible information in the limited time at their disposal and with a view to this, they have cast their net as wide as possible. The main instruments of the *ad hoc* survey were the Questionnaires. These were of two kinds :—(a) the main *ad hoc* survey questionnaire on points likely to be common to all the industries surveyed and (b) supplementary and special questionnaires in respect of certain industries such as plantations, mines, railways, rickshaw pullers, port labour, municipal labour, glass, shellac, mica, etc. The main questionnaire was accompanied by a tabular form for entering wage data and this was used wherever possible. In the case of certain surveys, however, such as salt, paper, cotton, woollen and jute textiles, dockyards, silk, cement and gold mining, it was possible to conduct a wage survey on a sample basis. The chief method of collection of data was by personal investigation of industrial establishments, examination of their records and contact with labour in factories and homes. The information thus collected was supplemented and checked with replies to the Questionnaires received.

4. For the purpose of conducting enquiries, a sufficiently large field staff, consisting of 16 Supervisors and 45 Investigators, was appointed. Before the commencement of field work, all the Supervisors (with the exception of those working in Bengal) were called to the Committee's headquarters at Simla and given detailed instructions on the technique and scope of the enquiries to be conducted by them, the manner in which they were to submit their data, and the centres and units which they were to investigate. In addition, both Supervisors and Investigators were provided with written instructions regarding the

use of questionnaires, sampling of concerns (where this could not be done in advance), filling of the wage forms, etc. In particular, they were asked not only to collect information on the spot but also to draw upon every other possible source of information. In doing so, they were required to distribute copies of the questionnaires in the centres assigned to them not only amongst the sampled units but also amongst employers' and workers' associations in the industry and such other associations and individuals as were likely to be interested in the subject. They were also asked to get into touch with officials of Central and Provincial Governments connected with labour and obtain such facilities as might be necessary in doing their work.

5. As far as the field work in Bengal was concerned, it was done by the staff of the Committee under the guidance and supervision of the Labour Commissioner, Bengal, and his subordinate officers. Members, however, paid visits to selected centres and units in Bengal to obtain first-hand knowledge of local labour conditions.

6. The Committee's survey covered all Provinces with the exception of the North West Frontier Province where none of the industries selected for survey was sufficiently important. It extended to many of the Indian States also, such as Kashmir, Patiala, Gwalior, Baroda, Mysore, Sandur, Travancore, Cochin, Bundi, Indore and some of the States of the Eastern States Agency. No survey was undertaken in the Hyderabad State as that State preferred to appoint its own Labour Investigation Committee, with terms of reference identical to those of this Committee, for enquiry into local labour conditions.

7. In dealing with the *ad hoc* survey work, several courses were open to the Committee :—(i) the Committee, as a whole, to study each industry, (ii) the surveys to be distributed region-wise and each Member put into charge of a region, and (iii) each Member to be entrusted with a few surveys throughout India. With a view to speedy and efficient work, the third course was actually adopted. This departure from the usual procedure of the Committee as a whole dealing with the work was necessary in view of the immensity of the task and the necessity of maintaining an all-India perspective. Moreover, it was felt that this procedure would enable Members to make a specialised study of labour conditions in individual industries in different parts of the country. It was also felt that the peculiar problems of industrial labour had more an industry-wise than a region-wise dispersion and that the procedure would be helpful to future legislation which has to take into consideration the diversified conditions of each industry. It will be seen, however, that in the Reports the factual material has been presented both on an all-India and on a regional basis.

8. Thanks and acknowledgments are due to Provincial Governments, State Authorities, Labour Commissioners (and particularly the Labour Commissioner, Bengal), Directors of Industries, Chief Inspectors of Factories, Port authorities, local bodies, employers' and workers' associations, managements of the units surveyed and all others who rendered help in the collection of the data presented in these Reports.

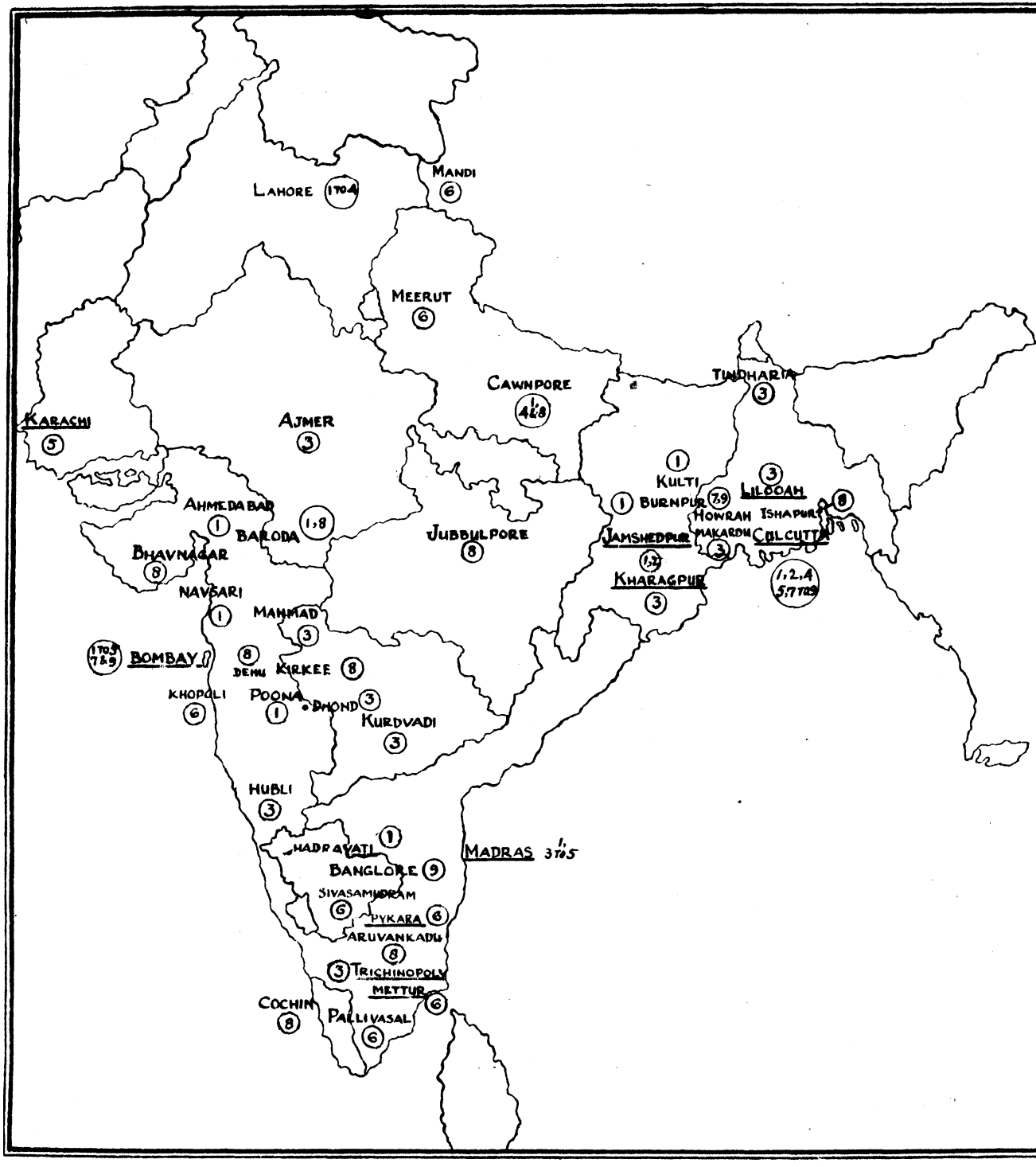
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MAP OF INDIA

CONTAINING ENGINEERING AND MINERALS AND METAL CENTERS.

1. NOTE:- IMPORTANT CENTERS HAVE BEEN UNDER LINED.

1. GENERAL ENGINEERING.
2. ELECTRICAL - DO -
3. RAILWAY WORKSHOPS.
4. COACH BUILDINGS.
5. KEROSENE TINNING & PACKING
6. GENERATING STATIONS.
7. METAL STAMPING.
8. ORDINANCE FACTORIES & DEPOTS.
9. MISCELLANEOUS.

2. NOTE:- Figures with in circles indicate industry or industries mentioned above.

CHAPTER I.—INTRODUCTION.

The Engineering Industry covers a very comprehensive field comprising a variety of trades. In the official publication, ***Statistics of Factories,*** the category ' engineering ' includes the following : (i) Coach Building and Motor Car Repairing ; (ii) Electrical Engineering; (iii) Electrical Generating and Transforming Stations ; (iv) General Engineering ; (v) Kerosene Tinning and Packing; (vi) Metal Stamping; (vii) Railway Workshops; (viii) Ship Building and Engineering; (ix) Steel Trunk, Lock and Cutlery; (x) Tramway Works and (xi) Miscellaneous. In addition to these two important categories have to be considered, viz., Government and Local Fund factories engaged on engineering processes and a large group of concerns, which are classified in the *Statistics of factories* as ' Minerals and Metals '. It is clear that no perfect definition of the term ' engineering ' can be given, and, in fact from the moment the raw material, e.g., the mined ore, comes from the mine to the final stage in which a machine or a ship or an electrical article is put on the market, there can be a large number of intermediate stages. It is difficult to say where precisely ' engineering ' begins and where it ends. For this reason, we have adopted a somewhat broad connotation of the term and included in our survey certain Government-owned concerns, such as ordnance depots and factories, as well as iron foundries, iron and steel smelting and steel rolling mills. It may be mentioned here that the shipbuilding industry forms part of a separate *ad hoc* survey (*vide Report on Dockyards*), as also petroleum refineries (*Report on Mineral Oil*). The following statement gives the details of the industries covered in this Report :—

TABLE 1.

Industries Investigated.

Category.	Industries covered under the Category.
1 General Engineering	(*i*) General Engineering* ; (*ii*) Steel Trunk Lock and Cutlery , (*iii*) Foundries , and (*iv*) Iron and Steel Smelting and Steel Rolling Mills.
2. Electrical Engineering	(*i*) Electrical Engineering* (Workshops) ; (*ii*) Electrical Generating and Transforming Stations (Power Stations) , and (*iii*) Tramway Works.
3. Railway Workshops	Railway Workshops**.
4. Coach Building and Motor Repairing ..	Coach Building and Motor Repairing.
5. Kerosene Tinning and Packing ..	Kerosene Tinning and Packing.
6. Metal Stamping	Metal Stamping.
7. Ordnance	Ordnance Depots and Factories.
8 Miscellaneous	Miscellaneous Engineering Factories.

*These industries include both (*i*) Government and Local Fund Factories and (*ii*) All other Factories.

**These are purely Government factories.

foundries were greatly handicapped by the shortage of coal and coke. Many metal stamping and miscellaneous engineering concerns could not get the necessary raw materials for production. The distribution and sale of several essential metals were controlled by the Government and permits were issued mostly to those factories which were directly engaged on war work or were executing Government orders, with the result that the other factories were greatly handicapped. Moreover, transport difficulties, whether for the bringing of raw materials or for disposing of the finished product, were not the least of some of the difficulties the industry had to face during war time.

III.—Standardization of Occupational Terms.

One of the biggest problems in the engineering industry, as well as in textiles, is the absence of uniform terminology for the various occupations which it comprises. Terms like " fitter ", " moulder ", " mistry.", ".machineman ", " khalasi ", etc., have scores of different connotations in different parts of the country and sometimes even in the same centre. Not only this, but even if a man is called by one name, he may be doing the work appropriate to several other categories, and on the same day he may work in different processes in a concern. Of course, in the larger concerns, some sort of standardization of occupational terms is attempted, and it appears that the Indian Engineering Association have fixed hourly basic rate of wages for the Calcutta and Bombay areas and for this purpose, the different trades are classified. Broadly speaking however, there is a great confusion in this regard, and it appears that a large number of employers benefit by the confusion. The representatives of engineering workers complained that owing to lack of standardization of terms, it was possible for an employer to pay wages according to his inclination, and also to require workers engaged on the one job to take up work rightly be ongoing to another category. It was stated that owing to the unorganised condition of labour in the industry, this kind of exploitation could not be checked. It was not possible to verify this allegation with regard to the entire industry, though in many small concerns it was amply borne out. It is clear that the question of standardization of *wages* hinges upon a correct solution of the problem of standardization of occupational nomenclature. Apart from uniformity of wages, the work of Employment Exchanges would be greatly facilitated, if there were some sort of terminological uniformity. The Government of India have taken keen interest in this problem and it was discussed at the Conference of the Chairmen of National Services Labour Tribunals in December 1943, and subsequently Provincial Committees with the Chairmen of the National Service Labour Tribunals as chairmen were set up in some of the industrial Provinces. They were to examine and report on the standardization of occupational terms, statistics of wages and methods of wage fixation, the extent to which standard basic wages could be fixed and the possibility of introducing a measure of standardization in respect of overtime, night work, bonus and other forms of remuneration supplementing the basic rates. It was, however, soon realised that standardization cannot be on a *Provincial* basis only, but has to be on an all-India character, and it appears that the work of this Provincial Committee has been temporarily suspended. At the same time, the Labour Department of the Government of India have taken up this problem of occupational classification in various industries in connection with Resettlement and have issued *Guides* for various civil occupations, including engineering, building construction, transport services, communications, etc. These *Guides to Occupational Classifications* are likely to be of great use to employers as well as to Employment Exchanges in future. The problem, however, is complicated by the fact that employers at present have their own

various modes of classification and are not always agreeable to accept new classifications. Unless an element of persuasion, or even of compulsion, is introduced, we may find it difficult to get such standardization universally accepted. The problem goes to the root of any wage legislation, whether for minimum wages or for fair wages. For this reason, it is also very often hazardous to compare wages in different areas or centres or concerns. The problems of standardization of occupational terms is also complicated by the orthodoxy, and, as stated earlier, sometimes the self-interest of the employers, especially in small concerns. To tackle the problem effectively may take several years. It may be recalled that in the United Kingdom, the Ministry of Labour took something like 25 years to produce its monumental *Guide to Occupational Classifications*. This Guide has been enforced in various industries for the purposes of wage fixation and employment services, and it is being continually expanded and corrected from year to year by trained experts engaged on each group of occupations. In India, something similar may have to be attempted.

IV.—Location of the Industry.

The Provinces of Bombay, Bengal, Madras and the Punjab account for nearly 75 per cent. of the engineering concerns in British India. General engineering, electrical engineering, railway workshops and coach building and motor repairing concerns are scattered in the various Provinces and a few even in Commissioners' Provinces, especially Delhi. After the four major Provinces mentioned above, comes the United Provinces in importance in regard to the engineering industry. Kerosene tinning and "miscellaneous" factories are mostly confined to Madras, Bombay and Bengal, and metal stamping to Bombay and Bengal Delhi is the only Commissioner's Province that has a somewhat developed engineering industry. Appendix III to this Report gives the distribution of the various branches of the industry Province-wise in 1939 and 1943. Most of the factories are located in urban areas. Several railway workshops are in the suburbs of cities as also in the mofussil. Many electrical generating stations are in rural areas, but transforming stations are mostly in urban or suburban areas. Among States, Mysore and Baroda take a prominent place in regard to the development of the engineering industry.

Various factors have contributed to the present location of the engineering industry. The easy access to iron ore and coal have made Bihar the home of the iron and steel industry, and Jamshedpur where the Tata Iron and Steel Co., is established has further advantages in that it is situated on the banks of two rivers, viz., the Suvarnorekha and Kharkai which promise an unfailing water supply. Likewise, Burnpur in Bengal and Bhadravati in Mysore, two other important centres of the engineering industry, owe their location to similar factors. Coach building and motor repairing industry has naturally developed in large cities for the demand for their products or services are great in such cities. Similarly, kerosene tinning and packing is located in the Provincial capitals of Bombay, Calcutta, Madras and Karachi, these cities serving as the best distributing centres for kerosene.

The following are some of the important centres of location of the engineering industry :—

General Engineering.—Madras ; Bombay ; Poona ; Ahmedabad ; Bhiwandi ; Calcutta , Kulti ; Burnpur ; Cawnpore ; Lahore ; Jamshedpur ; Baroda ; Navsari ; Bhadravati.

Electrical Engineering.—Electrical workshops are mainly in big cities like Bombay, Calcutta. Lahore, Jamshedpur, etc., while in almost all towns, big and small, power stations (electric power houses) have been erected. Some of the important hydro-electric generating stations are in Khopoli, Pykara, Mettur, Sivasamudram, Pallivasal, Mandi, Meerut, Bhira, Bhivpuri, etc.

Coach Building and Motor Repairing.—Madras ; Bombay ; Calcutta ; Lahore ; Cawnpore.

Kerosene Tinning and Packing.—Madras ; Bombay ; Calcutta ; Karachi.

Metal Stamping.—Bombay ; Calcutta and Howrah.

Ordnance Factories.—Kirkee ; Dehu ; Jubbulpore ; Calcutta ; Ishapur Cawnpore ; Baroda ; Cochin ; Bhavanagar ; Aruvankadu.

Miscellaneous.—Bombay and suburbs ; Bangalore ; Calcutta and Howrah.

V.—Scope of the Enquiry.

While selecting the samples for investigation various factors, such as location of industry, nature of work done, size of the factories, etc., were taken into consideration. In all 220 factories employing 3,05,225 workers were covered, as will be seen from the table below :—

TABLE 2.

Factories and Workers covered by Investigation.

Industry*.	Factory Statistics (1943)†		Covered by Investigation.	
	Factories.	Workers employed.	Factories.	Workers employed
General Engineering	1,454	1,95,679	65	95,898
Electrical Engineering	206	25,175	43	16 354
Railway Workshops	184	1,41,252	45	55,836
Coach Building and Motor Repairing	166	20,623	20	13,296
Kerosene Tinning and Packing ..	43	9,706	3	4,196
Metal Stamping	75	8,898	8	2,514
Ordnance Depots and Factories ..	45	1,21,076	22	1,09,637
Miscellaneous	256	18,840	14	7,494
Total ..	2,129	5,51,352	220	3,05,225

*Industries under this column include all those mentioned in the previous table.

†'Factory Statistics' cover only those factories in British India which come under the Factories Act, 1934 ; Factories investigated include some factories in the Indian states and also some of those which do not come under the Factories Act. So the two sets of figures are not strictly comparable.

These 220 factories were selected from the Provinces and Indian States as follows :—

TABLE 3.

Location of Concerns Investigated.

Province or State.	Number of Concerns investigatd in								
	General Engineering.	Electrical Engineering.	Railway Workshops.	Coach Building & Motor Repairing.	Kerosene Tinning & Packing.	Metal Stamping.	Ordnance.	Miscellaneous.	Total.
Madras	9	4	3	3	..	..	.	..	19
Bombay	18	20	35	6	3	8	13	12	115
Bengal	22	15	4	7	..	..	3	..	51
U. P.	3	1	..	1	..	..	1	..	6
Punjab	5	2	2	3	..	..	..	..	12
Bihar	4	1	..	..	..	..	..	1	6
Ajmer-Merwara	..	..	1	..	..	..	..	..	1
C. P. & Berar	..	..	..		..	..	2	.	2
Baroda	3	..	..	..	..	..	1	..	4
Mysore	1	..	..	..	..	..	..	..	1
Bhavnagar	..	..	..	..	..	..	1	..	1
Cochin	..	..	..	..	.	..	1	..	1
Aundh	..	..	..	..	.	..	..	1	1
Total ..	65	43	45	20	3	8	22	14	220

Working of the Labour Acts.

The Factories Act.—The provisions of the Factories Act are generally observed. Sometimes, as the Indian Engineering Association have remarked in their reply, small and newly established factories which cannot be easily located no doubt try to evade the provisions of the Act. Most of the Ordnance Depots do not use any mechanical or electrical power and, for this reason, do not fall under the Act, although some of them have workshops on the premises and are partly covered. In several cases, the workshops are separated from the depots and the applicability of the Act to the depots fully is still a matter of dispute. In Bengal, the factories are inspected only at rare intervals. During war time inspections have been rarer still and some factories have not been visited more than once during five years. The results

are that safety measures have been neglected causing numerous accidents. In certain kerosene tinning and miscellaneous factories, Sections 35, 36 and 42 of the Act have been contravened and the Factory Inspectors have passed strictures on such contravention.

In the Baroda State, the State Factories Act applies to the factories. The Act is on the lines of the British Act (1934) except that the hours are 60 per week for perennial factories and 66 for seasonal factories and there is no provision for a weekly holiday but only an insistence on a minimum of 4 holidays in a month and 52 in a year. Sections 78 and 79 have also been omitted. Several other States, including Mysore, Travancore, Cochin and Aundh, etc., also have separate Factories Act applicable in the respective States.

War-time Exemptions.—Section 8 of the Factories Act authorises a Provincial Government in case of public emergency to exempt any factory from any or all the provisions of the Act for such period as it may think fit. Section 44 of the Act also authorises Provincial Governments to exempt factories from any or all the provisions of Sections 34—40, if the exemption is required to enable a factory to deal with exceptional pressure of work. Exemptions granted under Section 44 can only be for a period of two months and any exemption in respect of weekly hours of work (Section 34) is subject to maximum limits to be prescribed. During war time, several engineering factories were granted exemption under Section 8. The exemptions have been granted to enable factories to concentrate on maximum production of goods for war. Other exemptions usually granted have been from Section 34 (weekly hours), Section 35 (weekly holiday), Section 36 (daily hours) and Section 37 (intervals for rest). In a few cases, exemption has also been given from the provisions of Section 38 (spreadover) Section 39 (notice of periods of work for adults), Section 40 (copy of notice of periods of work to be sent to Inspector), Section 45 (restrictions on the employment of women), Section 46 (special provision for night shifts) and Section 47 (extra pay for overtime). Railway workshops, ordnance factories and depots, motor repairing and assembling works, electrical workshops, and generating stations, structural and general engineering factories, docks and oil companies usually have got exemptions from the provisions of Sections 34—40 of the Act. In Bombay and Bengal, exemptions have generally been granted from one or more of Sections 34—38 ; in Assam, Bihar and United Provinces, from Sections 34—36 ; in Madras and the Punjab, from one or all of the provisions of Sections 34—40. Exemptions from Sections 45—47 were granted only rarely.

Generally in Madras, Bengal, Bihar, United Provinces and Assam, the exemptions were for the duration of the war while in the Punjab, they were only for six months. In Bombay, the exemptions were for periods below six months and in Sind, which utilised Section 44 to grant exemptions, the period was only two months. In Bombay, Sind and the Punjab, the exemptions were renewed from time to time. In some cases, the exemptions appear to have been too liberal. For example, the U. S. Army General Motors Repair Workshop in Sind was exempted from *all* the provisions of the Act for the duration of the war, while in some other cases, the period of exemption was unspecified.

The Payment of Wages Act.—The provisions of the Act are complied with in almost all factories. In some concerns in Bengal it was found that the right procedure was not always followed in calculating overtime wages. The Indian Engineering Association complains of a practical difficulty. Labourers are apt to leave without notice and without giving an address and later make applications for payment of wages through the Commissioner who orders the payment of wage due and imposes a fine of Rs. 10. The Association suggests that the Act be amended so that a workman should not appeal

to the Commissioner until he has proof that he has applied direct to his employer for payment, in the first place, and also furnished proof that payment has been withheld without due cause.

Workmen's Compensation Act.—Generally speaking, in the engineering industry and especially in the larger concerns, the provisions of the Workmen's Compensation Act are faithfully observed. In the Bombay Province, almost all engineering firms insure their liability, while in Bengal most firms do so. In the Calcutta area all arrangements are carried out through the Calcutta Claims Bureau which has been established by Insurance Companies to deal with employment injury claims. Some large concerns in Bengal prefer to cover their own risks and have established special funds for the purpose. Several very small concerns and sometimes new concerns do not insure their liability to pay compensation. In some of the Indian States, Workmen's Compensation Acts, modelled on the British Indian measure, apply to engineering concerns. In some others, similar legislation is contemplated. There is no information available as regards the working of these Acts.

Maternity Benefit Act.—The Provincial Maternity Benefit Acts apply to all these factories, but the number of women engaged in the engineering industry is very small. The ordnance factories and depots assert that the Maternity Benefit Acts are not applicable to them as they are provincial legislation, which, they contend, is not applicable to concerns belonging to the Central Government. This legal point has not yet been properly dealt with.

The Mysore Labour Act.—The Mysore State passed the Mysore Labour Act in 1942, an important provision of which makes it compulsory for all factories employing 100 or more workers to recognise any registered trade union of their workers. This Act is in force at Bhadravati.

CHAPTER II.—GENERAL ENGINEERING (Including Some Minerals and Metals).

Scope of the Enquiry.—The 65 units investigated fall under the following main classes :

(i) General Engineering (47 units) ;
(ii) Steel, Trunk, Lock and Cutlery (2 units) ;
(iii) Foundries (8 units) ; and
(iv) Iron & Steel Smelting and Steel Rolling Mills (8 units).

According to Factory Statistics, the first two classes come under Engineering, whereas the other two classes form part of Minerals and Metals. From the standpoint of the number of factories, general engineering is the most important branch of the engineering industry. If the number of workers employed is taken into consideration, it stands third in rank, the first two being Ordnance Factories and Railway Workshops. The following table shows the strength of the four branches, the labour conditions in which have been described in this chapter.

TABLE 4.
Factories and Workers in 1943

Category.	No. of factories.	No. of workers.
I Engineering	1,029	5,13,613
(i) General Engineering	919	1 20,227
(ii) Steel, Trunk, Lock and Cutlery	16	2,626
II Minerals & Metals	389	92,694
(i) Foundries	173	11,882
(ii) Iron & Steel Smelting & Steel Rolling Mills	46	60,944

Most of the factories in this group are small units. In Bombay, for example, in 1943 out of the 218 general engineering factories (coming under the Factories Act), 100 were ' notified factories ', i.e., coming under Section 5 of the Factories Act. The total employment in these 100 factories was only 1,277, while the remaining 118 factories employed 12,355 workers.

The nature of work done in the units investigated may be broadly stated as consisting of, mainly (a) metal casting, (b) repairs to machinery and the making of spare parts, (c) making of certain types of machinery like rice hullers, oil expellers and ghanies, groundnut decorticators, coffee-grinders, centrifugal pumps, producer-gas plants, tobacco canning furnaces, etc., (d) structural work like the cutting, drilling, punching and shearing, joining, riveting and welding of metal sheets, rods, angles, plates, etc., for the construction of different types of structures, (e) carpentry work, making of patterns for the preparation of moulds for casting metal, as well as the making of different wooden parts for structures, trucks, vehicles, etc, (f) shaping and preparation of metal parts of machinery and precision tools, vehicles and equipment by turning them over lathes, (g) painting over metal and wood work, (h) manufacture of iron and steel furniture, safes, locks and trunks, (i) iron and brass foundry work, and (j) iron and steel smelting and steel rolling. It may be mentioned that a foundry is generally a part of almost every general engineering workshop and that most foundries maintain a general engineering section like a machine-shop with a few lathes.

The following table shows the extent and location of industries in 1939 and 1943.

TABLE 5.

Factories and Workers in Provinces.

Province.		General Engineering				Steel, Trunk, Lock & Cutlery.		Foundries		Iron & Steel Smelting & Steel Rolling Mills.	
		Government & Local Fund.		All other factories.							
		1939	1943	1939	1943	1939	1943	1939	1943	1939	1943
Madras	F	9	11	18	47		1	13	24	2	2
	W	1,115	1,453	2,172	5,840	.	38	688	993	128	429
Bombay	F	6	9	142	218	12	13	28	36	.	..
	W	1,383	3,919	5,384	13,632	1,338	2,150	1,046	2,252	..	..
Bengal	F	10	13	162	274	.	..			6	16
	W	1,912	6,469	25,480	54,502	..	.		.	16,914	22,277
U. P.	F	6	10	15	40	1	2	12	14	8	19
	W	589	2,858	1,332	2,807	556	438	527	760	426	3,836
Punjab	F	5	6	20	124	..	..	46	87	.	..
	W	920	1,272	1,255	7,671	..	..	1,554	5,370	..	..
Bihar	F	5	5	17	28	..	..	3	3	3	5
	W	672	1,672	4,853	5,475	..	..	1,983	2,042	23,322	34,235
Other Provinces.	F	11	29	34	105	..	..	8	9	..	4
	W	1,154	5,743	2,125	7,914	..	..	268	465	..	167
Total	F	52	83	408	836	13	16	110	173	19	46
	W	7,745	22,386	42,601	97,841	1,894	2,626	6,066	11 882	40,790	60,944

F = No. of factories ; W = No. of workers employed.

Samples Investigated.—The main idea in the selection of units was to make the survey as representative of the whole industry as possible. In all, 65 factories were investigated in six Provinces and two Indian States. Details in regard to the factories investigated are given in the following table.

TABLE 6.

Number of Factories Investigated.

Province or State.	Number of Factories investigated in				Total number of workers covered.
	General Engineering.	Steel, Trunk Lock and Cutlery.	Foundries.	Iron & Steel smelting.	
Madras	6	..	3	..	1,949
Bombay	16	2	..	..	8,411
Bengal	16	..	1	5	39,580
U. P.	3	..	..	..	4,019
Punjab	2	..	3	..	1,062
Bihar	1	..	1	2	36,770
Baroda	3	..	..	..	492
Mysore	..	..	..	1	3,615
Total ..	47	2	8	8	95,898

Of the 47 general engineering factories, only 8 (Madras, 3 ; Bombay, 3 ; Bengal 1 and Mysore, 1) were Government and Local Fund factories. Most of the factories are situated in urban localities. As an illustration the following figures from Factory Statistics for Bombay City and Bombay Province may prove useful.

TABLE 7.

Factories in Bombay City and Province, 1943.

	General Engineering.		Steel, Trunk, Lock and Cutlery.	
	Factories.	Workers.	Factories.	Workers.
Bombay City. Govt. & Local Fund factories	5	3,656	..	..
Bombay City. All other factories ..	99	8,971	8	2,051
Bombay Province. Govt. & Local Fund factories	9	3,919	..	..
Bombay Province. All other factories ..	218	13,632	13	2,150

Most of the units selected for investigation are from urban areas as follows :

TABLE 8.

Location of Factories.

Province or State.	No. of units investigated.	Names of centres and the No. of units (in brackets).
Madras	9	Madras (9).
Bombay	18	Bombay (14), Poona (2), Ahmedabad (1), and Bhiwandi (1).
Bengal	22	Calcutta & Howrah (19), Kulti (2), and Burnpur (1).
U. P.	3	Cawnpore (3).
Punjab	5	Lahore (5).
Bihar	4	Tatanagar (4).
Baroda	3	Baroda (2), and Navsari (1).
Mysore	1	Bhadravati (1).

The data given in the table below show that, though a large number of factories were established during the period intervening between the two World Wars, a considerable number had come into existence earlier. The oldest factory among those investigated was established in 1799, while three factories were founded during 1858—1860.

TABLE 9.

ates of Establishment.

Province or State.	No. of concerns.	Number of factories established						
		before 1800.	1801 to 1860.	1861 to 1900.	1901 to 1913.	1914 to 1918.	1919 to 1937.	1938 and after.
Madras	4	..	..	1	..	1	2	..
Bombay	16	..	2	4	3	3	2	2
Bengal	18	1	1	2	1	3	6	4
U. P.	3	..	..	..	..	..	2	1
Punjab	6	..	..	..	1	..	5	..
Bihar	4	..	..	..	1	..	3	..
Baroda	3	..	..	..	..	1	..	2
Mysore	1	..	..	..	..	..	1	..
Total ..	55	1	3	7	6	8	21	9

Most of the factories started as small workshops, which gradually grew in size and importance. For a number of years in the early stages they were so small as to fall outside the scope of the Factories Act. The dates of establishment and of coming under the Factories Act given in the following table illustrate this.

TABLE 10.

Establishment of Factories and Application of Factories Act.

(Based on figures of 6 Bengal factories).

Unit.	Date of Establishment.	Date of coming under Factories Act.
I	1865	1910
II	1916	1928
III	1919	1920
IV	1922	1936
V	1932	1937
VI	1938	1939

I. Employment.

The following table, compiled from the Factory Statistics, shows that both the number of factories and of workers has considerably increased since 1939 and in some by as much as 100 per cent.

TABLE 11.

Factories and Workers.

Industry.	Factories.			Workers.		
	In 1939.	In 1943.	Increase. %	In 1939.	In 1943.	Increase. %
General Engineering ..	460	919	100	50,346	120,227	139
Steel, Trunk, Lock and Cutlery	13	16	23	1,894	2,626	39
Foundries	110	173	57	6,066	11,882	96
Iron & Steel smelting and Steel rolling	19	46	142	40,790	60,944	49
Total ..	602	1,154	92	99,096	195,679	97

Figures collected in the course of *ad hoc* surveys also show marked increase in employment during the war.

TABLE 12.

Employment in the Sampled Factories.

	No. of factories.		No. of Workers.	
	1939	1944	1939	1944
Madras	9	9	1,339	1,949
Bombay	14	18	3,253	8,411
Bengal	16	22	22,742	39,580
U. P.	2	3	561	4,019
Punjab	3	5	410	1,062
Bihar	4	4	30,640	36,770
Baroda	1	3	67	492
Mysore	..	1	..	3,615
Total ..	49	65	58,924	95,898

On the whole, it was found that employment in private concerns increased substantially, while employment in Government and Local Fund factories declined. Out of the 49 factories, which supplied figures for 1939 and 1944, only 13 show a decrease in employment figures. Of these 13 concerns, 4 are Government and Local Fund factories. Increase in employment in most of the factories during the war was obviously due to the stepping up of production and of the maximum utilisation of all available plants. Employment and activities in these concerns might have expanded to a larger extent, had it not been for the shortage in technical personnel, machine tools, coal and iron and steel products.

The number of workers in the sampled factories varies from 13 in one to 28,477 in another. As the table below shows, only four factories have more than 4,000 workers each, while the majority of factories have less than 500 workers, usually between 50 to 300.

TABLE 13.

Extent of Employment.

Area.	Year.	No. of concerns in which the No. of workers was						
		less than 50	50–150	151–500	501–1,000	1,001–2,500	2,501–4,000	Over 4,000
Madras	1939	..	6	3	..	..	..	..
	1944	2	4	1	2	..	..	..
Bombay	1939	3	6	3	1	1	..	..
	1944	1	3	7	2	3	2	..
Bengal	1939	3	4	2	3	1	1	2
	1944	1	7	2	2	6	1	3
U. P.	1939	..	..	2	..	..	..	..
	1944	..	..	2	..	..	1	..
Punjab	1939	..	2	1	..	..	..	..
	1944	2	1	1	1	..	..	..
Bihar	1939	..	..	..	..	2	1	1
	1944	..	..	..	..	1	2	1
Baroda	1939	..	1	..	..	..	..	..
	1944	1	..	2	..	..	..	..
Mysore	1944	..	..	..	..	..	1	..
Total ..	1939	6	19	11	4	4	2	3
	1944	7	15	15	7	10	7	..

Female and Child Labour.—The number of female and juvenile labour, as shown in the table given below, is small, because engineering is a heavy and skilled industry, necessitating the employment of adult male labour.

TABLE 14.

Female Labour.

Province or State.	No. of factories employing female labour.		No. of women employed.		Percentage increase or decrease in number of workers. %
	1939	1944	1939	1944	
Bombay	4	5	54	361	+ 569
Bengal	4	4	320	212	— 34
Punjab	*Nil.*	1	*Nil.*	4	..
Bihar	4	4	4,028	4,564	+ 13
Mysore	..	1	..	103	..
Total ..	12	15	4,402	5,244	+ 15

Note :—No female labour was found in Madras, U. P., and Baroda factories.

Female workers, mostly unskilled, are employed as coolies or sweepers. In two of the factories investigated in Bombay, the proportion of female labour to the total number of workers in January 1944, was 11 per cent. and 31 per cent. A distinctive feature of these two concerns was that most of this labour was skilled or semi-skilled ! Female workers, almost all young Christian unmarried girls, work as test-clerks in the Assembly Department or as winders in the Electrical Winding Department.

Only three factories, one each in Bombay, Bengal and Bihar, employ children, but the number of children in each of the first two factories is less than 5. The Bihar factory employed 163 and 374 children in 1939 and 1944 respectively, showing an increase of 129 per cent. These children work as office boys and peons. Though the employment of children elsewhere is uncommon, boys (mostly adolescents certified to be adults) are employed in a number of concerns, especially in Madras and Bengal. In Bengal, boys or young trainees occupy a vital position in the small undertakings, which are usually unregistered and unregulated concerns producing various machine parts and simple tools or other equipments. Children are obviously employed because they cost less than adults. Usually they are made to work long hours, even exceeding those prescribed by the Factories Act on the plea that they are not working in the factory but are being trained in different jobs ! They are generally made to work under contractors, who are held responsible for their work. In these days of high cost of living, it is not unnatural for boys to go over to other places for better wages. After getting some training, therefore, they migrate from place to place under the duress of necessity.

Piece-rated Labour.—The factories investigated in Madras, U. P. and Mysore had all time-rated labour. The extent of piece-rated labour in other factories is shown below :

TABLE 15.

Piece-rated Labour.

Province or State.	Number of factories employing piece-rated Labour.		Number of piece-rated workers employed.	
	1939	1944	1939	1944
Bombay	2	3	28	69
Bengal	4	6	1,471	3,211
Punjab	..	1	..	21
Bihar	2	2	216	437
Baroda	1	1	38	131
Total ..	9	13	1,753	3,869

Contract Labour.—Contract labour is more prevalent in Bengal and U. P. than in other Provinces. It is usual for a number of concerns to give some items of work on contract to other workshops or to private contractors, and hence there is considerable fluctuation in the volume of contract labour. For example, in one of the Bombay concerns, 30 workers, who were Chinese fitters, were employed and paid through contractors for a short period in 1944 and were later put on time rates. Contract work was thought to be indispensable by some of the concerns, because of urgent war work necessitating immediate employment of a large labour force and lack of adequate staff to supervise such a large force. The extent of contract labour in the factories investigated is given below :

TABLE 16.

Contract Labour.

		Madras	Bombay.	Bengal	U.P.	Punjab	Bihar	Total
(i) No. of factories employing contract labour	*1939*	1	1	3	2	..	1	8
	1944	1	2	8	3	1	1	16
(ii) Employed and paid through contractors	*1939*	64	18	353	68	..	183	686
	1944	50	50	2,410	215	200	318	3,243
(iii) Employed through contractors but paid directly	*1939*	..	25	164	..	..	..	189
	1944	..	48	871	23	..	..	942
(iv) Total contract Labour	*1939*	64	43	517	68	..	183	875
	1944	50	98	3,281	238	200	318	4,185

Female labour employed by contractors was found only in the Bihar factory and in one of the Bengal factories. The Bihar factory's contractor employed 48 and 148 female workers in August 1939 and January 1945 respectively ; the Bengal factory's contractor employed only 38 females in January 1944. Workers employed through contractors are generally blacksmiths, moulders and coolies.

Length of Service.—The following figures about length of service show the effect of war-time expansion in the industry. The figures were available only for 41 factories.

TABLE 17.

Length of Service.

Province or State.	No. of concerns.	Workers.	Workers with continuous service of			
			Less than one year.	1—5 years.	5—10 years.	Over 10 years.
Madras	7	Number	338	187	109	432
		%	32	18	10	40
Bombay	12	Number	2,836	4,687	509	687
		%	32	54	6	8
Bengal	13	Number	8,638	11,522	4,558	2,461
		%	32	42	17	9
U. P.	3	Number	1,717	2,060	11	6
		%	45	55	..	..
Bihar	4	Number	3,859	15,880	10,391	17,295
		%	8	33	22	37
Baroda	2	Number	109	109	..	..
		%	61	39	..	..
Total ..	41	Number	17,557	34,445	15,578	20,881
		%	20	39	18	23

Generally, it was found that in the concerns owned by public bodies labour was more stable than in the private concerns. Some of the long standing private concerns, however, are exceptions. In a few cases, a number of workers were replaced on account of strikes or after the 1942 evacuation.

Permanent and Temporary Classification.—The practice of classifying workers as permanent and temporary is found mainly in public concerns and in well-established private concerns. As the following figures show, only 22 out of the 65 factories have a regular classification. Others do not classify their workers properly though some of them treat all their workers either as temporary or as permanent.

Table 18.

Classification of Workers.

Province or State.	Number of concerns whose workers are				Percentage of permanent workers.		
	Not classified.	All temporary	All permanent	Classified.	Maximum	Minimum	Average.
Madras ..	..	4	..	5	21 %	75 %	51 %
Bombay ..	5	4	4	5	3 %	77 %	36 %
Bengal ..	10	3	5	4*	..	..	65 %
U. P. ..	..	2		1	..	..	87 %
Punjab ..	..	2	1	2	20 %	90 %	55 %
Bihar ..	1	..	..	3	62 %	94 %	82 %
Baroda ..	2	..	..	1	..	..	50 %
Mysore ..	.		.	1*	..	..	..

*The figures about percentage of permanent workers of three Bengal factories and the Mysore factory were not available.

The privileges of permanent workers, such as leave, notice on termination of service, benefit of Provident Fund, etc., are similar to those in other branches of engineering.

Apprenticeship.—Out of the 65 concerns investigated, apprenticeship system was found to be in existence in 39 concerns (Madras, 5 ; Bombay, 11 ; Bengal, 15 ; U. P., 1 ; Punjab, 3 ; Bihar, 3 and Mysore, 1). In 20 of these concerns (Madras, 2 ; Bombay, 8 ; Bengal, 6 ; Punjab, 3 and Mysore, 1), however, the system is rather irregular. They train a few learners for some ordinary or technical jobs. In Madras, for example, two concerns recruit young men for being trained as machinemen, moulders, etc. During the period of training, no wages are paid, but soon after the young man acquires some skill, say, in six months, he is put on daily wages. A certain proportion of workers thus trained are absorbed in the concern, while a large number go out for jobs elsewhere. Nearly 70 persons were trained in the two concerns during the last five years, of whom 16 are at present working in the concerns. Similary in a Bombay concern, the apprentices do not receive any pay during the training period of three months. After that they start on the same pay as is given to technical personnel in the third grade. In another Bombay concern, there are at present four apprentices of whom two have 2½ years' experience and are classed as ' advanced '. The advanced apprentices get Rs. 30 p. m , while the other two get Rs. 15 p. m. One of the two advanced apprentices attends the V. J. Technical Institute and his fees are borne by the factory. In a third Bombay factory, there are two learners, whose attendance is not compulsory and who are paid only Rs. 5 or Rs. 10 for their conveyance. The Mysore factory takes engineering graduates and diploma-holders and trains them in six months ; during this period, they are paid from Rs. 50 to Rs. 60 p. m. Boys belonging to workers' families, are also trained for some time and are absorbed as workers.

The details of the apprenticeship system in the other 19 concerns are given below.

TABLE 19.

Apprenticeship System.

Province and concerns		Nature of the System.	Apprentice period (in years).	Remuneration in— 1st yr. 2nd yr. 3rd yr. 4th yr. 5th yr.
Madras				
I, II & III		For students from Govt. School of Technology, studying for L.M.F. Diploma.	5	*Nil* in 2 concerns ; in III .. 4 as. 5 as. 6 as. 8 as. p.d.
	IV	Training for non-workers ..	5	Rs. 10 15 20 25 p.m.
	V	For Supervisory posts	5	Re. 1 — 1 — 1½ — 1½ — 1½ p.d.
Bombay	I	Company's apprentices .	5	As. 8 As. 12 Re. 1 Rs. 1½ Rs.1½ p.d.
	II	(*a*) For supervisory posts ..	5	*Nil* for 6 months ; then grade of Rs. 1—½—1½.
		(*b*) Ordinary or Trade Apprentices	5	As. 12 to Rs. 1-8-0 p.d.
	III	(*a*) Graduate Apprentices (University).	2½	Rs 65 to Rs. 130 p.m.
		(*b*) Graduate University Apprentices (Technical).	1½	Rs. 55 to Rs. 90 p.m.
Bengal				
	I	(*a*) 'A' class (for Science graduates).	3	Rs. 30-35-40 .. .. p.m.
		(*b*) 'B' class (for Matriculates)	5	Rs. 15–20–23–26–30– p m.
		(*c*) 'C' class (ordinary apprentices)	5	As. 6 – 7 – 9 – 10 – 12 p.d.
	II	For ordinary posts	5	Rs 20 – 23 – 26 – 29 – 32 p.m.
	III	(*a*) Indentured apprentices ..	6	Figures not available.
		(*b*) Trade apprentices	3	
		(*c*) Draughtsmen Improvers .	3	
		(*d*) Improvers (2nd & 3rd year students)	½ to 1	
	IV	(*a*) For Supervisory posts (for Matriculates).	5	Subsistence allowance.
		(*b*) Ordinary posts .. .	3 to 4	Rs 7-8-0 p m. + D.A. Rs. 10 p.m.
	V	Practical training for Calcutta Technical School students	5	Rs. 15 – 20 – 25 – 30 – 40 p.m.
	VI	For ordinary posts	½	*Nil* for 2 months & then Rs. 2.
	VII	Do.	6	Rs. 10 and then increment of Rs 2-3-0.
	VIII	Do.	½	Rs. 10 from 2nd month.
	IX	Do.	5 to 6	As. 4 to As. 8 a day.
U. P.	I	For Supervisory Posts ..	5	*Nil* for 3 months, then Rs. 50 – 75 – 90 – 105 – 120 p.m.
Bihar	I	(*a*) Graduate Apprentices (for Engineering Degree or Diploma holders)	..	Rs. 75 p.m.
	I & II	(*b*) 'c' class Apprentices (Administrative qualification— Middle English standard).	5	Grade of Rs. 1½–2 As. - Rs. 2 p.d.
		(*c*) Trade apprentices .. .. Do.	2	Grade of As. 14–2 As. Rs. 1½ p d.
	II	(*a*) Apprentices	5	Grades of As 8 – 2 As.–Re.1 p.d.
	III	Trained as fitters, turners and electrical mistris.	3	Grade of As. 12 – 4 As.–Rs. 1½ p.d.

Except in one or two cases, the apprenticeship period is counted towards total service. In a number of cases, however, the apprentice does not get any guarantee of being absorbed in the concern, after his apprenticeship period is over.

Labour Turnover.—The figures of labour turnover are vitiated by a number of factors. In one of the Punjab foundries, for example, almost all the workers had to be turned out once in 1944 at the time of closing down the factory. A Madras factory, which specialises in casting tobacco furnaces and parts of sugar cane crushing mills, employs additional men during the six-monthly period from September to February every year. These men are employed on a temporary basis and form about 40 per cent. of the regular number employed. Subject to such limitations, the figures given below give a broad picture of the labour turnover in the concerns investigated.

TABLE 20.

Labour Turnover.

Province.	A month in the year.	No. of factories.	Average daily No. of workers.	Number of workers who left				Percentage of monthly labour turnover.
				Retired	Dismissed	Vol. left.	Total	
Madras	1944	8	1,496	2	7	34	43	3 %
Bombay ..	1941	1	68	..	..	3	3	4 %
	1943	5	3,870	1	60	30	91	2 %
	1944	10	3,928	..	41	102	143	4 %
	1945	1	1,998	..	3	22	25	1 %
Bengal .. :	1939	2	775	..	..	1	1	..
	1943	6	6,961	25	45	195	265	4 %
	1944	2	1,934	..	19	98	117	6 %
U. P.	1939	1	206	..	3	2	5	2 %
	1944	1	1,916	..	19	2	21	1 %
Punjab	1944	1	801	..	13	70	83	10 %
Bihar	1939	3	34,509	2	34	17	53	.
	1943	1	36,200	2	106	13	121	.
	1944	3	7,560	2	73	29	104	1 %
Baroda	1943	2	230	..	2	5	7	3 %
Mysore	1945	1	3,615	2	29	5	36	1 %

In general, the turnover in this industry appears to be small. It is negligible in the concerns owned by Government or public bodies, because labour in these concerns has been definitely settled in the industrial areas for many years, has no village nexus and is not migratory at all. The labour turnover in this industry has been reduced also because of the Essential Services (Maintenance) Ordinance which prevents workers from going from one concern to another. The figures in the above table show that labour turnover is mainly due to dismissals and resignations. The reasons for dismissals are shortage of work on account of non-availability of raw materials and war orders, absence without leave, breach of discipline, etc. Out of 42 dismissals in 1943 in a Bombay concern, 24 were due to absence without leave and the remaining 18 for causing damage to property. The number of dismissals in a Bombay Government factory was high (21 in July 1943), because of a rule which automatically discharges a worker, if he is absent for more than 5 days.

The common reasons for resignations are better prospects elsewhere which are readily available during these days of scarcity of skilled or semi-skilled labour, illness, visits to native places, etc. Most of the workers, who voluntarily leave the factory, do not give any reasons. Out of 88 persons who left a Bombay factory in 1943, only 7 workmen resigned due to continued illness, while the remaining 81 workers left without giving any reasons.

Absenteeism.—There has been little uniformity in the absenteeism figures supplied by the units investigated. The following table gives figures only for 18 units in Madras, Bengal and Mysore.

TABLE 21.

Absenteeism in Madras, Bengal and Mysore.

Province.	Month & Year	No. of units	Total No. of estimated man-days.	No. of man-days lost by absenteeism.	Percentage of absenteeism.		
					Average	Maximum	Minimum
Madras . ..	Jan. 1944	9	39,615	5,680	14·3 %	29·1 %	2·8 %
Bengal . {	1939	8	4,40,801	19,512	4·4 %	32·7 %	1·2 %
	1943	8	7,08,084	67,008	9·5 %	39·8 %	2·3 %
Mysore ..	March 1945	1	93,990	721	0·8 %	..	..

The following percentage figures about factories in other Provinces and States are in a number of cases not very accurate. They may, however, serve to show, at least broadly, the extent of absenteeism among the workers.

TABLE 22.

Absenteeism in Bombay, U. P., Punjab, Bihar and Baroda.

Province and Concerns.	Period.	Percentage of absenteeism.	Province and Concern.	Period	Percentage of absenteeism.
Bombay			U. P.		
I	Oct. 1944	12 %	I	1944	20 %
II . .	1939	5·9 %	II . .	1939	11 %
	1943	8·3 %		1944	19 %
III . .	1939	12 %	III	1944	5 %
	1944	10 %	Punjab I	1944	10 %
IV . .	1943	3·8 %	II . .	1944	21·1 %
V . .	Jan. 1944	10 %	Bihar I	1939	12·2 %
VI . .	Oct. 1944	9 %		1944	11·5 %
VII .	Aug. 1939	7%	II	1939	15·3 %
	Aug. 1944	13 %		1944	19·9 %
			Baroda I	1943	9 %

Absenteeism is generally lower in concerns owned by Government and Local Bodies than in those owned by private bodies. An analysis of the Madras figures given below bears out this statement.

TABLE 23.

Absenteeism in Madras, in January 1944.

Factories.	No. of units.	Total No. of estimated man-days.	No. of man days lost by absenteeism	Percentage of absenteeism.		
				Average	Maximum	Minimum
Government ..	3	9,666	545	5·6 %	8·5 %	2·8 %
Private	6	29,949	5,135	17·2 %	29·1 %	11·9 %

The above tendency is explained by the fact that leave rules and dearness allowance are more liberal in the public as compared to private concerns. There is also the attraction of the " Saturday bonus " of two hours' wages which a worker loses even if he is absent for one day in the week.

The percentage of absenteeism varies from category to category as can be seen from the following figures for a few occupations in a Government factory in Bombay. The percentages of absenteeism, maximum and minimum, are for the months of June, July and August 1943.

TABLE 24.

Percentage of Absenteeism in a Bombay Factory.

Category of workers.	Percentage of absenteeism.	
	Maximum	Minimum.
Draughtsmen, Tracers, etc.	4 %	3 %
Fitters & Turners	17 %	14 %
Blacksmiths	20 %	2 %
Pattern makers	25 %	3 %
Painters	38 %	18 %
Wire Drawing Machine Operators	3 %	1 %
Learners	8 %	3 %
Coolies	3 %	1 %
Sweepers	21 %	6 %

The following figures are from a Bihar factory.

TABLE 25.

Absenteeism in a Bihar Factory.

Category of workers.	Percentage of absenteeism.	
	1939	1944
Skilled workers	15·7 %	15·85 %
Coolies	16·44 %	17·62 %
Rejas	13·8 %	26·27 %

The absenteeism varies according to seasons and months also. A U.P. factory has 20 to 25 per cent. absenteeism in summer and 15 to 20 per cent. absenteeism in winter. In a Bihar factory, absenteeism is highest during the months, March to July when employees go to villages for the harvest-cum-marriage season. The following figures from a Bombay factory show that absenteeism is high during this season and at the time of Holi and Diwali holidays.

TABLE 26.

Absenteeism month by month
(in a Bombay Factory)

Month.	Percentage of absenteeism.		Month.	Percentage of absenteeism	
	1939	1943		1939	1943
January	3·0 %	7·7 %	July	7·8 %	7·2 %
February	4·6 %	9·3 %	August	6·1 %	5·6 %
March	7·0 %	12·3 %	September ..	11·5 %	3·5 %
April	4·5 %	19·3 %	October	5·2 %	5·7 %
May	4·2 %	10·2 %	November ..	6·3 %	6·0 %
June	7·4 %	5·7 %	December ..	2·8 %	6·9 %

The main causes of absenteeism are sickness, domestic needs and religious and social ceremonies. The worker in war time often takes up short period work under contractors to get high wages. Besides, in many concerns, if the worker is late by more than half an hour, he is shut out. A Bihar factory gives the following causes.

TABLE 27.

Causes of absenteeism in a Bihar factory.
(Figures indicate the percentages of total labour force).

Year.	Cause of absenteeism.							
	Sickness.	Accident.	Leave.	Festival leave.	Suspension.	Off against Sunday work.	Of own accord.	Total.
1939	3·13 %	0·47 %	4·89 %	0·4 %	0·02 %	1·47 %	1·83 %	12·21 %
1944	2·97 %	0·54 %	4·94 %	0·47 %	0·1 %	0·8 %	1·69 %	11·51 %

Standing Orders.—In all, 20 factories (Madras, 4 ; Bombay, 8 ; Bengal, 1 ; U.P., 3 ; Punjab, 1 ; Bihar, 2 ; and Mysore, 1) have Standing Orders or Service Rules for their workers. Out of these 20 factories, 8 are owned by Government or Local Bodies and the industrial relations therein are governed by service rules framed by Local Bodies or by Government orders published in the Provincial Government Gazette from time to time. Besides these 8 concerns, 3 private factories (Bombay, 2 and Punjab, 1) have a few Rules mainly dealing with recruitment, discipline and termination of service. In a number of Bengal factories usually a contract form has to be signed by every worker, who is expected to abide by the rules prescribed by the Management. The only workshop, which claims to have service rules, maintains a Service Sheet for every individual employee Neglect of duty, insubordination, commendation for good service and any other matter which the District Engineer thinks ought to be recorded in the Service Sheets are noted therein. All the three concerns investigated in U. P. are members of the Employers' Association of Northern India and adhere to the rules and regulations framed by the Association in consultation with the U. P. Labour Commissioner.

Recruitment and Labour Officers.—As we have seen previously, in 16 of the concerns investigated some specific jobs are given to contractors, who carry them out with their own labour. Only in 3 of these 16 concerns, workers are employed through contractors but paid directly. However, even in these concerns, as in all others investigated, the system of direct recruitment is in vogue. In Madras, recruitment through the Employment Exchange has been made compulsory for public concerns. A number of private concerns are, however, not satisfied with the present working of the Exchanges and hence are reluctant to utilise them for recruitment. In Bombay, out of the 18 units surveyed, only three recruited some labour through the Exchanges. In one of the factories, which has about 350 workers, only about 15 technicians were recruited through the Exchange. A Bengal factory and the Mysore factory have a selection board for recruitment. The Appointment Board of the Bengal factory consists of a chairman and two members through which labour is finally appointed after a preliminary selection by the Department *Maistries* at the factory gate. Workers sent through the National Service Labour Tribunal are also required to obtain the final approval of this Appointment Board. In the Mysore factory, labour is recruited by a Committee with the General Manager as the President, the Labour Officer as the Secretary and the Medical Officer as a member. Posts carrying a salary of less than Rs. 30 p.m. are filled up on the recommendation of the Committee. All jobs above Rs. 30 and up to Rs. 50 p.m. are filled up by the General Manager himself and appointments to higher posts are made by the Chairman of the Works on the recommendation of the General Manager. Generally, larger establishments maintain a Labour Bureau, where applications are filed and registered and workers recruited after being examined.

Labour Officers have been appointed only by 13 concerns (Bombay, 2 ; Bengal, 6 ; U. P., 1 ; Bihar, 3 ; and Baroda, 1 ;). Their duties are to deal with complaints regarding wages, fines and such other conditions of employment. Sometimes they have to look after recruitment also. In factories, which have no Labour Officers, this work is taken up by the *maistries* or foremen of various departments or by the Works Manager or Manager or by the Director. One of the U. P. factories has a ' Hitkari ' (Welfare) Committee, which investigates into the complaints lodged by the workers. Members of this Committee include members elected by workers from amongst themselves.

II.—Wages and Earnings.

Wage-rates and Gross Earnings.—The rates vary from Province to Province and hence are given separately. The main topics on which detailed information is given in the following paragraphs are graded or time-scale promotion, changes in wages since 1939, wages of contract labour and rates of basic wages and gross earnings for various occupations.

A.—Madras.

In many concerns, the minimum and the maximum rates payable to different categories are fixed. The level at which a particular worker starts and the increments given on occasions are both decided at the discretion of the employer. Increments may be given once a year or once in two years or whenever the management finds it necessary to do so. In one case increments were given thrice during the year 1944 and once at the beginning of 1945. In the three public concerns, however, promotion is based on time-scale. In one of them, the minimum and maximum for each occupation are fixed and within this grade an increment of one anna per calendar year is given provided work and conduct are satisfactory. In another, occupations are divided into grades, varying from two to four, the first grade being the highest. (For instance, turners have four grades I, Rs. 1-7-0 to Rs. 1-10-0 ; II, Rs. 1-1-0 to Rs. 1-6-0 ; III, Re. 0-12-0 to Re. 1 per day and a special grade of Rs. 1-11-0 to Rs. 2 per day). In each occupation, the number of places in each grade is fixed from time to time and promotion from grade to grade can take place only when a vacancy arises. Increments are given within the grade at the rate of one anna biennially. In the third public concern, workers are divided into two classes : unskilled and skilled. Unskilled workers are divided into two grades, the second grade getting 8 as. to 10 as. per day and the first 11 as. to 12 as. per day. Skilled workers are divided into four grades : (i) 9 as. to Re. 1 p. d. ; (ii) Re. 1-1-0 to Rs. 1-8-0 p. d. ; (iii) Rs. 1-9-0 to Rs. 1-13-0 p. d. and (iv) Rs. 1-14-0 to Rs. 2 p. d. Within the grade, an annual increment of one anna is given. Those who have reached the maximum of their grades are given a final increment of half an anna. Among private concerns, one factory has a definite system of grading and increment. At start, a worker is called a ' boy ' and is paid 8 as. a day ; the next grades are those of the " learner " at as. 12 a day, first grade at Rs. 1-6-0 p. d. and technician at Rs. 1-12-0 p. d. Promotion from grade to grade is not according to the length of service, but according to efficiency as judged by the management. Apart from the grades, every worker gets an increment of one per cent. per year of service which is carried on even after a worker is promoted from a lower grade to a higher grade.

As mentioned already, there is no contract labour in any except in one concern. In this concern, the rates paid by contractors are generally the same as those paid by the concern itself and the disbursement of wages by contractors is supervised by the management to avoid fraud. In fact, it is said that the contractor pays higher rates than the concern when urgent work has to be done.

The rates of wages have remained the same as fixed in 1939 in the public concerns and some private concerns and dearness allowance is being paid to

compensate for the rise in the cost of living. A few concerns have changed the wage rates, some of which are given below.

TABLE 28.

Wage rates in 1939 *&* 1940 *and in* 1944 *in Madras* (*in* 3 *private concerns*).

Occupation.	Unit.	Minimum rates.		Percentage increase.	Maximum rates.		Percentage increase
		1939-40	1944		1939-40	1944	
Blacksmith ..	I	0 12 0	1 0 0	33⅓ %	1 4 0	1 4 0	*Nil.*
	II	.	..	..	1 8 0	2 0 0	33⅓ %
Carpenter ..	I	0 5 7	1 5 0	400 %	1 7 0	2 0 0	39 %
	II	0 10 0	0 10 0	*Nil.*	1 8 0	4 8 0	200 %
Cooly	I	0 7 0	0 15 0	114 %	..	..	..
Moulder ..	I	0 8 0	1 4 0	150 %	1 2 0	1 14 0	66·6 %
	II	0 8 0	0 10 0	25 %	0 12 0	2 12 0	266·6 %
	III	0 3 0	0 6 0	100 %	1 14 0	2 0 0	6·3 %
Hammerman ..	III	0 10 0	0 15 0	50 %	..	..	..
Turner	I	0 14 0	1 2 0	28 6 %	1 13 0	2 2 0	17·2 %
	III	0 12 0	1 0 0	33⅓ %	0 7 0	2 2 0	48 %
Driller	II	0 12 0	1 0 0	33⅓ %	0 14 0	1 5 0	50 %
	III	..	..	..	0 12 0	0 15 0	25 %
. ..	III	..	..	..	1 4 0	2 4 0	80 %

The cases of large rise are mostly in those concerns and those categories where workers were very much underpaid before the war, and where rates had to be raised to retain the existing employees.

The following table gives details of maximum, minimum and average basic wage rates per day, maximum, minimum and average monthly earnings and average daily earnings of the principal categories of such workers in each group as have worked for the same number of days in the month of January 1944. Some of the categories may overlap to a certain extent because there is no uniformity in classifying workers in the different concerns. For example, some concerns include rivetters among blacksmiths, others include patternmakers among carpenters and in some cases several categories are put under the general term " machine men ". There is also some difficulty due to the same category being called by different names as coolies, helpers, attendants, boys, etc. Some concerns put the heads of sections as *Maistries* or supervisors separately, whereas in others these are mixed up with the general categories. In spite of these difficulties, the wage data collected are of considerable significance and interest, because there is not much difference between the ranges of the wages of skilled workmen in the several categories.

Table 29.

Wages and Earnings (in Rs.) in Madras.

Occupation.	No. of units	Basic wages earned.			Gross Earnings.			Average daily earnings.
		Maximum	Minimum	Average.	Maximum	Minimum	Average.	
Blacksmiths ..	8	1 9 0	0 14 0	1 2 11	55 15 6	22 8 0	31 4 11	1 7 8
Carpenters ..	7	3 8 0	0 6 0	1 6 1	58 11 0	31 3 0	36 4 0	1 11 7
Coolies	7	0 15 0	0 6 0	0 10 4	35 8 0	7 11 0	18 7 2	0 14 9
Cleaners	3	1 4 0	0 9 6	1 0 0	27 14 6	17 4 9	23 12 9	1 2 4
Drillers	3	1 8 0	0 10 0	1 1 2	34 8 0	22 8 11	25 1 4	1 4 7
Electricians ..	1	..	..	1 5 6	..	..	54 2 9	2 4 1
Fitters	9	2 2 0	0 8 0	1 4 6	59 13 6	17 6 0	33 15 2	1 8 6
Fireman & Furnacemen	2	1 4 0	0 14 6	1 1 3	32 15 3	32 1 0	32 8 2	1 7 3
Hammermen ..	5	1 2 0	0 12 0	0 14 8	33 10 6	25 4 10	30 13 11	1 5 10
Machinemen & Turners	9	2 2 0	0 6 0	1 5 6	74 7 3	19 11 0	37 9 3	1 11 5
Mistries	4	2 10 0	1 0 0	1 13 9	60 6 0	32 14 1	50 13 11	2 5 4
Markers	3	1 15 0	1 0 0	1 5 4	54 12 4	32 14 1	45 14 0	2 0 6
Moulders	7	2 0 0	0 10 0	1 4 6	51 0 0	16 8 0	30 13 0	1 7 5
Painters	3	1 8 0	0 10 0	1 1 2	38 2 0	22 15 0	32 12 11	1 8 1
Patternmaker ..	1	1 10 0	0 9 0	1 12 0	43 0 0	43 0 0	43 0 0	2 0 0
Rivetters	4	1 10 0	0 9 0	1 1 4	48 14 3	15 6 0	31 2 8	1 6 0
Serangs	1	1 3 6	1 3 0	1 3 3	44 4 9	40 13 9	42 9 3	1 12 5
Template makers ..	1	0 12 0	0 10 0	0 11 4	25 14 8	23 6 11	24 4 9	1 1 3
Tinkers	1	1 8 0	1 3 0	1 5 6	41 11 0	32 8 6	37 1 9	1 11 0
Welders	5	2 12 0	0 12 0	1 14 9	66 10 6	16 8 9	50 3 2	2 4 9
Boilermaker ..	1	1 6 0	1 0 0	1 2 8	44 14 5	33 8 0	39 3 10	1 11 10

The ranges of rates given above differ from those announced by the concerns in their rate schedules, as can be seen from the figures given below.

TABLE 30.

Ranges of Announced. Actual and Average Wage-rates and Average Earnings, Madras.

Occupation.	Rates announced.		Basic rates actually given.		Range of average basic daily rates.		Range of average daily earnings.	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Blacksmith ..	2 0 0	0 12 0	1 9 0	0 14 0	1 5 0	1 0 0	1 13 1	1 3 3
Carpenter ..	2 0 0	0 12 0	3 8 0	0 6 0	1 12 6	0 14 6	2 4 1	1 2 9
Coolies	1 0 0	0 7 0	0 15 0	0 6 0	0 12 5	0 8 5	1 3 7	0 8 5
Drillers	1 10 0	0 8 0	1 8 0	0 10 0	1 4 9	0 11 10	1 9 1	1 2 1
Fitters	3 0 0	0 8 0	2 2 0	0 8 0	1 10 0	0 14 6	2 4 7	1 3 1
Hammermen ..	1 4 0	0 8 0	1 2 0	0 12 0	1 2 0	0 12 0	1 7 0	1 2 9
Machinemen & Turners .	2 8 0	0 12 0	2 2 0	0 6 0	1 11 0	1 1 0	2 7 10	1 3 8
Mistries ..	2 12 0	1 15 0	2 10 0	1 0 0	2 2 6	1 1 4	2 8 2	1 13 6
Markers ..	3 0 0	1 4 0	1 15 0	1 0 0	1 11 6	1 0 6	2 4 7	1 13 6
Moulders ..	2 10 0	0 6 0	2 0 0	0 10 0	1 8 5	1 1 0	1 13 5	1 3 1
Painters ..	1 8 0	0 10 0	1 8 0	0 10 0	1 8 0	0 10 0	1 15 3	1 0 3
Rivetters ..	2 0 0	0 8 0	1 10 0	0 9 0	1 6 3	0 10 6	1 9 9	0 11 4
Welders ..	3 0 0	0 12 0	2 12 0	0 12 0	2 8 0	1 1 0	2 9 10	1 7 3

The actual maximum wages paid are less than the maximum announced, but in most cases the actual minimum rates are either the same as or above the announced rates. The figures giving the range of average basic rates show that these are substantially higher than the minimum rates and in some cases quite near the maximum rates. From this it may be concluded that there are a large number of workers whose basic wage rates are higher than the minimum rates. The range of average daily earnings (gross and net) including overtime pay and dearness allowance, but excluding the annual bonuses, shows that these allowances and extra earnings raise the incomes of the lowest paid in each category considerably. While the minimum basic rates are well below 12 as. a day in most cases and the minimum average basic rates are near Re. 1 or less than Re. 1 per day, the minimum average daily earnings are in most cases above Re. 1 per day and go up to Rs 1-13-6 per day.

B.—Bombay.

Except in one Government concern and to a certain extent in three private concerns, there does not seem to exist any time-scale or graded promotion. The rates of pay in the Government concern are divided into two schedules : (a) for those engaged on or after the 1st March 1933, and (b) for those engaged before that date. These rates for some of the categories of workers are given in the following table.

TABLE 31.

Wage-rates in a Government Factory—Bombay.

Occupations (with grades.)	For employees engaged on or after 1-3-1933.				For employees engaged before 1-3-1933.			
	Daily rates	Monthly Rates		Annual increments.	Daily rates.	Monthly Rates		Annual increments
		Min.	Max.			Min.	Max.	
	Rs. A.	Rs. A	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.
Learners (under 17 years)	1 0				1 0			
Learners over 17 years	1 8	..	..	..	1 8	..	..	..
Assembly shop mechanic	..	40 0	61 0	3 0	..	40 0	68 0	4 0
Assembly shop wiremen	..	40 0	61 0	3 0	..	40 0	68 0	4 0
Hammermen ..	1 0	28 0	33 0	1 0	1 0	28 0	35 0	1 0
Polishmen .. Gr. II	1 12	50 0	65 0	3 0	1 12	55 0	75 0	5 0
Polishmen .. Gr. I	..	70 0	82 0	4 0	..	75 0	85 0	5 0
Painters .. Gr. II	2 0	50 0	65 0	3 0	2 0	60 0	80 0	5 0
Painters .. Gr. I	..	70 0	82 0	4 0	..	80 0	105 0	5 0
Platers .. Gr. II	2 0	45 0	60 0	3 0	2 8	45 0	65 0	5 0
Platers Gr. I	..	65 0	72 0	4 0	..	65 0	75 0	5 0
Blacksmith carpenters & Turners .. Gr. II	2 0	55 0	70 0	3 0	2 0	60 0	80 0	5 0
Blacksmith carpenters & Turners .. Gr. I	..	75 0	95 0	4 0	..	80 0	105 0	5 0
Fitters .. Gr. III	1 8	40 0	52 0	3 0	1 8	40 0	56 0	4 0
Fitters .. Gr. II	2 0	55 0	70 0	3 0	2 0	60 0	80 0	5 0
Fitters .. Gr. I	..	75 0	95 0	4 0	..	80 0	105 0	5 0
Workshop coolies ..	1 0	25 0	28 0	1 0	1 0	25 0	29 0	2 0
Electrical coolies ..	..	25 0	28 0	1 0	..	25 0	29 0	2 0
Stores Coolies ..	..	25 0	33 0	1 0	..	25 0	35 0	2 0

Note :—Increments are subject to satisfactory work and attendance.

In one of the private concerns, no specific system of graduated or time-scale promotion exists, though an effort has been made to establish rates for various categories of work. After completion of the learning period, personnel are included in one or the other of the categories at the discretion of the Management. These classifications, with their rates of pay, are as follows :—

TABLE 32.

Scales of Wage-rates in a Bombay Factory.

Classification of employment.	Standard rates of pay (in Rs. per day).			
	Class IV	Class III	Class II	Class I
I. Setters up, Tool Room Hands, Craftsmen ..	2 4 0	2 8 0	2 12 0	3 0 0
II. Machinists Group A (*i.e.*, Grinder, Fine Machine Tapping Nos. 4 & 6 Autos, DSG Lathe Gaugers and skilled workers, *e.g.*, motor winders ..	..	1 8 0	1 12 0	2 0 0
III. Machinists Group B (*i.e.*, small lathes, drills, No. 2 Autos milling etc.) semi-skilled (*i.e.*, Assemblers, Fan winders, store coolies)	..	1 4 0	1 8 0	1 12 0
IV. Learners (*i.e.*, Apprentices)	Grade of 14 as.—2 as.—Rs. 1-6-0 (at interval of 2 to 6 months).			
V. Unskilled workers	Below Rs. 1-4-0.			

In another Bombay concern, the time-scale promotion exists only for coolies and hammermen, because they get a start lower than that given to other skilled workmen. The scales are as under :

TABLE 33.

Wage-rates for Hammermen and Coolies in a Bombay Factory.

	Rate of wages (in Rs.) paid after a period of							
	Initial start	½ year	½ year	1 year	1½ years	2 years	3 yrs.	3½ yrs.
Hammermen	0 14	0 15	1 0	1 1	1 2	1 3	1 4	..
Coolies	0 14	..	0 15	1 0	..	1 1	..	1 2

In the fourth Bombay factory, owned by the Poona Municipality, the monthly-rated workers, numbering about 10, get an annual increment of Rs. 2 to Rs. 4 in the following grades :—

(i) Rs. 25—2—50 p. m. for Blacksmiths, Carpenters, Moulders and fitters.

(ii) Rs. 30—2—60 p. m. for Turners, Painters and Motor Inspectors.

(iii) Rs. 60—3—90 p. m. for Weigh bridge Mechanic.

(iv) Rs. 60—4—100—5—125 p. m. for Motor Mechanic.

Six factories have revised their basic wages in wartime. In addition to this increase in basic wages, some of these factories grant a separate dearness allowance. The changes in the wage rates in six factories are given below :—

TABLE 34.

Changes in Basic Wage Rates—Bombay.

Occupation.	Unit No.	Basic wage rates in	
		1939	1944
		Rs.	Rs.
Fitters	I	1 5 0	2 2 6
	II	1 6 0	2 8 0 to [illegible] 0
	III	1 2 0 to 2 6 0	1 4 0 to 2 14 0
	IV	1 6 0 to 2 0 0	1 6 0 to 3
	V	1 0 0 to 2 12 0	1 0 0 to 3 4 0
	VI	0 9 0 to 1 5 0	1 2 0 to 1 13 0
Turners	I	1 9 0	2 8 0
	III	1 6 0 to 1 15 0	1 4 0 to 3 0 0
	IV	..	1 4 0 to 2 6 0
	VI	1 4 0	..
Moulders	I	1 12 6	2 8 0
	III	1 4 0 to 1 14 0	1 4 0 to 2 3 0
	V	1 2 0 to 2 0 0	1 4 0 to 2 14 0
Millers	I	1 12 6	2 6 3
Drillers	I	1 8 0	2 0 0
	IV	0 12 0	1 0 0 to 1 4 0
Carpenters	I	1 8 0	2 0 0
	II	2 8 0	1 8 0 to 5 0 0
	III	1 0 0 to 1 8 0	1 8 0 to 1 12 0
	IV	..	1 14 0 to 2 8 0
	VI	0 10 0 to 1 6 0	1 8 0 to 1 12 0
Tinsmith	I	1 9 2	1 15 0
	III	..	1 4 0 to 1 12 0
	IV	1 4 0	1 4 0 to 2 2 0

Occupation.	Unit No.	Basic wage rates in	
		1939	1944
		Rs.	Rs.
Blacksmiths	III	1 8 0 to 1 12 0	1 8 0 to 2 2 0
	IV	0 6 0 to 2 12 0	0 10 0 to 5 14 0
	V	0 12 0 to 2 0 0	1 8 0 to 2 8 0
	VI	0 12 0 to 1 7 0	..
Painters	II	1 8 0 to 2 4 0	1 2 0 to 2 4 0
	III	0 12 0 to 1 0 0	0 14 0 to 1 2 0
	IV	0 12 0	..
	VI	0 9 6	1 8 0
Electricians	III	1 6 0 to 1 10 0	1 12 0 to 2 4 0
Machinists	II	0 12 0 to 1 2 0	0 14 0 to 2 0 0
	III	1 4 0 to 2 9 0	1 4 0 to 2 13 0
	V	1 8 0 to 3 6 0	1 4 0 to 3 14 0
Markers	III	1 0 0 to 2 0 0	1 0 0 to 2 8 0
Pattern-makers	III	1 6 0 to 1 14 0	1 6 0 to 2 0 0
	V	1 0 0 to 1 12 0	2 12 0 to 3 0 0
Template makers	II	..	3 8 0
	III	2 4 0 to 3 12 0	3 0 0
Welders	III	2 0 0 to 2 8 0	1 8 0 to 3 4 0
	IV	1 8 0 to 1 12 0	1 10 0 to 2 6 0
Winders	II	0 12 0 to 1 6 0	0 14 0 to 2 0 0
Assemblers	II	0 12 0 to 1 2 0	0 14 0 to 1 12 0
	III	1 0 0 to 1 6 0	1 2 0 to 1 12 0
Boiler makers	III	1 0 0 to 1 8 0	1 4 0 to 2 4 0
	IV	1 8 0 to 3 8 0	1 8 0 to 4 8 0
Coolies (Male)	I	0 12 0	0 14 0
	II	0 14 0 to 1 2 0	1 0 0 to 1 8 0
	III	0 12 0 to 0 14 0	0 14 0 to 1 2 0
	IV	0 6 0 to 1 6 0	0 12 0 to 1 10 0
	V	0 8 0 to 1 0 0	1 4 0 to 1 12 0
	VI	0 6 0 to 0 12 0	0 8 0 to 1 0 0
Coolies (Female)	III	0 8 0 to 0 12 0	0 10 0 to 0 15 0

It may be mentioned here that concerns No. V and VI are in Poona, while the other four are in Bombay. This explains why the wages in No. V and VI are considerably lower than those in others.

The wages and earnings based on the figures supplied by 13 concerns (10 in Bombay and 3 in other towns) are given below. The rates in Bombay are higher.

TABLE 35.

Monthly Wages and Earnings (in Rs.) in Bombay Province. (Based on figures of 13 concerns).

Occupation.	Rates in Bombay City (10 factories).						Rates in Poona & Ahmedabad. (3 factories).					
	Basic Wages.			Gross Earnings.			Basic Wages.			Gross Earnings.		
	Max.	Min.	Ave.	Max.	Min.	Ave.	Max.	Min.	Ave.	Max.	Min.	Ave.
Fitters	132	22	56	349	40	91	50	37	44	107	26	54
Turners	105	19	63	175	43	101	..	.	36	107	39	64
Moulders	110	25	52	163	45	89	..	..	50	130	33	70
Drillers	65	25	39	120	42	71	..	..	..	65	39	47
Carpenters	110	25	61	166	46	93	50	47	49	91	52	67
Blacksmiths	125	16	60	210	26	98	.	..	55	65	39	52
Painters	95	21	43	134	37	67	.	..	34	..	..	46
Hammermen	41	22	29	85	37	58	..	..	..	39	33	36
Machinists	73	21	44	154	36	76	..	.	..	111	33	83
Welders	75	33	64	123	65	103	.	..	..	..	..	..
Coolies	41	19	27	88	32	56	23	11	16	49	24	33

C.—Bengal.

The system of graded or time-scale promotions was found only in 8 concerns, most of them being big. Increments for the skilled personnel vary from Rs. 2 to Rs. 5 annually while unskilled workmen on daily rates get increments ranging from one anna to two annas on the completion of one year's service.

The rates of wages have gone up considerably since 1939 as can be seen from the figures given in the following table. They relate to workers employed directly by the concern on time-rates.

TABLE 36.

Wage rates (in Rs.) in Bengal.

Occupation	Wage rates in 1939.			Wage rates in 1944.			Percentage increase in averages.
	Maximum	Minimum	Average.	Maximum.	Minimum.	Average.	
Beltman	1·00	0·94	..	1·90	1·24	..	..
Blacksmith Mistry	1·76	0·69	0·94	2·51	1·16	1·42	51·06%
Boilermaker Mistry	..	..	..	4·50	0·75	..	..
Boilermaker	1·75	1·31	0·88	1·74	1·00	1·25	42·05%
Carpenter Mistry	2·00	0·88	0·75	2·26	1·11	1·29	72·00%
Chippers	1·00	0·81	0·88	1·43	1·00	1·29	46·59%
Coolies	0·53	0·49	0·46	0·91	0·67	0·85	84·78%
Crane drivers	1·25	1·06	0·75	1·75	1·11	1·00	33·33%
Driller Mistry	..	..	..	2·17	1·56	..	..
Driller	1·25	1·06	0·82	1·29	0·87	1·19	45·12%
Electro-plater	..	..	..	3·25	1·44	..	..
Fitter Mistry	1·44	1·44	..	3·27	2·23	..	..
Fitter	2·00	0·75	1·19	2·43	0·86	1·83	53 78%
Furnacemen	1·75	0·63	0·56	1·30	0·62	0·75	33·93%
Hammermen	0·88	0·63	0·57	1·12	0·72	0·94	64·91%
Khalasi	1·00	0·63	0·75	1·28	0·88	1·00	33·33%
Mason	1·13	0·75	0·75	1·32	1·11	1·22	62·67%
Moulder Mistry	..	..	..	3·96	2·59	..	..
Moulder	1·50	0·85	0·63	1·91	1·08	1·25	98·41%
Oilman	1·00	0·63	0·63	0·98	0·77	1·00	58·73%
Painter	1·38	0·75	0·63	1·29	0·88	1·13	79·36%
Pattern Maker	2·00	0·50	..	2·38	0·72	..	..
Planer Mistry	..	..	..	4·50	2·00	..	..
Planer	1·50	1·06	0·63	2·03	1·00	1·00	58·73%
Rivetter	1·25	0·94	1·25	1·90	1·15	1·75	40·00%
Shaper	1·50	1·06	0·63	1·79	1·10	1·00	58·73%
Slotter	1·50	1·06	0·63	1·88	0·91	1·00	58·73%
Tool Grinder	..	..	0·88	1·79	0·90	1·19	35·23%
Turner	1·50	0·66	0·75	2·51	1·10	1·75	133·33%
Welder (Electric)	3·50	1·00	0·75	3·38	1·41	1·44	92·00%
Welder (Gas)	..	..	..	2·44	1·19	..	..

A tabular statement appended below shows the maximum, minimum and average of both basic and gross earnings for some of the important occupations in the industry.

TABLE 37.

Wages and Earnings (in Rs.)—Bengal. (Based on figures of 13 concerns).

Occupations.	Basic Wages.			Gross Earnings.		
	Maximum	Minimum.	Average.	Maximum.	Minimum.	Average.
Blacksmith	2·48	1·24	1·72	3·13	1·61	2·24
Carpenter	2·75	2·10	2·34	3·55	2·65	3·05
Chipper	1·25	0·75	1·05	1·81	1·13	1·53
Cooly	1·04	0·78	0·86	1·57	1·21	1·43
Crane Driver	1·75	1·00	1·41	3·19	1·86	2·57
Driller	2·04	1·67	1·86	2·91	2·36	2·64
Fitter	2·55	1·08	1·56	3·29	1·43	2·10
Furnaceman	2·75	0·81	1·75	4·80	1·52	3·13
Hammerman	1·13	0·88	1·00	1·58	1·27	1·43
Khalasy	1·63	0·75	1·09	2 28	1·12	1·57
Mason	1·52	1·11	1·33	2·50	1·78	2·12
Moulder	2·43	0·97	1·67	3·16	1·29	2·20
Oilman	1·04	0·72	0·85	1·74	1·22	1·43
Pattern maker	2·13	1·07	1·55	2·61	1·34	1·92
Planer	2·07	1·57	1·80	4·03	2·33	3·26
Rivetter	3·24	1·81	2·55	3·66	2·71	3·13
Shaper	1·77	0·89	1·35	2·22	1·16	1·69
Slotter	2·50	1·75	2·21	3·36	2·45	3·01
Tool Grinder	1·44	0·81	1·25	2·63	1·18	1·77
Turner	2·99	1·72	2·23	3·94	2·30	2·97
Welder	2·50	1·00	1·56	3·07	1·44	2·18

D.—United Provinces.

The system of graded or time-scale promotion was found only in one concern. Contract labour is employed by all the three concerns and the rates are said to be practically the same as those paid to labour employed directly. Considerable changes in basic wages have occurred since August 1939 ; for instance a coolie was paid on an average 6 as. to 7 as. per day in 1939 whereas

now he is paid 9 as. to 10 as. per day. The wage rates in one concern are given below :—

TABLE 38.

Wage rates (in Rs.) in a U. P. Factory.

Monthly paid staff.			Daily rated staff.		
Occupation.	Minimum.	Maximum.	Occupation.	Minimum.	Maximum.
Shift Incharge ..	90	250	Head fitter	2 0 0	3 8 0
Mistry	60	160	Fitter	1 4 0	3 0 0
Fitter Apprentice ..	40	60	Asst. Fitter	0 12 0	1 8 0
Electrician	40	100	Fitter Cooly ..	0 10 0	1 0 0
S.B. Attendant ..	30	50	Carpenter	1 0 0	2 8 0
Motor Man	18	30	Carpenter cooly ..	0 10 0	0 14 0
Bandhani Cooly ..	16	20	Blacksmith	1 8 0	2 8 0
			Hammerman ..	0 10 0	0 14 0
			Welder	1 4 0	3 0 0
			Painter	1 0 0	2 0 0
			Bandhani	0 12 0	1 0 0
			Pattern maker ..	1 8 0	3 0 0
			Core maker	1 0 0	1 8 0

In another concern, most of the skilled occupations have been divided into different grades and wages are fixed accordingly as follows :

TABLE 39.

Wage rates (in Rs.) in another U. P. Factory.

Occupation.	Rates per day.		
	Ist Grade.	IInd Grade	IIIrd Grade.
Fitters	3 0 0	2 8 0	2 8 0
Turners	4 0 0	3 0 0	2 0 0
Machinists	2 4 0	1 4 0	..
Electricians	2 8 0	2 0 0	1 8 0 (wiremen).
Welders	3 4 0	2 8 0	..
Blacksmiths	3 0 0	2 8 0	1 8 0
Carpenters	..	2 8 0	2 0 0
Grinders	..	1 0 0	0 12 0
Toungsmen	..	1 8 0	1 0 0
Hookers	..	1 0 0	0 12 0
Unskilled Labour	..	0 10 0	0 8 0

In the third concern, daily-rated coolies are paid at the rate of 11 as. to 12 as. per day : coolies at the monthly rates get a pay of Rs. 18 to Rs. 40 p.m. The technical staff get wages within a range of Rs. 24 to Rs. 115 per month.

E.—Punjab.

None of the concerns investigated has any system of graded or time-scale promotion. Contract labour is employed only in one concern and it receives more, it is stated, than the company's labour. Wages since 1939 have increased, as the following figures show.

TABLE 40.

Wages and Earnings in a Punjab Factory.

Occupation	1939 Basic Wages.		1945 Basic Wages.		1945 Gross Earnings.	
	Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.
Turners	0 8	1 10	1 4	2 9	1 12	3 1
Welders	0 13	2 0	1 8	3 0	2 0	3 8
Fitters	0 12	1 8	0 14	4 0	1 6	4 8
Coolies	0 4	0 9	0 8	0 15	1 0	1 7
Hammermen	0 9	0 12	0 10	0 8	1 2	2 0
Blacksmiths	0 14	2 8	1 5	3 0	1 13	3 8
Masons	..	1 4	1 8	2 0	2 0	2 8
Electricians	..	0 12	1 4	2 4	1 12	2 12
Carpenters	0 14	1 10	1 6	2 0	1 14	2 8
Moulders	8	2 0	1 0	5 0	1 8	5 8
Core Makers	0 10	1 0	1 0	3 8	1 8	4 0
Firemen	..	1 4	0 11	1 9	1 3	2 1
Tongsmen	0 11	1 10	0 14	2 4	1 6	2 12
Shapers	..	..	1 4	2 0	1 12	2 8
Planers	..	..	1 8	2 8	2 0	3 0
Drillers	..	..	1 4	1 8	1 12	2 0
Slotters	..	..	0 14	1 6	1 6	1 14
Grinders	..	..	0 10	1 0	1 2	1 8
Markers	..	..	1 12	3 8	2 4	4 0
Polishers	..	..	0 12	1 2	1 4	1 10
Khalasies	..	..	0 8	2 8	1 0	3 0
Rivetters	..	..	..	3 0	..	3 8
Bar holder	..	..	0 8	1 1	1 0	1 9

The wage-rates and earnings in three other concerns are given below :—

TABLE 41.

Wage-rates and Earnings (in Rs.) in Punjab.

Occupation.	Wage-rates in concerns I & II.				Gross Earnings in Concern.		
	I		II		III		
	Maximum.	Minimum	Maximum.	Minimum.	Maximum.	Minimum.	Average.
Turners ..	2 8	7 0	1 12	3 8	3 12 0	1 2 0	1 10 6
Fitters ..	2 0	4 2	1 12	3 8	3 0 0	2 0 0	2 4 0
Moulders ..	1 10	8 0	1 10	3 8	..	..	..
Carpenters ..	3 2	3 12	2 0	3 6	..	..	..
Painters ..	2 10	4 0	1 6	3 0	..	..	..
Coolies ..	1 2	1 15	1 0	1 4	1 8 0	1 7 0	1 7 6
Blacksmiths ..	3 12	6 0	1 12	2 14	3 12 0	2 4 0	..

F.—Bihar.

In two of the four concerns, there is the system of graded or time-scale promotions, but it is mainly restricted to supervisory posts and to monthly-rated operatives. A considerable number of workers (mostly unskilled) are on standard rates of pay and cannot get any increment until promoted to a higher vacancy. Only one factory employs contract labour, who get less than the company rates. The Management of the Company, however, scrutinise the contractor's pay-rolls and supervise payments to ensure that fair rates are paid.

The increase in wage rates since 1939 can be seen from the following figures of a foundry in Tatanagar.

TABLE 42.

Wage-rates in a Tatanagar Foundry.

Department.	Wage rates during.						
	Aug 1939	1940	1941	1942	1943	1944	1945
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Ramming ..	1 3 0	1 3 0	1 4 0	1 4 0	1 4 0	1 6 0	1 6 0
Chapni	0 13 0	0 13 0	0 14 0	0 14 0	0 14 0	0 15 6	0 15 6
Box S. Supplies ..	0 11 0	0 11 0	0 12 0	0 12 0	0 12 0	0 13 6	0 13 6
Black S. Supplies ..	0 9 0	0 9 0	0 10 0	0 10 0	0 10 0	0 11 0	0 11 0
Sand L. Maker ..	0 8 0	0 9 0	0 10 0	0 10 0	0 10 0	0 11 0	0 11 0
Kadawalla	0 7 6	0 7 6	0 8 6	0 8 6	0 8 6	0 9 6	0 9 6
Nali	0 13 0	0 13 0	0 14 0	0 14 0	0 14 0	0 15 0	0 15 0
Clamp tighter	1 3 0	1 3 0	1 4 0	1 4 0	1 4 0	1 5 0	1 5 0
D. L. Carrier ..	0 13 0	0 13 0	0 14 0	0 14 0	1 0 0	1 1 0	1 1 0
S. L Carrier .	0 11 0	0 11 0	0 12 0	0 12 0	0 14 0	0 15 0	0 15 0
Stick-holder	0 8 0	0 8 0	0 9 0	0 9 0	0 10 0	0 11 0	0 11 0
Runner-braker . ..	0 10 0	0 11 0	0 12 0	0 12 0	0 15 0	1 0 0	1 0 0
Laddle Repairer	0 10 0	0 11 0	0 12 0	0 12 0	0 14 0	0 15 0	0 15 0
Big Laddler	0 9 0	0 9 0	0 10 0	0 10 0	0 12 0	0 13 0	0 13 0
Removing Khalasi ..	0 13 0	0 13 0	0 14 0	0 14 0	0 14 0	1 0 0	1 0 0
Water-boy	0 8 0	0 9 0	0 9 0	0 9 0	0 10 0	0 10 0	0 11 0
Sl. Moulder	1 1 0	1 1 0	1 2 0	1 2 0	1 2 0	1 3 0	1 3 0
Sl. Coremaker	1 1 0	1 1 0	1 2 0	1 2 0	1 2 0	1 3 0	1 3 0

Two other factories investigated in Bihar have standardised their wages, not only according to the different categories of workers, but also according to different shops. The following table gives maximum and minimum wage rates for a few of the numerous categories. It may be pointed out that sub-occupations have not been taken into consideration. Drivers, for example, include crane drivers (which are for electric, steam loco, hydraulic, petrol, overhead and jib or derrick cranes), stationary engine drivers (for steam, i.e., gas or other power engines), and drivers for air compressor, blower, blower condenser, boiler feed pump, booster, steam, engine boiler, ice engine, generator, generator condenser pump, hydraulic pump, turbine engine, service water pump, locomotive, electric-loco, diesel loco, petrol lorries, charging lorry, door extractor, hoist engine, lorry car, pusher, steam lorry and Lister truck. All these categories, however, are included under ' Drivers '.

TABLE 43.

Wage-rates (in Rs.) in two Bihar Factories.

Occupation.	Wage-rates in Factory I.		Wage-rates in Factory II.	
	Minimum	Maximum	Minimum.	Maximum.
Blacksmiths	1 8 0	3 0 0	1 8 0	2 6 0
Fitters	1 8 0	3 0 0	1 6 0	3 2 0
Shearers	1 4 0	1 12 0	1 6 0	2 6 0
Grinders	1 0 0	2 0 0	1 8 0	2 8 0
Firemen	1 0 0	1 8 0	1 0 0	1 6 0
Serangs	2 0 0	..	1 8 0	2 6 0
Khalasies	0 9 0	2 6 0	0 12 0	1 4 0
Hammermen	0 14 0	1 6 0	0 14 0	1 4 0
Moulders	1 0 0	2 12 0	1 12 0	2 2 0
Painters	0 12 0	2 0 0	0 14 0	1 6 0
Masons	0 14 0	2 0 0	1 4 0	2 2 0
Turners	1 8 0	3 0 0	1 4 0	3 2 0
Oilmen	0 14 0	1 0 0	0 14 0	1 2 0
Machinemen	1 0 0	3 0 0	1 2 0	2 8 0
Drillers	1 0 0	1 10 0	1 2 0	1 4 0
Welders	1 12 0	3 0 0	1 0 0	2 2 0
Drivers	0 12 0	5 8 0	1 0 0	2 10 0
Carpenters	1 4 0	2 2 0	2 0 0	2 6 0
Coolies	0 8 0	0 9 0	0 8 0	0 9 0
Rejas (sweepers)	0 7 0	0 7 6	0 7 0	0 8 0

The higher staff such as foremen, shift-foremen ,supervisors, *maistries*, chemists, etc., have graded scales, which vary from Rs. 100 to Rs. 950 p.m. with annual increment, varying from Rs. 5 to Rs. 25.

The wages and earnings of a few categories of workers in Factory I in the above table are given below. This factory is a very large one, employing over 28,000 employees.

TABLE 44.

Basic Wages and Gross Earnings in a Bihar Factory.

Occupation.	No. of workers.	Daily wage-rate		Basic wages earned.			Gross earnings.		
		Max.	Min	max.	Min.	Ave.	Max.	Min.	Average.
		Rs A	Rs A	Rs. A.	Rs. A	Rs. A.	Rs. A.	Rs. A.	Rs. A.
Fitters	145	3 0	1 8	78 0	39 0	51 13	105 12	61 14	75 13
Machinemen	237	3 0	1 0	78 0	26 0	43 11	105 12	50 2	67 1
Blacksmiths	50	3 0	1 8	78 0	39 0	49 15	105 12	65 4	73 14
Masons	268	2 4	0 14	58 8	22 12	40 2	86 15	46 14	68 2
Riggers	154	1 9	1 0	40 10	26 0	32 11	63 14	48 8	55 12
Painters	100	2 0	0 14	52 0	22 12	29 0	76 4	44 8	51 6
Moulders	245	2 12	1 0	71 8	26 0	39 1	101 6	51 4	65 14
Chippers	69	2 2	0 10	55 4	16 4	24 14	83 5	40 5	49 14
Carpenters	46	2 2	1 4	48 12	32 8	39 8	72 0	55 0	61 14
Tongsman	24	2 4	2 0	58 8	52 0	56 1	94 13	84 14	92 5
Khalasis	569	2 0	0 9	56 0	15 12	31 15	85 1	39 10	58 9
Forkman	62	0 14	0 13	24 8	22 12	23 1	48 4	46 8	46 13
Drivers	96	5 8	2 0	151 0	56 0	85 3	221 5	112 1	117 14
Firemen	95	1 8	1 0	42 0	28 0	39 9	76 2	61 6	70 7
Switchboard attendants	64	4 0	2 3	112 0	61 4	80 6	155 3	95 3	118 11
Coolies (male)	5756	..	0 8 9	15 5	15 5	15 5	31 7	31 7	31 7
Coolies (female)	3372	..	0 7 6	13 2	13 2	13 2	29 1	29 1	29 1
Sweepers (male)	408	..	0 8 9	16 7	16 7	32 9	32 9	32 9	32 9
Sweepers (female)	497	0 7 6	0 7 0	14 1	13 2	14 0	30 0	29 0	29 15

The wages and earnings in Factory II are given below.

TABLE 45.

Basic Wages and Gross Earnings in another Bihar Factory.

Occupation.	No. of workers	Basic wages earned			Gross Earnings.		
		Max.	Min.	Ave.	Max.	Min.	Ave.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Rollers	31	91	61	78	156	102	121
Finishing Heaters	44	78	51	70	126	97	109
Finishing Catchers	24	54	47	51	99	70	79
Opener and S. Helpers	50	34	30	33	61	52	54
Annealing Openers	22	34	30	32	58	50	54
Firemen	32	36	36	36	67	58	62
Roll-changing Khalasis	30	58	28	49	91	47	78
Turners	24	73	38	56	96	59	79
Machinemen	33	73	29	50	104	48	76
Fitters	77	73	44	57	108	67	86
Blacksmiths	15	54	50	52	85	75	80
Hammermen	15	34	27	31	58	47	54
Welders	13	47	44	46	79	70	75
Khalasis	14	47	29	35	78	48	58
Carpenters	4	67	46	54	100	71	82
Masons	8	62	47	52	96	71	80
Painters	3	54	29	42	78	48	63
Drivers	2	78	78	78	124	124	124
Coolies	92	15	13	14	30	27	28
Rejas (Female sweepers)	68	11	11	11	27	25	26

Note.—No. of days worked in the month are 27.

G.—Baroda.

None of the three concerns investigated has a graded or time-scale system of promotion. In one of the concerns the minimum daily wage rate is 11 as.

while the minimum monthly wage is Rs. 32. The wage rates and gross earnings in the other two concerns are given below :—

TABLE 46.

Wage-rates and Gross Earnings in two Baroda Factories

Occupation.	No of workers	Daily wage rate		Basic wages and D.			Gross Earnings		
		Max	Min	Max	Min	Ave.	Max	Min	Ave.
		Rs A P	Rs A. P	Rs. A P.	Rs A P.	Rs. A P.	Rs A. P.	Rs. A P	Rs A. P.
Factory I									
Fitters	45	3 0 0	1 2 0	50 2 6	29 0 6	40 5 8	50 2 6	29 0 6	40 5 6
Moulders	74	3 0 0	1 0 0	78 14 3	28 2 0	47 3 10	78 14 3	28 2 0	47 3 10
Coolies	90	1 0 0	0 12 0	35 12 9	18 5 6	24 6 5	35 12 9	18 5 6	24 6 5
Factory II									
Fitters	1		1 12 0	39 0 0	39 0 0	39 0 0	39 0 0	39 0 0	39 0 0
Turners	3	5 0 0	1 12 0	117 8 0	14 4 0	73 14 8	117 8 0	14 4 0	73 14 8
Moulders	3	3 14 0	2 12 0	120 4 0	50 5 0	75 14 0	120 4 0	50 5 0	75 14 0
Carpenters	3	2 8 0	1 8 0	67 8 0	28 8 0	44 8 0	67 8 0	28 8 0	44 8 0
Coolies	11		1 0 0	26 0 0	13 0 0	21 8 0	26 0 0	13 0 0	21 8 0

H.—Mysore.

The following are the daily wage rates paid in the factory investigated. A day consists of 8 hours.

TABLE 47.

Daily Wage-rates in the Mysore Factory.

Type of work.	Grade	Wage-rate.	
		Minimum.	Maximum.
		Rs A. P.	Rs. A. P.
(*i*) Highly skilled jobs of a very responsible nature (chargemen, Maistries, etc.).	I	2 10 0	3 0 0
	II	2 2 0	2 8 0
(*ii*) Skilled jobs requiring a good experience and careful handling	I	1 10 0	2 0 0
	II	1 4 0	1 8 0
(*iii*) Semi-skilled jobs or jobs of an arduous nature	.	0 12 0	1 2 0
(*iv*) Unskilled jobs requiring handling by male adults	..	0 8 0	0 11 0
(*v*) Jobs that can be handled by boys or women (adolescents and female coolies).	..	0 5 0	0 8 0

Note.—(*i*) Skilled and semi-skilled jobs (classes *ii* and *iii*) include masons, machinists, moulders, blacksmiths, hammermen, fitters, turners, etc.

It has been estimated that there has been an increase of about 15 to 25 per cent. in the rates since 1939 in the lower grades and up to 60 per cent. in the higher grades.

Dearness Allowance.—As the following table shows a number of methods are used for the payment of dearness allowance.

TABLE 48.

Methods of Payment of Dearness Allowance.

Province or State.	No. of concerns.	Method of payment of dearness allowance.					No dearness allowance.
		Flat rate for all.	Different flat rates for dif. groups.	Sliding scale based on cost of living index.	Based on percentage basis.	Mixed (more than one method).	
Madras ..	9	2	5	2	..	..	..
Bombay ..	18	2	4	7	1	..	4
Bengal ..	22	4	6	.	6	6	..
U. P. ..	3	..	..	.	1	2	..
Punjab ..	5	1	..	..	1	..	3
Bihar ..	4	..	..	.	..	4	..
Baroda ..	3	..	1	..	..	..	2
Mysore ..	1	..	1	.	..	..	..
Total ..	65	9	17	9	9	12	9

Nine concerns do not pay the dearness allowance, but most of them increased their basic wages in war time. The daily flat rate varies from 4 as. to 10 as., while the monthly rate varies from Rs. 2 to Rs. 18, both calculated on *pro-rata* attendance. In one concern, the rate is 6 pies per hour on working days only. Out of the 65 concerns investigated, as many as 26 give dearness allowance at a flat rate, in 17 of these 26 concerns for different groups of workers, different flat rates are used, some of which are given below.

TABLE 49.

Flat Rates of Dearness Allowance.

Province.	Concern.	*	Per month or per day.	Income Groups and Rates of Dearness Allowance. I	II	III	IV
Madras ..	I	I.G.	..	Up to Rs. 15 p.m.	Up to 11 As. p.d.	11 As. and over p.d.	..
		D.A.	p.d.	Re. 0 2 9	Re. 0 4 6	Re. 0 6 0	
	II and III	I.G.	p.m.	Up to Rs. 40	Rs. 40 and above	..	..
		D.A.	p.m.	Rs. 10	Rs. 13		
	IV	I.G.	p.d.	Up to Re. 1	Re. 1 and above		.
		D.A.	p.m.	Rs. 10	Rs. 12		.
	V	I.G.	p.d.	As. 5 to As. 10	As. 11 to Rs. 1 1 0	Rs. 1 2 0 to Rs. 1 8 0	Rs. 1 9 0 to Rs. 2 2 0
		D.A.	p.m.	Rs. 4	Rs. 4 8 0	Rs. 5 8 0	Rs. 6 8 0
Bombay	I	I.G.	p.d.	Up to Re. 1	Re. 1 & above		
		D.A.	p.d.	As 8	As. 10		
	II	I G.	p.m.	Up to Rs 60	Rs 60 & above	.	..
		D A.	p.m.	Rs. 12	Rs 10	.	..
Bengal .	I	I G.	p.d.	Up to 8 As	As 8 to Re 1	Re. 1 to Rs. 1 8 0	Rs. 1 8 0 to Rs. 2.
		D A	p.d.	1 anna	2 annas	As 3 to As 6	As. 6 to 8 As.
	II	I.G.	p.m.	Up to Rs. 34	Rs. 34 to Rs 150		.
		D A.	p m.	Rs. 14	Rs. 18		
	III	I.G.	p.m.	Up to Rs. 30	Rs. 30 & above		..
		D.A.	p.m.	Rs. 9	Rs 9—8 0	.	
	IV	I.G.	p.d.	Up to Re. 0 12 6	Rs. 0 12 9 to Rs. 1 8 6	Over Rs. 1 8 6	. ..
		D A.	p.m.	Rs. 8 8 0	Rs. 9 0 0	Rs. 10 0 0	..
Baroda	I	I.G.	p.m.	Rs. 20 to Rs. 50	Rs 51 to Rs 150		..
		D.A.	p.m.	Rs. 15	Rs. 17 8 0		
Mysore	I	I.G.	p.m.	Up to Rs 80	Rs. 80 to Rs. 100	Rs 100 to Rs. 150	..
		D.A.	p.m.	Rs. 7 8 0	Rs. 8 0 0	Rs. 10 0 0	..

* I.G.=Income Group. D.A.=Dearness allowance.

In a few cases, the income groups are more than four; for example, the rates of dearness allowance in a Bengal concern are as follows :—

TABLE 50.

Dearness Allowance in a Bengal concern.

On hourly wage-rates up to and										Dearness Allowance (pies per hour).
Including	Rs. 0	A. 2	P. 6	..	..	Rs. A P. ..	..	..	..	9
Over	0	2	6	not exceeding		0 3 3	..	..	..	9½
,,	0	3	3	,,		0 4 0	..	..	..	10
,,	0	4	0	,,		0 5 0	..	..	..	10½
,,	0	5	0	,,		0 6 0	..	..	..	11
,,	0	6	0	,,		0 7 0	..	..	..	11½
,,	0	7	0	,,		0 8 0	..	..	..	12
,,	0	8	0	..	..	..	..	..	..	12½

In some other cases, the rates are different for different categories of workers ; for example, in one concern, the rates for blacksmiths are Rs. 4, 3 and 2, for fitters, Rs. 15, 10, 4 and 3, for turners, Rs. 4, for coolies, Rs. 2, for pattern-makers Rs. 4 and for M|c men Rs. 4 and 3. In another factory, the moulding shop workers get dearness allowance at the rate of 6 as. in the rupee on the pay earned; workers in other shops of the factory have no uniform rate and get anywhere between Rs. 2 and Rs. 19 per month. Out of the nine concerns which base their dearness allowance on a sliding scale basis the two in Madras pay roughly 2 as. per point in the cost of living index. In one concern the rate at index 200 was Rs. 17-14-0 and the dearness allowance in September 1944 amounted to Rs. 18-6-0 per month. In Bombay most of the concerns utilising the sliding scale method follow the Bombay Mill-owners' Association, subject to certain conditions. One of the factories, for example, pays the allowance according to the Millowners' Association's scale, only to those who are getting less than Rs. 1-12-0 per day; for those getting higher the factory has a more favourable scale by which this allowance rises by one per cent of basic wages earned for every two points by which the cost of living index exceeds 100. In another factory, the workers get four-fifths of the allowance paid by the textile mills. In two concerns, the workers get dearness allowance at the rate of one per cent for each two points by which the cost of living index exceeds 100 or according to the Millowners' Association scale, whichever is higher. Nine of the units investigated have fixed dearness allowance as a certain proportion of the total wages earned by a worker. In the Bengal factories, this proportion ranges from one anna to 6 as. per rupee. In a U. P. factory, the proportion of dearness allowance varies inversely with the basic wage of a worker as follows :

TABLE 51.

Dearness Allowance in a U. P. Factory.

(Allowance based as a percentage of wages).

Monthly wages earned	Rate of dearness allowance
	Re
Re. 1 to Rs. 16	0 10 6 per rupee earned.
Rs. 16 to Rs. 25	0 8 3 ,, ,,
Rs. 25 to Rs. 32½	0 7 6 ,, ,,
Rs. 32½ to Rs. 40	0 6 9 ,, ,,
Rs. 40 to Rs. 50	0 6 0 ,, ,,
Rs. 50 to Rs. 75	0 4 6 ,, ,,
Rs. 75 to Rs. 100	0 4 6 ,, ,,

In a Punjab concern, dearness allowance is paid at the rate of 10 per cent. of the basic wages. As many as 12 concerns utilise more than one method for the payment of dearness allowance and some of the examples are given below. In a Bengal factory, dearness allowance is paid at the rate of 25 per cent. of the wages earned plus Rs. 5 with a minimum of Rs. 10 p.m. In another Bengal concern, those drawing wages up to Rs. 50 get 1 anna 6 pies per rupee, while others getting below Rs. 80 get 1 anna per rupee.

There is also a general Dearness Allowance at the rate of 6 pies per rupee for every hour worked. In a third Bengal concern, workers getting below Rs. 50 are given Rs. 0-1-6 per rupee as dearness allowance, while those earning between Rs. 50 and Rs. 100 get Rs. 2-8-0. In a U. P. factory, ordinary coolies get dearness allowance at the rate of Re. 0-5-6 per rupee earned, while workmen employed on monthly wages are paid the allowance at the rates recommended by the Employers' Association of Northern India. In another U. P. concern, there are three rates of Dear Food Allowances, which are added together and are then paid to the workmen. These rates are as follows :—

TABLE 52.

Rates of Dear Food Allowance in a U. P. Factory.
(All the three D. F. As are added together and paid)

Basic Wages		Dear Food Allowance (per rupee).	
Daily.	Monthly.	I D.F.A.	II D F.A
		Rs. A. P.	Rs. A. P.
1 anna to 11 As.	Re. 1 to Rs. 19	0 2 0	0 2 0
12 As. to Re. 1-4-0	Rs. 19-8-0 to Rs. 32-8-0 ..	0 1 6	0 1 6
Rs. 1-5-0 to Rs. 2-14-0	Rs. 32-8-0 to Rs. 75 ..	0 1 6	0 1 0
Above Rs. 2-14-0	Above Rs 75	0 1 6	0 0 6
		III D.F.A.	
1 anna to As. 15	Re 1 to Rs 25	1 pie per point per day	
Re. 1 to Rs. 1-8-0	Rs 26 to Rs. 40	1·5 ,, ,, ..	
Rs. 1-8-6 to Rs. 2-14-0	Rs. 41 to Rs. 75	2 pies ,, ,, ,.	
Above Rs. 2-14-0	Above Rs. 75	2·5 ,, .. ,,	

The four factories investigated in Bihar have adopted the following scales.

TABLE 53.

Dearness Allowance in Four Bihar Factories.

Income groups.	Rate of Dearness Allowance.
	Rs. p.m.
Up to Rs. 100 p.m.	10
Rs. 100 to Rs. 199 p.m.	13
Rs. 200 to Rs. 299 p.m.	16
Rs. 300 to Rs. 399 p.m.	20
Rs. 400 to Rs. 499 p.m.	25
Rs. 500 to Rs. 2,000 p.m.	10% of salary.
Rs. 2,000 to Rs. 2,200 p.m.	Difference between salary and Rs. 2.200 p.m.

Bonus and other Allowances.—34 concerns (Madras, 4; Bombay, 15; Bengal, 7 ; U. P., 1 ; Punjab, 1 ; Bihar, 4 ; Baroda, 1 and Mysore, 1) pay what may be called the ' prosperity ' bonus, because of the war-time profits. This bonus varies from 25 days' to 3 months' wages in a year and is generally subject to such conditions as prescribed number of days' attendance, employment at the time of distribution, etc. In a Bombay concern, those who take the bonus in 12 equal instalments are paid a further 25 per cent extra at the end of their final payment. In all cases, however, the bonus is temporary and conditional on the extent of profits earned by the company.

Besides this war-bonus, workers get some other allowances also. In Madras, the Government factories do not give the ' prosperity bonus ', but grant what is called a " Saturday Bonus ", which may be considered as an attendance bonus. On Saturdays the workshops work for 5-1|2 hours and wages are given for two hours more as " bonus " to workers who attend regularly throughout the week. If a worker is irregular in attendance, he loses the whole or a part of this Saturday bonus. In a Bombay factory, production bonus is given to certain workmen engaged on specialised jobs. In two other Bombay factories a Sunday or holiday bonus is paid to all workers who work on Sundays or holidays. This bonus is in addition to the overtime rates stipulated under the Factories Act. In Bengal, three factories award Puja bonus which in one case is equivalent to 50 per cent of the salary of the workers. In another Bengal concern, which pays production bonus, the time-rated workers are allowed yearly general bonus equivalent to two months' earnings, while piece-rated workers get 10 per cent of their " excess earnings ". In a few Bengal concerns, the practice of awarding attendance bonus, war allowance and food grains at concessional rates exists. In the four factories investigated in Bihar a number of allowances and bonuses are paid. A war-time allowance, known as Emergency Allowance, is paid in two factories. It is 10 per cent. of the salary, subject to a minimum of Rs. 5 per month, to all employees getting below Rs. 500 per month. Three factories give a flat cost rebate per month at the rate of Rs. 3-11-0 for family-men and Rs. 2-8-0 to bachelors by way of financial concession against food purchases, since Government have taken over the control of rationing. Production bonus averaging 25 per cent. is paid to all daily-rated workers in one of the factories. Production bonus in another factory is based on the total monthly production of finished steel and is payable to all monthly-paid workers, drawing less than Rs. 300 p.m. (or Rs. 10 p.d.). The maximum bonus is payable for a production of 50,000 tons and on this production, the lowest rated employees would earn Rs. 6 p.m., while an employee getting Rs. 300 p.m. would get Rs. 12 p.m.

In the biggest factory (employing over 28,000 workers) in Bihar, there are other miscellaneous allowances, such as the following : (i) *Departmental bonus*--based on the production of a department and payable to workers directly concerned with such production; this bonus being in addition to the general Production Bonus and in many cases equal to 100 per cent. of a man's wages; (ii) *Shipment Bonus*—payable on the outward despatch of materials to workers employed in Shipping Departments, or in the Shipping Sections of production departments, in the case of lowest paid workers eligible for bonus in the merchant mill shipping department, i.e., stock khalasies, whose rate is 9 as. per day, the monthly bonus being on an average Rs. 29-6-0 per month; (iii) *New Departmental Bonus*—payable to workers in production departments, who receive general production bonus but are not eligible for departmental bonus, it being 10 per cent of an employee's wages ; (iv) *Attendance*

Bonus—payable to all weekly paid employees, as well as to monthly paid employees, whose wage proper is less than Rs. 15 p.m., the bonus amounting to two days' additional pay for every four weeks of duty provided that the employee has not been absent for more than one day during that period and to one day's pay, if he has been absent for not more than 2 days during the period of four weeks ; (v) *Efficiency Bonus*—payable to certain workmen in the shops employed on repetition jobs amounting to one pie in the rupee of the employee's wages for every one per cent. (after the first five per cent.) of time he serves on the estimated maximum time for each job ; (vi) *Demurrage Bonus*—payable every month to most monthly-paid employees of the Traffic Department provided the Company does not incur any liability for demurrage to the B. N. Railway and (vii) *Hot Bonus*—payable to the locomotive crew who deliver the steel ingots from the pitside of the furnaces to the soaking pit of the mills, the bonus depending on the speed with which the ingots are delivered. In the Mysore factory, a production bonus is paid to workers at the blast furnace, the pipe foundry, the open hearth and the rolling mills according to the excess of output over a fixed minimum. This is shared by all the workers in the section in proportion to their wages.

Overtime.—Of the 65 concerns investigated only 14 concerns (Bombay, 4; Bengal, 5; U. P., 2; Punjab, 2; and Baroda, 1) do not work overtime. Though the rate of overtime lacks uniformity, the provisions of the Factories Act with regard to extra payment for overtime are generally observed. Overtime is defined in most concerns as any work beyond scheduled working hours and work on any holiday. Such work is compulsory only in a few concerns, which are engaged on war-work. One way of compelling people to take up overtime is to threaten them that they would not be allotted overtime again when a chance occurs, if they refuse to take it up when asked. In war time, exemptions have been given to engineering concerns from Sections 34, 35 and 36 of the Factories Act. It was alleged by some representatives of workers that taking advantage of these exemptions an excessive amount of overtime work was being done for the following reasons (i) the fact that there is a shortage of machinery and equipment, (ii) the desire of the employer to carry on with a relatively small labour force and (iii) the substantial amount being paid as dearness allowance to workers, it is cheaper to pay a worker overtime at 1-1|2 times the daily rate rather than engage him for another day or engage extra labour. Over-time work is generally recorded in registers. In a few cases it was found that these registers were not open to workers or their representatives for inspection.

Deductions and Fines.—Voluntary deductions from the wages of the workers are made for provident fund, house rent (if the workers are housed in Company's quarters), rations, subscriptions to the Co-operative Society, advances or loans granted by the factory, etc. Fines, however, have been imposed in 18 concerns (Madras, 1; Bombay, 5; Bengal, 6; U. P., 1; Punjab, 1; Bihar, 1; Baroda, 2; and Mysore, 1). The details of some of these Fine Funds are given below :

TABLE 54.

Fine Fund.

Province	Concern.	No. of workers employed	Amount outstanding in Fine Fund (Rs.)	Period	Fine Fund used for
Bombay . ..	I	2,692	38 2 0	1938 to 1944	'Workmen's Welfare Fund'.
	II	575	918 14 6	Up to 31—1—'44	Conveyance and Medical charges.
	III	393	156 6 6	1943-44 ..	'Workmen's Benefit Fund'.
	IV	228	12 4 6	Outstanding in Fund	Education of the workers.
	V	158	203 11 0	,,	Benefit of the workmen.
Bengal	I	890	60 0 0	,,	Hospital Fund.
	II	585	18 2 0	1944	Medical Aid
	III	3,713	3,353 11 6	Outstanding in Fund	Not yet used
	IV	1,856	20 10 0	,,	,,
	V	2,085	32 9 0	1943	Welfare of workers.
U.P.	I	3,356	40 12 0	1944	,,
Punjab	I	189	1 10 0	1944	,,
Bihar	I	28,477	1,725 0 0	Outstanding in Fund	Not yet used.
Baroda	I	248	No fine in 1943	.	..
	II	214	9 0 0	Outstanding in Medicines Fund	..

In the Mysore concern, fines are imposed in small amounts, but no separate Fine Fund is maintained, the amount going to the general revenues of the factory.

Wage Period.—The following figures show the wage periods adopted by the investigated concerns.

TABLE 55.

Wage Periods.

Province.	Number of Concerns paying the workers				Total
	Monthly	Fortnightly.	Weekly.	Miscellaneous (at varying periods).	
Madras	6	2	1		9
Bombay	12	1	1	4	18
Bengal	14	3	5		22
U.P.		2		1	3
Punjab	4		1		5
Bihar	1	..		3	4
Baroda	2	.		1	3
Mysore	1		.		1
Total ..	40	8	8	9	65

The nine concerns which use several methods, generally pay their unskilled workers either daily or weekly and their skilled workers monthly. A few of them pay some of their workers fortnightly. The waiting period in the case of monthly-paid workers varies from 7 to 10 days. In the case of weekly payment, normally one week's pay is kept in hand and payment is made on subsequent Saturday.

Holidays.- There is hardly any uniformity as regards closed holidays in the investigated units. However, it was found that 37 units (Madras, 1; Bombay, 12; Bengal, 13; U. P., 3; Punjab, 4; Bihar, 1; Baroda, 2; and Mysore, 1) allow holidays only once a week, usually on Sundays. The remaining 28 concerns allow some public holidays for festivals etc. in addition to the weekly holiday. These additional holidays vary from one to ten in number and may be with or without leave. Generally " no work no pay " is the rule in many factories. In a Bombay concern, sectional half-holidays are given on communal basis. The important holidays granted in Bengal are for Durga Puja and for Viswa Karma Puja and in South India for Dussera and Dipawali.

Working Conditions.

Shifts and hours of Work. The number of shifts varies from factory to factory. In one of the U.P. factories, there are 41 shifts, which include general day and night shifts for various categories of workers. Generally, the maintenance staff and the continuous process workers have separate shifts from those for men on general shifts. Some of the ' shops ' have their own independent shifts. In the following tables, however, the most important shifts have been taken into consideration.

TABLE 56.

Number of Shifts.

Province or State	Total number of concerns which have						Total No. of	
	1 shift	2 shifts	3 shifts	4 shifts	5 shifts	7 shifts	concerns	shifts
Madras	6	3	.	..		..	9	12
Bombay	7	5	2	..	1	1	16	35
Bengal	12	4	1	4		.	21	39
U.P.	..	2	..	..	.	.	2	4
Punjab	3	..	1	1	.	..	5	10
Bihar	..	..	.	4	.	..	4	16
Baroda	2	..	1	..		..	3	5
Mysore	..	.	..	1	.	..	1	4
Total ..	30	14	5	10	1	1	61	125

The hours of work, rest-interval and spreadover of these 125 shifts are shown in the following table.

TABLE 57.

Hours of Work, Rest Interval and Spreadover.

Nature of (normal) shifts.			Number of such shifts in the sampled factories in								Total
Actual hours of work	Rest Interval	Spread over	Madras	Bombay	Bengal	U.P.	Punjab	Bihar	Baroda	Mysore	
7½	½	8		..	15	.	3	12		3	33
7½	2	9½		.	.	..			..	1	1
8	½	8½		.	4		2		..	..	6
8	1	9	6	5	3	..	.	1			15
8	1½	9½	..	1	3	.	.	1			5
8	2	10	..	..	..	.	..	2	..	..	2
8½	1	9½	..	4	..	.	..	..	..		4
8½	½	9	.	.	6	.	.		1		7
8½	1	9½	3	6	3	.	1	.		.	15
8¾	½	9¼	1	..	..			.			1
9	½	9½	.	..	1	.	.		.	.	1
[illegible]	1	10	2	15	[illegible]	4	4	..	1	..	27
9	1½	10½		1	..	..	.	.	..		1
9½	1	10½	..	1	..			.	1		2
10	1	11	.	2	2						4
10	1½	11½			1		.				1
	Total	.	12	35	39	4	10	16	5	4	125

Thirty out of the 33 shifts in the first line in the above table, are continuous process shifts, each of 8 hours. Out of the 125 shifts, 19 are night shifts as follows.

TABLE 58.

Night Shifts.

Nature of night shifts			Number of night shifts in the sampled factories in				Total
Actual hours of work.	Rest Interval	Spread-over	Madras	Bombay	Bengal	U P.	
8	1	9	2	3			5
8½	1	9½	..	2		.	2
8¾	¼	9¼	1	..	.	..	1
9	1	10	..	4	..	2	6
10	1	11	..	2	2		4
10	1½	11½	..	..	1	.	1
		Total ..	3	11	3	2	19

The hours of work in some concerns may vary from time to time. For example, the single shift in a Bengal concern is of 8-1|2 hours normally but sometimes of 9-1|2 hours depending on the pressure of work. In a night shift in another Bengal concern, the rest interval of 1-1|2 hours is broken into two : first from 10.30 p.m. to 11.30 p.m. and the second from 2.30 a.m. to 3.00 a.m.

Seven factories in Madras, three in Bombay and five in Bengal have separate shifts for Saturdays. These shifts, as the following table shows, are 19 in number.

TABLE 59.

Hours of work on Saturdays.

Province	Number of shifts with a spreadover of hours											
	3½	4	4½	4¾	5	5½	6	6½	7	7¼	7½	8
Madras	1*	..	1		2	1	2	1				
Bombay .. .		1*		1		.	1*			1	1	1*
Bengal .			2	.	1		1	..	1		.	

*These are night shifts.

Overlapping shifts are worked in some concerns, which work more than three shifts. Overlapping shifts are usually worked by separate sets of workers. The working hours vary between 7-1|2 and 10 a day and 45 and 51 a week.

Ventilation, Lighting, Congestion, Flooring, Protection against Heat, etc.— The condition of ventilation, lighting, etc. are in most cases fairly satisfactory. War-time expansion in employment did not have a corresponding expansion in the space of the workshops, because of war-time restrictions on construction. The result is that certain sections of the factory, such as the foundry, the carpenters' workshop, the smithy, the fitting and machine shops, etc., have been over-crowded. In a Punjab foundry, the hot-mill was found to be quite dark, while some other places, where bars and scarps were being cut, were very congested. On an average, however, a worker gets about 84 sq. ft. floor area. The following table gives some figures in this respect.

TABLE 60.

Floor Area per Worker.

Province or State	Concern	No. of workers	Floor area per Worker (in sq. feet).
Bombay	I	596	56
	II	2,085	14
	III	1,706	167
	IV	275	122
	V	238	30
	VI	393	90
	VII	250	110
	VIII	228	90
	IX	1998	12
U.P.	I	3356	50
Bihar	I	2696	112
	II	3637	194
Baroda	I	30	50

The details about Bengal concerns are given below :

TABLE 61.

Ventilation, Lighting and Congestion in Bengal.

Concern	No. of workers	Area (in sq. ft).	No. of Lights	No. of windows	Area of each Window
I	80	13,860	51	10 6	7′ × 4′ 5′ × 5′
II	30	5,448	32	32	3½′ × 2′
III	1,034	46,530	.	..	..
IV .. .	83	2,160	42	22	4½′ × 3′
V	51	11,520	.	40	6½′ × 3′
VI	66	3,400		13	doors (with total area 438 sq. ft.)
VII	892	1,10,934	.	210	5′ × 2½′
VIII	1,485	1,21,770		.	
IX	278	90,000	.	.	..
X	841	2,76,500	.		..
XI	1,400	3,00,000			.

NOTE.—Besides the windows, there are many doors.

A number of workshops are sheds with high corrugated iron roofing generally open on three or four sides. The floor is earthen in the foundry and paved in the machine shop. In most of the concerns owned by Government or public bodies, the workshops are well constructed with high roofs in a large compound. Lighting is adequate, there being natural light as well as electric light. A good deal of work on wood and metal is done in the open in many concerns. This is rather unsatisfactory in hot places like Bombay and Madras as the sun's heat is scorching practically throughout the year. The tin sheds also prove very hot and oppressive in summer.

Shelters.—Only 17 concerns (Madras, 4; Bombay, 3; Bengal, 5; U.P., 2; Punjab, 2 and Bihar, 1) have provided rest shelters for their workers. The details of some of these are given below.

TABLE 62.

Rest Shelters.

Province	Concern	No of workers		No of shelters	Area	Remarks.
Madras	I		607		120′ × 10′	Brick walls, corrugated iron roofing
	II		150	1	1000 sq ft	Cement floor
Bombay . .	I	Males	2,246	1		Dining room and a rest-hall only for female staff
		Females	259			
	II		75	1	15′ × 12′	..
	III	Males	189	4	(*i*) 225 sq ft	4 rooms (15′ × 15′) with seats and tables for girls.
		Females	86		(*ii*) 30 × 30′	Tiffin canteen with seats and tables for men.
					(*iii*) 40′ × 20′	Shelter-shed without seats or tables.
					(*iv*) 40′ × 20′	Change-room with seats and tables.
Bengal . .	I		70	1	16′ × 22′	
	II		30	1	15′ × 24′	
	III	Males	3,579	1	75′3″×20′9″	For male workers
		Females	134	1	37′9″×20′9″	For female workers
	IV		8,357	1	75′ × 20′	
	V		1,500	1	75′ × 20′	
Bihar .. .	I	Males	3,614	3	(*i*) 39′ × 24′	Two dining halls
		Females	143		(*ii*) 39′ × 24′	
					(*iii*) 17′ × 11′	For female workers.

In other cases, during rest intervals workers go to their houses or utilise the space in the workshop or in the compound outside the workshop. It may be mentioned that in Madras it is obligatory for concerns employing 150 men or more to have a shelter. In another Madras concern, the tiffin rooms are partitioned for different communities and there is a separate tiffin room with tables and benches for Anglo-Indians.

IV.—Welfare Activities.

Sanitary arrangements in the case of big mofussil factories, which have provided housing accommodation for their workers, are generally common for all workers whether resident or not. Such arrangements are in existence in Jamshedpur (Bihar), Burnpur (Bengal), Bhadravati (Mysore), and in some other places and will be studied later in this Chapter. In this section, sanitary and other arrangements inside the workshop compound of a few factories have been described. The following table gives the number of latrines and urinals in 39 factories.

TABLE 63.

Latrines and Urinals.

Province	No. of concerns	No. of Workers employed	No. of latrines	No. of urinals	No. of workers using one latrine or urinal.
Madras	6	1,282	35	34	34
Bombay	12	10,852	206*	76	38
Bengal	15	16,531	202	82	57
U.P.	1	210	6	24	7
Punjab	5	574	34	4	15
Total ..	39	29,449	483	189	44

* These include 8 latrines for 122 female workers in 3 concerns.

Besides, in two Bengal concerns employing 4,730 and 5,488 workers, there are 5 and 10 septic tank latrines respectively. The sanitary arrangements in the former company are given below :

TABLE 64.

Sanitary Arrangements in a Bengal Factory.

	Structural works	Mechanical and wagon works
Total number of workers including batches working in different shifts	1,875	2,855
Maximum No. of workers in a single shift	1,275	2,148
Existing Sanitary Arrangements .	(*i*) One new Septic Tank Latrine with Rotating Sprinkler to filter bed-capacity (700 users) with 7 external urinals.	(*i*) One new Septic Tank Latrine with Rotating Sprinkler to filter bed for 700 users, with 7 external urinals.
	(*ii*) One Septic Tank Latrine Capacity —1000 users.	(*ii*) Two Septic Tank Latrines each for 700 users.

Water supply seems to be fairly adequate. The six Madras concerns have 25 water-taps, one hand-pump, one bore-well and two water-tanks. In Bombay also water-taps are common and 8 of the 12 concerns have provided 65 water-taps. Washing facilities, mostly by means of water-taps, are provided in all the 12 concerns. One of these concerns, employing about 2,000 workers has 37 washing taps and 25 shower baths. In Bengal, tube-wells seem to be common. 11 concerns have 12 water-tanks, 9 tube-wells, 1 well, 4 water-reservoirs (with capacity ranging from 400 to 4,000 gallons) and a number of taps. In two factories (under one Management), employing altogether 9,857 workers, there are 74 latrines for males and 9 for females, 13 urinals, 219 drinking water taps, 2 bathing tanks, 7 ranges of shower baths with 52 taps for bathing and washing for use by labourers. The Punjab factories utilise hand-pumps and water-taps for water supply. One of the Punjab factories employs 4 women, but there are no separate latrines for them. In most of the Provinces, one of the most frequent remarks in the Factory Inspection Book is that the lime-washing and tarring of latrines is over-due. The examination of sanitary arrangements is under the jurisdiction of the Public Health Staff, and it is alleged that there is no proper co-ordination between this staff and the Inspectorate of Factories. In many cases, there are no separate urinals and water is supplied through Municipal water-taps or through a water reservoir with a few taps. In some cases these reservoirs need cleaning. Cool water in summer is supplied in 25 concerns (Madras, 5 ; Bombay, 4 ; Bengal, 4 ; U. P., 2 ; Punjab, 2 ; Bihar, 4 ; Baroda, 3 and Mysore 1) through various means such as earthen jars, filters, etc. In a Jamshedpur factory, for example, there are three systems for supplying drinking water : (i) Spray system supplies filtered water to employees throughout the Plant. There are 90 sprays in service. (ii) Tap system also supplies filtered water either by means of cooling coils or direct refrigeration. (iii) Bottled aerated water is supplied to all the departments free of cost. Ice also is supplied free to all departments either for cooling aerated water or drinking water. The capacity of Aerated Water Plant is 15,000 bottles per day while that of the Ice Plant is 15 tons per day. In another Bihar factory, filtered water is available at numerous points throughout the plant and cool water is supplied during summer together with ice and soda water, free of charge.

Medical Aid.—Medical aid in General Engineering industry varies from well-equipped hospitals to ordinary First Aid Boxes. The arrangements can be broadly classified as follows :—

TABLE 65.

Medical Aid Arrangements.

Medical Arrangement	Number of concerns having the arrangements in							
	Madras	Bombay	Bengal.	U.P.	Punjab.	Bihar.	Baroda.	Mysore
Hospitals	.		3	..	.	3	.	1
Dispensaries	1	4	9	..	2	1		..
Private practitioners	1	2	3	..	2	..	.	..
Dispensary of a sister concern . .	.	1			..	..	1	..
Contribution to General Hospital	..	1	1	..	..	..	.	..
First Aid Boxes	7	10	6	3	1	..	2	..

One of the three hospitals in Bengal has 4 beds for indoor patients, but there have been no indoor patients up till now : The hospital is in the charge of a whole-time doctor and on an average 10 cases are treated every day. The hospital of another Bengal factory comprises Medical, Surgical and Maternity Wards and also infectious diseases blocks for cholera, small-pox, typhoid and meningitis cases. There are three branch dispensaries, where First Aid and preliminary treatment are given. In addition, there is a Town Dispensary in operation and one more under construction. Approximately 894 cases in the outdoor and 51 cases in the indoor section are treated per day. There are 17 doctors, including the Chief Medical Officer. Four of them are M.Bs. and the rest are L.M.Fs. The third Bengal factory, having a hospital, has also three dispensaries and a Maternity Clinic. The Chief Medical Officer is L.M.F., L.T.M., and he has seven Assistants, six of whom are L.M.Fs. and one is an M.B. The cases treated per day (in 1943-44) were 612. Three of the four factories, investigated in Bihar (Jamshedpur) have maintained well-equipped hospitals. One of these hospitals has 20 beds and the medical staff consist of 33 whole-time doctors (including those at Branch Dispensaries and First Aid stations), 4 dental surgeons, 44 registered nurses and 18 probationer nurses, besides a large number of compounders, dressers, ward boys, etc. The hospital has the following clinics : (i) x-ray clinic, (ii) V.D. clinic. (iii) Ear, Nose and Throat clinic. (iv) Eye clinic. (v) Fracture clinic. (vi) Dental clinic, and (vii) Anti-Rabic clinic. The Maternity Ward in the hospital is in charge of a fully qualified graduate Lady Medical Officer and has 24 beds, including six beds for children. A Gynaecological Ward with 18 beds is also maintained. There is also a Maternity and Child Welfare clinic. The average number of cases treated every day at the dispensaries is 4,142. The emoluments of the doctors among whom some have foreign degrees are as follows :—

Chief Medical Officer	Rs. 950—50—1200 p.m.
Deputy Medical Officer	Rs. 750—50/2—900 p.m.
Medical Officer	Rs. 500—25—700 p.m.
Medical Officer	Rs. 300—25—500 p.m.
Lady Medical Officer	Rs. 300—25—500 p.m.
Resident Medical Officer	Rs. 160—10—300 p.m.
Asstt. Medical Officers	Rs. 120—15—270 p.m.
Asstt. Medical Officers	Rs. 80—10—180—10/2 200 p.m.

The hospital of another Bihar factory is staffed by 3 fully qualified L.M.P. doctors, 1 lady doctor, 1 matron, 5 nurses, 3 dressers, 6 compounders and 10 sweepers. The third Hospital has 2 M.B.B.S. doctors and 1 L.M.F. The salaries of the doctors vary between Rs. 130 to Rs. 440 per month. The hospital has an out-patient department and 11 beds. Total number of cases treated daily in 1944 was as follows :—

TABLE 66.

Cases Treated in a Bihar Factory.

	Average number of cases treated per day in 1944		
	New	Old	Total
Employees	61	182	243
Non-Employees	56	167	223
	117	349	466

NOTE :—Average number of indoor patients was 23 per month.

The hospitals in Bihar factories maintain Ambulance cars. The hospital in the Mysore factory, though small, is equipped with an X-ray apparatus, an Ultra Violet Ray Apparatus, an Ambulance Car and an inpatient ward with 12 beds. It has among others, a Medical Officer of the grade of an Assistant Surgeon and two Sub-Assistant Surgeons. A Women's and Children's hospital and a Maternity Ward with 18 beds have also been established. In all the six hospitals, treatment is free both for the workers and for their families.

Some details about 15 of the 17 dispensaries in the sampled factories are given below. The system in all cases is allopathic.

TABLE 67.

Dispensaries.

Province	Concern	Doctors' Remuneration (Rs p m)	Doctors' Qualifications	Cases treated per day	Remarks.
Madras	I	..	..	70	Part time (2 hours) doctor whole time compounder.
Bombay	I	.	.	17	No doctor, but a qualified dispenser.
	II	750	L.M & S. L.M.R.C.P. D.T.M., L.M.	175	
	III		.	30	Doctor attends only twice a week. Total medical cost is Rs. 440 p m.
Bengal	I		M B	20–25	
	II		L.M F.	.	..
	III	65	M B.	25	Part-time Doctor. Two compounders on Rs 42 and Rs.30 p.m.
	IV	50	L M F.	.	In addition the Company pays a contribution of Rs. 50 per annum to a General Hospital.
	V	174	M B	100 to 125	
	VI	460	M B.	145	Compounder and dressers are also employed.
	VII	35	Compounder	.	
	VIII	253	Graduate in Medicine	115	
		128	L.M F.		
		104	2 Lucent ates		
Punjab	I	400	M B.B.S	136	3 compounders and 1 dresser are also employed
	II	160	L M.P.	60 to 70	Part-time doctor ; there is a whole-time compounder.
Bihar	I	175	L M.F.	175	..

Private practitioners are engaged by eight concerns, three of which pay each Rs. 25 per month, one pays Rs. 50 per month, while the remaining four concerns pay the doctor according to the number of cases he treats. Contributions to General Hospital are made by two concerns, one each in Bombay and Bengal (No. IV in the above table) ; these contributions are in addition to the payment of the bills charged by the hospitals. The Bombay factory, for example, contributed Rs. 200 in 1943 to the J. J. Hospital, in addition to Rs. 77 charged by the hospital for the cases treated.

Periodical medical examination of workers seems to be almost completely absent, except for those working in the Benzol Plant in a Bihar factory. These workers are examined every six months. Gasmen, Emptiers, Cranemen, Carpenters, etc., are prone to respiratory affections. Rammer coolies sometimes suffer from Byperkeratoses of hands. The common diseases are given in the following table. They relate to an Outdoor Charitable Dispensary managed by a Bengal factory, employing 2,085 workers.

TABLE 68.

An Outdoor Charitable Dispensary in Bengal.
Diseases Treated in the Year 1944.

Months.	Injury	Ring worm	Scabies	Eye disease	Ear disease	Malaria	Influenza	Mumps & chest cases	Vendisease	Ulcer	Disease of Rectum	Disease of Throat	Cellulitis	Caris tooth	Hernia & Hydrocele	Nose disease	C.S Fever	Intestinal Disease	Total
January	259	81	84	70	20	112	154	5	..	234	3	31	11	20	..	8	..	261	1353
February	252	70	50	50	19	83	156	4	..	183	5	32	21	28	1	8	.	178	1140
March	262	99	87	102	26	84	193	17	1	225	8	37	15	44	1	7	..	237	1445
April	234	125	92	112	14	107	187	8	..	232	[illegible]	40	13	33	1	8	..	309	1521
May	213	176	163	132	39	159	88	10	..	297	7	24	22	34	..	8	..	358	1730
June	252	137	145	115	21	112	95	10	..	229	3	33	20	46	..	6	..	334	1558
July	232	202	189	126	27	115	103	8	..	249	6	44	18	44	3	9	..	350	1725
August	172	162	158	115	21	109	109	13	..	197	4	28	16	38	..	11	..	325	1478
September	142	91	60	70	37	154	160	8	..	135	5	31	21	32	1	8	..	156	1111
October	154	85	89	116	8	151	159	9	..	180	5	28	22	28	1	..	..	228	1263
November	115	77	90	115	..	128	203	9	..	178	3	41	16	36	1	5	..	256	1278
December	111	58	83	61	14	68	210	32	1	230	..	35	5	19	..	..	1	257	1185
Total ..	2398	1363	1290	1184	246	1382	1817	133	2	2569	55	404	200	402	9	78	1	3249	16782

Canteens.—Out of the 65 concerns, only 24 have provided canteens for their workers as follows :—

TABLE 69.

Canteens.

Run and managed by	Number of factories having canteens in						
	Bombay.	Bengal	U P.	Bihar	Baroda	Mysore	Total
Company	3	1	..	1*	..	..	5
Contractors	8	2†	1	2	2	1	16
Workers' Co-operative concerns ..	..	3	..		..	..	3

*This factory has two canteens.

†One of the canteens is run by Indian Tea Market expansion Board.

In the case of canteens managed by workers, the establishment charges (cost of light, water, fuel, servants, etc.), are generally borne by the Company and hence the rates charged in canteens run by the Company or by the workers are generally lower than in those managed by contractors. In many cases, some concession is given to workers in the absence of a canteen. For example, free tea is given to night-shift workers in a Madras concern and to overtime workers in a Bombay concern. In a Bengal factory, workers get the midday meal free from the canteen run by the Company. Most of the canteens in the above table serve only tea and light refreshments. Some factories in Bengal and Bihar, however, provide meals also, while the Mysore canteen sells rice-packets at nominal rates of Re. 0-0-9 and Re. 0-1-6 each. In a Bihar factory on an average about 15,000 meals and light refreshments are served daily in two shifts at the two canteens. The canteens are not open at night. They are housed in two large buildings each divided into different sections for cooking and serving meals separately to Hindu vegetarians, Hindu non-vegetarians and Muslims (with whom Christians are included). Thus there are in fact six separate canteens. Another Bihar factory has also separate canteens for Hindus and Muslims.

Creches and Education.—The sampled factories employed in 1944, in all 5,244 women workers, out of which 4,564 were in Bihar factories. In Bombay, female labour employed in factories comprises mostly unmarried young girls and hence the necessity of creche does not arise. Two of the Bihar factories (employing 3,445 and 143 women) maintain creches. In one of these, there are three specially designed permanent combined Rest Houses (for women employees) and Babies' Creches, located at convenient places near the place of women's work and the construction of three more such buildings is in hand. A trained nurse assisted by women helpers is in charge of each permanent centre. In the other factory in Bihar, the creche is attached to the hospital, and is in the charge of a qualified Matron, assisted by trained staff. Suitable food as well as medical care and supervision is provided and mothers are given time-off during working hours to visit their children.

Educational facilities are provided only by 8 factories as follows :—

TABLE 70.

Educational Facilities.

	Number of concerns providing Educational facilities			
	Bengal	U.P.	Bihar	Mysore
For Children only	2	..	1	..
Both for Adults and Children	1	1	2	1

Free primary schools for the children of workers are maintained by four factories in Bengal, while only one of them conducts evening classes for adult workers, where Metallurgy, Metal Engineering, Mathematics and Drawing are taught. This factory maintains two English High Schools also —one for boys and the other for girls. The U. P. factory has a part-time adult school in which workers and their children are taught. The classes are held in the factory premises from 4 to 5-30 p.m. and about 25 workers get tuition. One of the Bihar factories has provided in Jamshedpur 2 high schools, 8 middle schools, 6 upper primary schools, 13 lower primary schools, 9 night schools and one technical night school. These schools mainly teach Hindi, Urdu, Bengali, and Oriya. In 1939, there were about 15,000 students (boys and girls, but now the number is less because of military requisition of some of the buildings). In 1938, several Mass Literacy Centres were started and these were attended by 7,128 men and 1,296 women. These centres had to be closed because of lighting restrictions. The percentage of literacy in Jamshedpur is 43 for men and 24 for women. Another factory in Jamshedpur has provided (i) a school which includes Lower Primary, Upper Primary and Middle English classes, at a cost of Rs. 34,384 ; and (ii) a Harijan School for Harijan and poor children. The cost of construction was Rs. 2,250 and the number of pupils 132. In addition the Company grants subsidy to an Andhra School, Hindustan Mitra Mandal and Utkal Samaj. Night classes are held for adult workers. A large Primary School to cater for 400 pupils has also been designed. A third factory in Bihar has recently started a School, where lady teachers train workers' children through the medium of English, Bengali and Urdu. In the Mysore factory, literacy work is carried on by means of Adult Classes, Reading Rooms, periodical lectures, radio-talks, Hari Kirtans and Bhajans. For workers' children, there are ten schools, seven of which are run by the Welfare Committee and two by Government. Lastly, it may be mentioned that one of the Bombay factories grants scholarships to the deserving children of workers.

Grain-shops.—Provision has been made in 38 concerns (Bombay, 14 ; Bengal, 14 ; U. P., 3 ; Bihar, 4 ; Baroda, 2 and Mysore, 1). None of the concerns investigated in Madras or Punjab maintain grainshops, as provisions are available at controlled rates in the Ration depots in the city. Out of the 14 grainshops in Bengal, seven supply the commodities as prescribed under the Government Rationing order at subsidised rates, while two shops follow the recommendation of the Bengal Chamber of Commerce in supplying foodstuffs to their employees. In U. P. also two out of the three grain-shops have rates lower than the market rates. In one of these two shops the rates have been fixed by the Employers' Association of Northern India. In Bihar, all the Factory Grain Shops have been taken over by Government, but the actual management is still in the hands of the factories. A rebate of

Rs. 3-11-0 and Rs. 2-8-0 per month on food-stuffs is given to married and single men at present. Before the introduction of rationing, employees in a Bihar factory were allowed to purchase the following quantities of food-grains per week at reduced rates from Company's Grain Shops.

TABLE 71.

Pre-war Rates of Grains in a Bihar Factory.

Commodity	Married employees	Single employees	Price per seer.
Rice or wheat	8 seers	5 seers	Re. 0-4-0
Dal	1 seer	1 seer	Re. 0-3-9 (Massoor)
		..	Re. 0-4-9 (Arhar)
Sugar	3/4 seer	3/4 seer	Re. 0-6-6

In a Baroda factory, the commodities are supplied at a rate which is 4 as. to 8 as. per maund less than the market rates. In the Mysore factory, the Co-operative Stores purchases and sells the articles at controlled, rates the administrative expenses and losses, if any, being borne by the Company.

V.—Housing.

The necessity of providing housing to employees is obvious in the out-of-way industrial areas, such as Jamshedpur, Bhadravati, etc. The workers employed in factories located in cities like Bombay, Cawnpore and Madras live in slums or in their own huts far away in the suburbs. In all 48 factories were investigated in the cities of Madras, Bombay, Ahmedabad, Calcutta and Howrah, Cawnpore and Baroda but except for the two factories in Howrah, none has provided any housing for their workers. As the following table shows, provision of housing to workers is more common in mofussil industrial areas than in urban centres.

TABLE 72.

Housing provided by Employers.

Province	Location of Concern.	Proportion of workers housed	Type of housing provided	Rent Rs. p.m.
Bombay	Dapuri (5 miles from Poona)	49%	Single and double room tenements of bricks.	..
Bengal	Hirapur	55%	Pucca quarters (a room, enclosed courtyard, kitchen and verandah).	Nil
	Kulti	36%	Pucca (brick-built wall with terrace roof or C.T.) and Kutcha (walls with straw thatching) houses as follows : Indian Family Quarters—114, Indian Mess Quarters 6, Boarding House—1, Indian Institute-1, Pucca Labour Quarters-1,447, and Mud-huts-347.	Nil
	Howrah	10%	Pucca and Kutcha houses with corrugated iron roofs.	Nil
	Howrah	12%	Kutcha rooms (for coolies and Darwans).	(8 as. for coolies Re. 1 for Darwans.)
Punjab	Lahore	3	22 single semi-pucca rooms (for technical and maintenance staff.	Nil
	Lahore	33%	6 pucca quarters (for Chowkidars)	Nil
Bihar*	Tatanagar	34%	8,315 quarters and 293 bungalows	Re. 1 to Rs. 40
	Golmuri	59%	931 pucca houses	Rs. 2-4-0 to Rs. 20
	Tatanagar	13%	350 quarters and 8 bungalows	Rs. 4 to Rs. 25.
Mysore*	Bhadravati	24%	All types (from cottages to bungalows).	Rs. 1-8-0 to Rs. 80

*Details of Bihar and Mysore factories are given below.

Jamshedpur or Tatanagar is a proprietary industrial town owned by the Tata Iron and Steel Co., Ltd. This Company started working in December 1911 and the number of workers has increased from 7,000 to 38,473. Some Associated Companies have been established on land leased to them by the Steel Company, which also supplies them with water and power as well as their chief raw materials, e.g., pig iron, steel billets, plates, sheets, roda, etc. Jamshedpur, a small industrial centre with 5,672 persons in 1911, has become one of the bigger towns in India with a population of 143,110 persons in 1941. The Steel Company has provided roads, trains, filtered and unfiltered water supply, sewage system, markets, schools, electricity, conservancy, play grounds, parks and recreational facilities, etc. The offices of the Central and Provincial Governments have also been set up. Both the Steel Company and the Associated Companies have their own schemes of housing their employees. The Steel Company, in addition, has provided planned Basti and residential areas, where employees of all the companies have erected their own private residences. The Steel Company has built up to date 8,428 quarters, of which 293 are bungalows for officers and senior supervisory staff. An abstract of the 8,315 quarters for workers is given below in a tabular form.

TABLE 15.

Housing provided by the Tata Iron and Steel Company, Ltd., Jamshedpur.

Type of Quarter	No. of Quarters	Rent Rs. p.m.	Details of accommodation provided in quarters								Front Garden Space.	Other Facilities
			Living Rooms	Other Rooms.	Verandahs	Court-yard	Kitchen	Store-Room	Bath-Room.	Latrine		
RN	462	1 to 1-8-0	1	..	..	1	..	..	..	..	1	
RM												
N		2-4-0 to 3-8-0	1	..	1	1	..	..	..	..	..	
RMR												
Assistant Mistresses' Quarters ..	11	11	1	..	2	1	1	1	..	..	1	Bath room water closet.
Works Guards Quarters ..	223	3	1	..	1	1	1		P	1	1	
Conservancy Staff	556	3-2-0	1	..	1	1	1	..	P	..	..	
N1	200	3-0-0	1	..	1	1	1	..	P	..	..	
N2	469	2-4-0	1	..	1	1	1	..	..	..	..	
RN1	470	4-0-0	1	..	1	1	1	1	P	1		
M2	192	5-0-0	1	..	1	..	1	..	..			
S	88	1-8-0 to 3	1	..	1	..	1	..	P	..	..	
Miscellaneous	96	4-0-0	2	..	1	1	1	..	P	1	1	
Chawls	1310	6/- to 6-8-0	2	..	1	1	1	..	P	1	1	
TR	388	7-0-0	2	..	1	1	1	..	P	1	1	
L1	478	9-0-0	2		2	1	1	..	P	1	1	
L2	331	9-0-0	2		2	1	1	..	P	..	1	
L3	844	8-8-0 to 9	2	..	2	1	1	..	P	..	1	Water-closet.
L4	50	14-0-0	2	..	1	1	1	..	P	1	1	
LH	23	17-4-0	2	2	1	1	1	1	P	1	1	
H1	183	16-0-0	2	..	..	1	1	1	P	1	1	
H2 . . .	24	21-0-0	2	..	1	1	1	1	P	1	1	
H3	48	21-0-0	2		2	1	1	1	P	1	1	
H4	16	21-0-0	2	1	2	1	1	1	P	1	1	
H5	494	19-0-0	2		1	1	1	1	1	1	1	
H6	24	20-4-0	2		2	1	1	..	1	1	1	
G2	184	12-8-0 to 13	3	2	2	1	1	.	1	1	1	
L5	36	24-8-0	3	2	2	1	1	..	1	1	1	
G . .	36	19-12-0	3	.	2	1		1	1	1	1	
G1 . .	40	28-8-0	4	.	2	1	1	1	1	1	1	
G4	9	25-0-0	3	.	2	1	1	1	1	1	1	
G5	30	30-0-0	3	2	2	1	1	1	1	1	1	
P	8	32-0-0	5	2	1	1	1	1	1	1	1	Water closet washing platforms.
P1	8	40-0-0	4	1	2							
P2												

NOTE.—(i) P in Bath-room column means a bathing platform.
(ii) Types H2, H3, H4, H6, H5, G2, G, G1, G4, G5, P, P1, and P2 have water connections inside.

Another Bihar concern has built 931 pucca houses. 500 houses, kutcha and semi-pucca, have been built by workers themselves in the Company's leased area with the assistance of building loans from the Company. These loans are granted at 3 per cent. interest and are repayable by easy instalments. The total number of employees housed is about 2,200 and the rents charged for Company's quarters range from Rs. 2-4-0 to Rs. 20 per month. The details of the housing are given below :—

TABLE 74.

Housing Provided by another Bihar Company.

Type.	No. of quarters.	Rent (Rs. p.m.)	Rooms	Details of accommodation provided in the quarters			Bath-room	Latrine	Other Facilities.
				Verandahs	Court-yard	Kitchen			
RN	48	2-4-0	1 (10′ × 9′)	1 (10′ × 3′ 3″)	8′ × 10′	..	..	..	1 cooking place
N2	44	3-4-0	2 (12′ × 8′ and 7′ × 5′)	1 (4′ 3″ × 5′)	12′ × 8′	..	..	..	,, ,, ,,
M2	44	3-4-0	2 (12′ × 9′ and 7′ × 7′)	..	16′ 9″ × 9′ 6″	..	..	4′ × 4′	,, ,, ,,
M3	76	4-0-0	2 (12′ × 8′ and 7′ × 7′)	1 (4′ 3″ × 7″)	16′ 9″ × 9′ 6″	..	..	4′ × 4′	
M4	136	5-0-0	2 (12′ × 9′ and 8′ × 9′)	1 (3′ 6″ × 3′ 6″)	18′ 9″ × 14′)	5′ × 5′ 6″	..	4′ × 4′	
Modified M4 ..	40	6-0-0	2 (10′ × 10′ and 11′ × 9′)	1 (4 9″ × 9′)	13′ × 18′	6′ × 5′	..	4′ × 4′	Washing platform (1′ × 4′).
L4	307	7-4-0 and 8-0-0	2 (10′ × 10′ and 11′ × 10′)	2 (10′ × 5′ 10½″ and 10′ × 5′ 3″)	20′ × 21′	8′ × 8′	4′ × 4′	4 × 4′	
L2	50	8-0-0	2 (12′ × 11′ and 11′ × 9′)	2 (12′ × 3′ 3″ and 9′ × 3′ 3″)	1242 sq. ft.	8′ × 8′	4′ × 4′	4′ × 4′	
H6	10	10-0-0	2 (12′ × 12′ each)	2 (24′ 9″ × 4′ 3″) and 20′ × 4′ 3″	960 sq. ft.	13′ × 8′	4′ × 4′	4′ × 4′	Store-room (8′ × 8′)
G4	25	15-0-0	3 (12′ × 12′ each)	2 (24′ 9″ × 4′ 3″ and 20″ 9′ × 8″)	20′ × 20′	12′ × 8′	6′ × 4′	4′ × 4′	Store-room (8′ × 8′)
G	8	15-0-0	3 (12′ × 12′ each)	2 (12′ × 5′ 3″ each)	1418 sq. ft.	12′ × 8′	4′ × 4′	4′ × 4′	Store-room (10′ × 8′)
SD	6	15-0-0	2 (16′ 6″ × 14′ and 16′ × 14′)	2 (14′ × 9′ 4″ and 15′ × 6′ 2½″)	..	13′ × 10′	Common	(7′ × 8′ 3″)	Pantry (8′ 3″ × 8′ 3″) Servants' room (10′ × 10′)
Q	25	20-0-0	3 (18′ 6″ × 14′ and 2 of 14′ × 14′)	2 (14′ × 9′ and 6′ × 6′)	..	13′ × 10′	7′ 3″ × 8′	7′ × 4′	Pantry (6′ 5″ × 9′ 3″) Servants' room (10′ × 10′).

NOTE.—(i) Besides there are 92 (48 one-room and 44 two-room) quarters, all rent free for the Watch and Ward Staff.
(ii) Types 12, H6, G4, G, S.D. and Q have inside water taps.
(iii) Total population in Company's Quarters is 4, 831 out of which 1,329 are children (below 12 years).
(iv) 89 sweepers and 3 Sanitary Inspectors in charge of a Medical Officer of Health to look after general conservancy.

The third company investigated in Tatanagar has the following types of quarters :—

TABLE 75.

Types of Quarters and Rents in a Bihar Factory.

Type	Rent (Rs. p.m.)	Electricity charge
TA	7	Re. 1 p m.
T	4	Re. 0-11-0 p.m.
L4	10	
L5	18	Re. 0-1-3 per unit with a minimum of Re. 1.
G4	25	
Officers' bungalow	30	

The fourth Bihar factory has no housing accommodation, but a scheme to build houses is under consideration. At present there are a few quarters which can be classified into four types according to accommodation contained : (a) 3 rooms, kitchen, a bath room, flush latrine and water taps ; (b) 2 rooms, and kitchen with water-tap and (d) 2 rooms and kitchen, with basket-type latrines. The rents for these types are Rs. 12, 5, 4, and 4 respectively and all are fitted with electric lights. Near the Bhadravati Works in Mysore, a large colony, called the New Town has come into existence and is being developed according to a plan. It is provided with well-laid out streets, underground sewage, street and house electric lights and water-taps, flush latrines, etc. The sanitary arrangements are supervised by a Sanitary Board. Colonies of workers' quarters have sprung up at present in three linguistic groups, inhabited by the *Kannadigas, Tamils* and *Telugus.* Most of these colonies have been built by the workers themselves, with materials supplied by the Works and on sites provided at a nominal rent of 2 as. per site. In two of the colonies, houses have thatched roofs, while in the third they have zinc sheet roofs. Houses are laid out in lines, each quarter having a verandah, a room and a kitchen. The floor is earthern. New tiled quarters have two rooms and a kitchen each and are provided with taps and lights. A community Centre and a school for each colony are now being constructed. The total number of houses of all types, ranging from cottages at Rs. 1-8-0 to bungalows at Rs. 50 p.m. built by the Works is 862 ; and the approximate total cost is about 10 lakhs of rupees. About 20 per cent. of the workers live in the old town in private houses, where rents are high, going up to Rs. 7 or 8 per mensem and sanitary conditions and amenities are lacking.

As for the workers for whom housing accommodation has not been provided by their employers, complete data are not available. As mentioned earlier some workers in the Mysore factory and in a Bihar factory have built their own houses with the assistance of their employers. Others live either in city slums or in far-off villages. Of the 38,000 employees of Tata Iron and Steel Works, 12,000 are housed in Company built quarters, 15,000 in Bastis, 2,000 in private residential areas, 4,000 in Jugselai, 4,000 in outlying villages and 1,000 in temporary camps inside the Works.

VI.—Trade Unions and Strikes.

Workers in 18 factories (Madras, 4 ; Bombay, 4 ; Bengal, 6 ; Bihar, 3 ; and Mysore, 1) have organised trade unions in their concerns. In addition, there are 8 unions (Madras, 1 ; Bombay 5 ; Bengal, 1 and Bihar, 1) which can be called general engineering unions as engineering workers from all factories are eligible for membership. Three of the four Madras unions have been formed in public concerns and claim the membership of almost all workers in the concerns. The subscription per worker is Re. 1 per year in one and 4 as. per month in another. In two concerns at least strikes have been avoided by the union leaders who have successfully managed intricate questions in regard to wage rates, grades and other privileges.

Of the six private concerns investigated in Madras, only one has got a Union which had its origin in a Strike Committee in 1942. The membership of the Union has increased from 300 at start to 700 in 1944. A monthly subscription of 2 as. per member is levied and the Union collected Rs. 432-6-0 in 1942-43, and Rs. 612-2-0 in 1943-44. The Union has been recognised and by means of representations it has been able to secure an enhanced dearness allowance, bonus, reinstatement of 7 dismissed workers, etc. The general union in Madras is known as the Madras General Engineering, Foundry and Smithy Workers' Union, which draws its members from several small concerns in the city, including two of the units investigated.

The details of the General Engineering Unions in Bombay are given below in a table compiled from information available in the Bombay Labour Gazette.

TABLE 76.

General Engineering Unions in Bombay.

Name of the Union.	Factory in which members are employed (with total employment)	Dates of Formation	Registration.	Membership.	Average Income Rs.	monthly Expenditure. Rs.
1. Richardson and Cruddas Employees' Union, Bombay	Richardson and Cruddas (1,706)	Sept. 1939	Decem- 1939	250	34	12
2. Engineering Workers' Union, Bombay .. .	*	Aug. 1939	Feb. 1940	3,008	333	253
3. Godrej and Boyce Workers' Union, Bombay .. .	Godrej and Boyce Manufacturing Co. Ltd. (1,998).	June 1942	April. 1943	1,141	254	57
4. Alcock, Ashdown Workers' Union, Bombay .. .	Alcock, Ashdown and Co. Ltd. (2,292).	July 1942	Dec. 1942	496	..	..
5. Engineering Factory, Kamgar Union, Bombay ..	*	July 1942	Nov. 1942	1,200	..	..
6. Iron Workers' Union, Bombay	*	Dec. 1942	Unregistered.	100	40	13
7. Bombay Iron and Steel Workers' Union, Bombay ..	*	Jan. 1943	,,	1,500	..	..
8. Bombay Telephone Workers' Union, Bombay	Bombay Telephone Co. Ltd. Workshop (2,505).	Nov. 1941	Dec. 1941	1,767	..	..
9. National Engineering Workers' Union, Bombay ..	*	Dec. 1943	June 1944	172	..	..

*These Unions are 'General Unions' i.e., they are open to all workers in General Engineering, though in fact the scope is restricted to not more than half a dozen undertakings.

Unions 1 and 4 in the above table are at present inactive, the former because of the arrest of its leader in August 1942. The Godrej and Boyee Workers' Union is recognised by the employers. Admission fee for membership is one month's subscription, the rate of which is as follows : 4 as. p.m. for those whose basic wage is Rs. 2 per day or less, 8 as. p.m. for those whose basic wage is more than Rs. 2 but not more than Rs. 3-8-0 per day and Re. 1 p.m. for those with a basic wage of more than Rs. 3-8-0 per day. The members are entitled to Retirement (including dismissal and resignation from the Company) Benefit and Death Benefit. As for the former benefit, those who have completed three years of membership shall be entitled to the return of full subscription paid by them after deducting admission fee and Re. 1 per year membership for office expenses. As for death benefit, the family of the deceased member shall be entitled to double the amount of subscription paid by him after making the above-mentioned deductions. The Bombay Telephone Workers' Union has also the same benefits. Its rates of subscription, however, are 2 as. p.m. for those drawing Rs. 30 p.m. or less and 4 as. for others ; the admission fee is 8 as. One of the investigated concerns has entered into an agreement with the general union, " the Engineering Workers' Union ". According to this agreement, the Management has framed rules for its workers regarding attendance, working hours, holidays, discipline, etc.

The table given below gives details about some unions in the General Engineering industry of Bengal.

TABLE 77.

Trade Unions in Bengal Factories.

Name of the Union.	Year of Registration.	Membership	Rate of subscription As. p.m.
1. Iron and Steel Workers' Union	1943	800	..
2. Bharati Iron and Steel Workers' Union ..	1942	150	2
3. Britannia Employees' Union	1944	150	2
4. Britannia Building Labour Union	1944	80	4
5. Britannia Building and Iron Mazdur Union	1942	200	4
6. Jay Engineering Workers' Union	1942	230	2
7. Jessops' Labour Union	1943	155	2

NOTE : Only the first union is a general union.

In the General Engineering industry of Bihar, there are four unions : (i) The Labour Federation, which was formed in 1936 and registered in 1938, (ii) The Tata Workers' Union, which was formed in 1937 and registered in 1938, (iii) The Tinplate Workers' Union and (iv) The Tatanagar Foundry Workers' Union. Except the third, all have been recognised by the employers, though no definite agreement has been reached between any Union and the employers. According to the Mysore Labour Act of 1942, workers in every factory employing more than 100 men are entitled and encouraged to form a labour association. There is thus a Labour Association in the Mysore Iron and Steel Works, Bhadravati, with a worker as its President ; no outsiders are members in it. A subscription of one anna per month is levied. The Association is affiliated to the Indian Federation of Labour.

Works Committees.—Works Committees were found only in 5 investigated factories (Bihar, 2 ; and one each in Bombay, U. P. and Baroda). The Bombay factory has a Workers' Committee and Shop Stewards, whose object is to get redress of any legitimate grievances. A Shop Steward must have at least 5 years' service with the Company and preferably be one of the senior mistries of the department he is elected to represent. Each department will be represented by one man selected by secret ballot of his fellow workers. The period of office of Shop Steward and Workers' Committee is for one year. The Shop Stewards meet the Joint Managers every month ; and the Workers' Committee meets the Managing Agents once a year in August. The Workers' Committee consists of one man from each of the departments, selected by ballot at a meeting of the Shop Stewards to be held in the respective departments. The Workers' Committee first deals with any points brought up by the Shop Stewards of the factory and if they feel they cannot decide any of the points raised, they then instruct the Shop Stewards to place these items on the agenda for the monthly meetings with Joint Managers. In one of the U. P. factories, there is a Works Committee, known as Hitkari Committee, which undertakes to give every kind of facility to the workers regarding safety, sanitation, employment, economic condition, education and other welfare activities. The workers are represented by five of their own men in the Executive Committee. In the biggest Bihar factory, there were Shop Committees some years ago, which, however, worked only for a few months, the workers, as is alleged by the Management, losing confidence in their own representatives. At present, there is a Joint Committee for each of the two unions, consisting of a representative of the Union and the Company's Labour Officer. The function of this Committee is to afford the Unions an opportunity to review or investigate cases in which the Unions are not satisfied with the previous decision of the Management. Up to the present time the unanimous findings of the Joint Committee have invariably been accepted by the management. Another factory in Bihar has a Mill Committee, composed of members of the management and of the Trade Union, to discuss the workers' grievances. A similar Committee, consisting of workers, foremen and departmental heads, is found in a Baroda factory ; it looks into the grievances of the workers generally.

Strikes.—Since the outbreak of the war, strikes and lockouts are ruled out under the Defence of India Rules and disputes have to be submitted for adjudication by the Labour Commissioner. In one of the Bengal factories, a short strike, lasting for about 50 minutes, was staged (see Table below : Concern No. X in Bengal) ; as a result two men were discharged, who were later prosecuted and convicted by the Government under Defence of India Rules. In the Mysore State, the Mysore Labour Act (mostly based on the Bombay Industrial Disputes Act, 1938), requires that a Labour Association should give a notice in the prescribed form to the employer and to the Commissioner of Labour regarding any industrial dispute and proceedings for conciliation should be initiated within 15 days and concluded within a month. The Government may also constitute a Court of Arbitration, the award of which would be binding on both parties. A strike or lockout would be illegal if it is commenced without giving notice or while conciliation proceedings are taking place till 14 days after the publication of the report or while the matter is before a Court of Arbitration or in contravention of a registered agreement, settlement or award. Two of three Mysore strikes in the following table were held illegal. Complete record of all strikes is not available but the following statement gives some details about strikes in investigated concerns.

TABLE 78.
Strike in War time.

Province	Concern.	Details of strikes in investigated concerns.			Result.
		Period.	Duration.	Causes or Demands.	
Madras	.. I	16-1-1941	½day	Protest against orders to stop late attendance.	Successful. Grace-time was granted.
	II	in 1942	3 days	(*i*) Advance for evacuation from Madras. (*ii*) Dearness Allowance as in sister-concerns.	Successful.
	III	July 1942	18 days	(*i*) Dismissal of 2 workers for indiscipline. (*ii*) Adoption of double shift on certain machines.	Unsuccessful.
	IV	April 1940	18 days	Dismissal of a machine-shop mistry.	Concern closed for a while.
Bombay	.. I	December 1941	Few Hours	,, ,, ,,	Compromise.
	II	February 1943	1 month	(*i*) 25% wage-increase. (*ii*) Dearness allowance according to Bombay Millowners' Association scale, (*iii*) 2 months' wages as bonus.	Adjudication.
		July 1944	..	Bonus.	,,
	III	October 1942	..	Increase in dearness allowance, bonus, minimum wage, grain shop etc.	Successful.
	IV	1943	.	25%wage-increase and 2 months' wages as bonus.	Adjudication.
Bengal	.. I	August 1942	1 month	Political disturbances in 1942	
	II	October 1939		Certain privileges as holidays with pay.	..
		March 1940 August 1940		Scavengers' strikes ; other workers joined in sympathy.	..
	III	July 1943	..	No specific demands at the time of strike , but some demands were made later.	Demands when made were met successful.
	IV	1942-43 (Nov.-Mar.)	5 months	Stay on-strike for wage-increase	Mediation of Labour Commissioner.
	V	January 1942	18 days	Bonus and wage-increase.	Adjudication.
	VI	June 1942 December 1942	.. .	.. .	Successful. ,,
	VII	October 1940	7 days	Strike by coke-oven men who wanted to welcome a trade union leader, whose entry was forbidden by Government	Unsuccessful. 200 men were discharged.
	VIII	18-1-1940	1 hour.	Wage-increase	Compromise.
		11-2-1941	1 day.	,, ,, (strike by crane drivers)	Unsuccessful.
	IX	Jan-Feb. 1942	12 days	Stay-in-strike for wage-increase and enhanced allowances	,,
	X	18-5-1944	50 minute	Wage increase	,, (2 men were discharged ; they were later convicted under D I. Rules).
U. P.	.. I	in 1944	..	bonus.	Successful. One months wages bonus was given.
Bihar	.. I	August 1942	13 days	Political disturbances in 1942	
	II	February 1940 October 1940 Nov. 1940 Dec. 1940	Minor strikes	(*i*) Recognition of Union (*ii*) uniform wages to unskilled workers. (*iii*) General wage-increase, (*iv*) security of service and other facilities as leave, P.F. etc.	Unsuccessful.
Mysore	.. I	Nov. 1941	3 days	Increase in dearness allowance and reinstatement of certain dismissed workers.	Adjudication by Labour Commissioner & Arbitration Tribunal.
		May 1942	18 days	Celebration of May-Day	These strikes were held illegal.
		Aug. 1942	28 days	Political disturbances in 1942	

VII—GENERAL.

Accidents.—The accidents likely to occur in the general engineering concerns are cuts, crushing of fingers, burns and injuries due to the falling of molten or red hot metal etc. The following table gives the details about accidents which occurred in the investigated concerns.

TABLE 79.

Accidents and Compensation Paid.

Province	Concern	Year	Total No. of accidents.	No. of accidents compensated.	Amount of Compensation Rs.	Remarks.
Madras	I	1943	269	41	226	
	II	1943	3	3	92	
	III	1944	1	1	900	
	IV	1943	1	1	250	
Bombay .. .	I	1943	5	2	100	
	II	1943	205	205	13,035	3 fatal cases.
	III	1943	212	..	..	Only leave with pay was granted.
	IV	1943	635	132	3,971	1 fatal case.
	V	1943	4	4	159	
	VI	1943	216	21	569	
	VII	1943	227	27	476	
	VIII	1943	1	1	150	
	IX	1943	1	1	363	
	X	1943	11	6	514	
	XI	1943	23	7	49	
	XII	1943	22	1	35	
	XIII	1943	237	88	2,336	
Bengal .. .	I	1943	30	1	192	
	II	1943	12	..	..	Half the daily rate of pay is allowed for the days of absence.
	III	1944	6	2	1,441	
	IV	1943	37	1	210	
	V	1943	372	270	8863	
	VI	1944	19	19	2,879	
	VII	1943	117	47	1,572	
	VIII	1942	215	215	16,487	Rs. 7,750 for 6 fatal cases. Rs. 6,395 for 15 permanent and Rs. 2,332 for 194 temporary disablement cases.
	IX	1943	203	203	8,345	
	X	1943	903	372	5,881	2 fatal, 107 serious and 794 minor cases.
	XI	1943	315	81	4,412	
U.P.	I	1944	23	19	483	
Punjab	I	1944	..	3	385	
	II	1944	20	11	224	
	III	1944	..	3	49	
	IV	1944	4	4	28	
Bihar	I	1943-1944	1,086	36	44,706	The 36 cases (including 15 fatal) are serious. In addition Rs. 30,469 was paid for temporary disablement cases.
	II	1943	471	274	9,905	These include 4 serious cases costing Rs. 4,788 in lump-sum.
	III	1943	5,930	29	9,600	3 fatal, 6 permanent and 20 temporary disablement cases.
Mysore	.	1944	180	180	8,219	

Some earlier figures as regards the Mysore factory are given below :

TABLE 80.

Accidents and compensation in Mysore Factory.

Year	No. of cases resulting in						Total amount paid
	Death	Permanent Disablement.	Temporary Disablement.	Death Rs.	Permanent Disablement. Rs.	Temporary Disablement. Rs.	Rs.
1941-42	3	..	46	590	..	93	683
1942-43	..	6	261	..	1,355	1,545	1,900

Indebtedness.—Indebtedness seems to be fairly common in this industry and it is estimated that about 40 to 60 per cent. of workers are indebted, the extent of indebtedness varying from a few rupees up to Rs. 500. Co-operative Credit Societies were found only in 11 concerns (Madras, 2; Bombay, 5; U. P., 1; Bihar, 2 and Mysore, 1). The rate of interest varies between 6-1|4 per cent. and 12-1|2 per cent ; but it is commonly 9-3|8 per cent. per annum. In a Bombay Society, it is 9-3|8 per cent on long-term loans and 12-1|2 per cent. on short loans; while in a U. P. concern these different rates are for members and non-members. The maximum loan in a Bombay Society is limited to Rs 500 or 4 months' pay; the amount advanced by this Society in 1943-44, has been Rs. 1,16,846. In another Society, the total indebtedness on 30th June 1944 amounted to Rs. 2,518. The Tata Iron and Steel Company has encouraged and helped the formation of about 33 Co-operative Credit Societies. The Company also provides free legal aid to indebted employees. During the year 1943-44, about 8,000 employees had borrowed over Rs. 19 lakhs from the Co-operative Credit Societies and about 5,658 workers over Rs. 6 lakhs from the Provident Fund.

The system of granting advances to workers, generally against their wages is fairly common. In Bengal, eleven out of the investigated concerns follow this system. In most cases the amount given on loan varies from month to month. One of the concerns, for example, granted loans amounting to Rs. 50 in October 1944, but did not grant anything during the next three months. Most of these loans are free of interest. In one Bengal concern, however, advances amounting to more than the wages earned, are given on 3 per cent interest. The extent of advances in some of the concerns investigated can be seen from the following figures.

TABLE 81.

Advances granted to workers.

	Concern	No. of workers employed.	Period	Amount of advances granted. Rs.
Bengal ..	I	70	December 1944	170
	II	30	October 1944	50
	III	1,290	Year 1944	4,000
	IV	2,085	Year 1944	12,795
Baroda ..	I	248	Year 1943-44	3,970

In the Baroda factory, loans amounting to Rs. 3,970 have been granted to 41 workers, the amount in individual cases varying from Rs. 25 to Rs 400. The loans are recovered in easy instalments of Rs. 5 to Rs. 25 per month.

Provident Fund.—Fourteen factories (Madras, 1; Bombay, 4; Bengal, 2; U. P., 1; Bihar, 3; Baroda, 2; Mysore, 1) have Provident Funds. The main features are as follows :—

(i) *Scope.*—The membership of the Fund is generally open to permanent workers, though other restrictions such as income-limit, period of service, etc. are also put in. In the Madras factory, the Fund is open to all permanent workers. In five concerns, persons getting less than a specified amount (Rs. 15, 20 or 25) per month, cannot become members of the Fund. In a Baroda concern, the limit is Rs. 25, but permanent workers getting between Rs. 20 and Rs. 25 per month may, subject to the approval of the Trustees, join the Fund. In one Bihar factory, no covenanted employee can be eligible for membership, while in another factory in the same Province, discretion in this respect rests with the Trustees. In at least four factories, service for a specified period is necessary. In a Bombay factory, it is open only to a worker who has worked for the Company for not less than 200 days in the period of one year or for 300 days in the period of 2 years prior to the date he applies for membership. In two factories, the condition is one year's approved service while in one (Mysore) it is three years. In all cases, the decision of the Trustees is final.

Contributions.—The usual rates of contribution by the members are (i) 6-1|4 per cent or one anna per rupee of the salary of wages earned by the contributor every month or (ii) 8-1|3 per cent. or one anna and four pies per rupee. Out of the investigated factories four have the first rate while seven have the second; in one factory, the contribution is not to exceed 8-1|3 per cent. of wages. The rate in the Madras factory is 7 per cent. while in one of the Bombay factories it is 4-11|19 per cent. (9 pies per rupee). In some cases, for the calculation of percentages, wages include all allowances while in others only basic wages are considered. In all cases the employer credits to the Fund a sum which is equal to the aggregate contributions made by the members of the Fund. In the U. P. factory, the employer's contribution is subject to a provision that no contribution beyond one per cent. of the members' subscriptions for the year shall be made to the Fund on the part of the Cmpany. In a Bihar factory, in addition to the usual contribution by the Company, a further sum as below is paid, if the net dividend paid by the Company on its ordinary share capital exceeds 7-1|2 per cent.

TABLE 82.

Additional Contribution by Company to the P. F. in a Bihar Factory.

Rate of net dividend on ordinary shares	Amount of further sum paid by employers
Not less than 7½% and not exceeding 8¾%	One week's wages
Exceeding 8¾% but not exceeding 11¼%	Two weeks' wages
,, 11¼ ,, ,, 13¾%	Three ,, ,,
,, 13¾% ,, ,, 16¼%	Four ,, ,,
,, 16¼% ,, ,, 18¾%	Five ,, ,,
,, 18¾% ,, ,, 21¼%	Six ,, ,,
For each additional 2½%	An additional week's wage.

Conditions of claims on Employer's contribution.—A member on ceasing to be a member can claim all the employer's contribution only if he puts in continuous approved service for a specified number of years. This period is 15 years in 7 concerns, 12 years in one concern, 10 years in one concern and 5 years in two concerns; in one concern, it is 15 years for male workers and 10 years for females. In seven of these concerns, however, the member gets a share of the employer's contribution in proportion to his period of service as follows :—

TABLE 83.

Claim to Employer's Contribution.

No. of years approved service.	Proportion of Employer's Contributions (with interest thereon etc.)					
	I	Bombay for Males	II for Females.	Bengal	Bihar I and II	Mysore I
3						25%
4						
5	(a)	(a)	(a)	(a)		
		33⅓%	50%	50 %		
6		40 %	60 %	60 %		50 %
7	33⅓-%	46⅔-%	70 %	70 %		
8		53⅓-%	80 %	80 %		
9		60 %	90 %	90 %		75%
10		66⅔-%	100 %	100 %	(a) 50	
11		73⅓-%			60 %	
12	66⅔-%	80 %			70 %	
13		86⅔-%			80 %	100 %
14		93⅓-%			90 %	
15		100 %			100 %	

NOTE :—'*a*' shows the minimum limit up to which the employers' contribution cannot be claimed.

In the U.P. factory, a member serving for less than 15 years gets 1|30th of the employer's contribution for each complete half year's service. If a member is dismissed from service for misconduct, he loses his claim, whatever may be his period of service; on the other hand, a member whose service with the Company is terminated through any circumstances beyond his control such as continuous illness, permanent incapacity, death etc. has a claim on the employer's contribution. In three concerns the number of members form 20 per cent., 22 per cent. and 32 per cent. respectively of the total number of workers employed.

Gratuities.—Thirteen concerns (Madras, 4 ; Bombay, 3 ; Bengal, 4 ; and one each in Bihar and Mysore) have gratuity schemes. Three out of the four Madras concerns, which give gratuities, are public. In one of them, gratuity

is paid on death or on retirement after 10 years' approved service at the following rates.

Above	5	years of service		3	months' pay (subject to a maximum of Rs. 1,000)		
,,	10	,,	,,	6	,,	,,	,,
,,	15	,,	,,	9	,,	,,	,,
,,	20	,,	,,	12	,,	,,	,,

In two other Madras concerns, the period is also 10 years ; but for a service of less than 15 years, 3 months' wages are paid, while for a service of 15 years or over 6 months' wages given. In a private Madras concern, gratuity is given at the discretion of the management to workers, who have put in more than 20 years of service. For one of the Bombay concerns also no fixed rules for gratuity exist and the worker is paid according to the length and type of service. Another Bombay concern pays gratuity after 10 years' approved service at the rate of 1|2 month's pay for every year's service based on the average monthly substantive salary drawn during the last 3 years' srvice. A third concern in Bombay has a Retirement Fund, to which workers do not contribute. Every worker who is not eligible for membership of the Staff Provident Fund, i.e. generally a daily paid worker, is allowed to be a member of the Retirement Fund and gets gratuities according to the following scale only when he retires on account of old age or continuous ill-health after 15 years of approved service.

Over	15	years' and less than		20	years' service	9 months' pay	
,,	20	,,	,,	25	,,	12	,,
,,	25	,,	,,	30	,,	15	,,
,,	30	,,	,,	30	,,	18	,,

In one of the Bengal workshops (a public concern) any worker who has rendered at least five years' good service in the workshop, gets one month's pay for every year of service, subject the maximum of 12 months' pay. In three other concerns the gratuities are given mostly at the discretion of the management. In a Bihar factory, a retiring gratuity equal to half a month's wages for every completed year of continuous service is paid, subject to a maximum of 12 months' wages. However, if a worker retires or is discharged before 15 years' continuous service, a gratuity ordinarily limited to half a month's wages for each qualifying year may be paid, subject to a maximum of 6 months' wages. One of the following conditions of service must be fulfilled to be eligible for gratuity ; (i) completion of 20 years' continuous service; (ii) retirement at the age of 55 or thereafter provided that not less than 15 years' continuous service has been completed; (iii) retirement after 15 years' continuous service with the approval of the authorities; or (iv) retirement or discharge with less than 15 years' service in consequence of a reduction in establishment or a certificate of unfitness on medical grounds due to employee's own fault. In the Mysore factory, workers, who are not entitled to become members of the Provident Fund are entitled to a gratuity on retirement, provided they have put in an approved service of not less than 15 years. The amount of gratuity is at the rate of half month's pay for each year of service, subject to a maximum of 15 months' pay.

Pensions.—Only two concerns have the system of pensions. A Madras factory gives pensions to retired workers according to their service up to a maximum of Rs. 15 per month. In the other concern (in Bengal) pensions are stated to be entirely *ex-gratia* payments.

CHAPTER VIII.—ELECTRICAL ENGINEERING.

(Including Electrical Generating and Transforming Stations)

In 1943, the Engineering Industry claimed 1929 factories employing 513,613 workers. Out of these, 78 factories with 13,083 workers belonged to Electrical Engineering and 121 factories with 9,605 wokers were the Electrical Generating and Transforming Stations. Judged from these figures, these two branches of Engineering seem to be of minor importance. However, electricity, like sulphuric acid, is essential for the production of a number of goods and the extent of its production often serves as an index of the industrial prosperity of a country. Though the Electrical Engineering Industry has only 199 factories and 22,688 workers, it plays a vital role in India's industrial organisation.

The units surveyed for the purpose of investigation fall under two main categories :—

Electrical Workshops.—They comprise undertakings repairing, fitting or manufacturing electrical equipments, accessories and commercial products such as switch-boards, switch-gears, meters, electric cables, electric fans and electric lamps; and also undertakings which do electro-plating, electric welding or charging storage batteries or accumulators.

(b) *Power Stations.*—comprising undertakings generating electricity and those which receive, transform and supply it. (These undertakings have been called as *Power Stations* in this Report).

The following figures from the Factory Statistics show the war-time development in these undertakings :—

TABLE 84.

Electrical Engineering.

Province	Electrical Workshops				Power Stations			
	No. of factories		No. of workers		No. of factories		No. of workers.	
	1939	1943	1939	1943	1939	1943	1939	1943
Madras	4	7	166	545	3	6	264	410
Bombay ..	12	18	842	2,103	18	22	824	1,040
Bengal .. .	22	27	3,009	5,472	12	12	2,673	3,049
U.P. .. .	1	..	19		12	16	1,353	1,508
Punjab .. .	12	12	1,124	1,747	4	7	472	661
Bihar .. .	6	6	1,698	2,392	9	15	554	1,468
Other Provinces .	9	8	519	824	24	43	951	1,469
Total	66	78	7,377	13,083	82	121	7,091	9,605

The most important Provinces from the point of view of the industry are Madras, Bombay, Bengal, U. P., Punjab and Bihar. Units representing the various sub-sections in the Electrical Engineering were chosen for investigation. The number of units investigated in the six Provinces was 43 as follows :—

TABLE 85.

Units Sampled for Investigation.

Province	Electrical Workshops		Power Stations	
	Factories	Workers (1944)	Factories	Workers (1944)
Madras	3	150	1	228
Bombay	9	2,501	11	1,421
Bengal	9	3,316	6	4,926
U.P.	..	..	1	1,512
Punjab	..	..	2	948
Bihar	1	1,352	..	..
Total ..	22	7,319	21	9,035

The nature of work carried on in these concerns can be seen in the following table. In the case of factories undertaking more than one type of work, only the main type is shown.

TABLE 86.

Nature of Work.

Nature of foctories.	No. of concerns in—					
	Madras.	Bombay.	Bengal.	U.P.	Punjab.	Bihar
I. *Electrical Workshops.*						
(i) Repairs workshops	2	2	..	..	..	..
(ii) Manufacturing fans ..	..	1	3	..	..	..
(iii) Manufacturing electric lamps	..	..	3	..	..	..
(iv) Dry cells and accumulators	..	1	..	..	..	..
(v) Cable Construction	..	1	..	..	..	1
(vi) Service and maintenance	1	2	1	..	..	..
(vii) Other workshops	..	1	2	..	..	..
II. *Power Stations.*						
(i) Electric Supply to Cities	1	3	6	1	1	..
(ii) Other Power Houses	..	..	..	..	..	..
(iii) Generating Stations (Tatas)	..	3	..	..	..	..
(iv) Receiving Stations	..	5	..	..	..	..
Total ..	4	20	15	1	2	1

Most of the Power Stations are of a more long-standing character than the Electrical Workshops. The following table shows that comparatively very few factories came into existence during the period 1920-1938, i.e., between the two wars. Many factories, specially the Power Stations were established before 1920, though none of the factories investigated was founded before 1896.

TABLE 87.

Date of Establishment.

Province.	Total no. of concerns	Electrical Workshops Established			Power Stations Established.		
		Before 1920	1920—1938	1938 & after	Before 1920	1920—1938	1938 & after
Madras	3	1	2	..	..	..	..
Bombay	15	1	2	3	5	1	3
Bengal	13	1	2	4	5	1	
U. P.	1	..	..	..	1	..	..
Punjab	2	..	..	..	2	..	..
Total ..	34	3	6	7	13	2	3

I—Employment.

The statistical data given in the table below show that there has been considerable increase in the number of workers employed in the Electrical Engineering concerns during the years of war, particularly in 1940-41. It is interesting to note that employment in the factories owned by Government and Local Funds has increased only slightly while that in other concerns has shown marked expansion.

TABLE 88.

Electrical Engineering in War-time.

Year.	Electrical Workshops owned by				Power Stations*	
	Govt. and Local Funds.		Others			
	Factories	Workers.	Factories.	Workers.	Factories.	Workers.
1939	34	3,592	32	3,785	82	7,091
1940	35	3,502	33	4,195	92	7,506
1941	36	3,751	38	6,649	113	8,638
1942	34	4,185	42	8,095	119	8,803
1943	34	4,329	44	8,754	121	9,605

*There are no Government or Local Fund Power Stations.

Figures collected in the course of *ad hoc* surveys also show an increase to the extent of 38 per cent. in the employment in Electrical Workshops since 1939. The employment in Power Stations however, reveals a decrease of about 9 per cent. This decrease, it was stated, was due to the shortage of skilled and semi-skilled operatives rather than to a decline in the requirements of power. It should not, therefore, be taken as a characteristic trend of the industry.

TABLE 89

Increase in Employment since 1939.

		Madras	Bombay	Bengal	U.P.	Punjab	Bihar	Total
I. *Electrical Workshops.*								
Factories ..	1939	2	7	6	.	..	1	16
	1944	3	9	9	..	..	1	22
Workers .	1939	69	1,293	1,554	..	..	947	3,863
	1944	150	2,501	3,316	..	..	1,352	7,319
II. *Power Stations*								
Factories .	1939	1	8	6	1	2	..	18
	1944	1	11	6	1	2	..	21
Workers	1939	228	1,006	5,104	1,481	745	..	8,564
	1944	228	1,421	4,926	1,512	948	.	9,033

Most of the concerns are small, employing about 100-150 workers. All the units surveyed except a Power Station in Bengal (which had 4,300 workers in 1939 and 4,000 workers in 1944) employed less than 1,600 workers.

The extent of employment is shown below.

TABLE 90.

Extent of Employment.

Province	year.	No. of concerns in which the no. of workers was				
		50 less than	50–150	151–500	501–1000	1000–1600
Madras	1939	2		1	..	..
	1944	2	1	1	..	..
Bombay	1939	4	7	3	1	..
	1944	4	11	3	2	..
Bengal	1939	1	4	4	2	..
	1944	2	4	5	2	..
U.P.	1939	..	..	..	..	1
	1944	..	..	..	..	1
Punjab	1939	..	..	..	1	..
	1944	..	..	..	1	..
Bihar	1939	..	..		1	
	1944	..	..	..	..	1 ..

Female Labour.—Five of the concerns investigated employ female labour but the number of women employed is insignificant, except in one Electrical Workshop in Bihar. The extent of female labour in the electrical engineering concerns is shown below :—

TABLE 91.

Female Labour.

Province	Concern	Nature of factory	No. of Women employed in August 1939	No. of Women employed in January 1944
Bombay	I	Power Station	1	1
	II	,, ,, ...	2	2
	III	Electrical Workshop	9	..
Bengal	I	Power Station	6	5
	II	,, ,, ...	2	2
Bihar	I	Electrical Workshop	108	137
Total ..	6		128	147

Most of the women are sweepers. The reason for the employment of women in the Bengal and Bihar factories may be found in the fact that these factories are located near the mining areas, where womenfolk take to industrial occupations. Work in Electrical Engineering, as compared to that in other branches of the engineering industry, does not involve much physical strain but requires constant and steady attention, skill and responsibility.

Piece-rate Workers.—Workers were employed on piece rates only in two Bengal factories and one Bihar factory. The number of workers in these factories is given below.

TABLE 92.

Piece-rate Workers.

Province	Concern.	Total No. of workers		No. of Piece-rate workers		Percentage of Piece-rate to total workers.	
		1939	1944	1939	1944	1939	1944
Bengal	I	646	1,118	240	455	37%	41%
	II	35	73	..	4	..	5%
Bihar	I	947	1,352	108	137	11%	10%

All the three factories are Electrical Workshops. In the Bengal factories, workers employed in the moulding and smithy jobs are generally on piece rates; in Bihar, piece-rate work is prevalent among setters (Dies), Block strippers and some coolies and 'Rejas'.

Contract Labour.—Only three concerns (one in Madras and two in Calcutta), all Electrical Workshops, employ some of their workers through

contractors. The figures for the Madras factory are not available. The contract labour employed in the other two factories is as follows :—

TABLE 93.

Contract Labour in Bengal.

Factory	Year	Total No. of workers.	Workers employed and paid through contractors.	Percentage of Contract labour to total.
I	1939	646	164	25%
	1944	1,118	251	22%
II	1943*	564	222	39%
	1944	610	446	73%

* This factory was established only in 1942

The Madras factory engages contract labour for unloading, stacking and handling coal. The Bengal factories utilise these workers as drillers or in galvanizing, smithy or moulding shops. Contract labour was employed to meet the shortage of the directly available skilled and semi-skilled workers. It may be mentioned here that in the Power Stations, all labour is employed directly and on time rates.

Length of Service.—An analysis of the length of service of the operatives shows that there is a fair degree of stability of employment in this industry. This stability, however, is more marked among workers in the Power Stations than among those in the Electrical Workshops. The high percentage of workers, who have less than five years' service to their credit, is due to the establishment of a number of new concerns and to the expansion of a number of older factories during the War. The following table gives data in regard to the length of service of workers employed in the sampled units.

TABLE 94.

Length of Service.

	No of concerns	Workers with the following length of service			
		Less than 1 year.	1 to 5 years	5 to 10 years.	Over 10 years
I. *Electrical Workshops.*					
Madras	3	10	25	102	17
		7%	*16%*	*66%*	*11%*
Bombay	8	1131	606	290	489
		45%	*24%*	*12%*	*19%*
Bengal	9	1414	983	481	238
		45%	*32%*	*15%*	*8%*
Bihar	1	394	780	260	183
		24%	*48%*	*16%*	*12%*
Total	21	2929	2394	1133	937
		40%	*32%*	*15%*	*13%*
II. *Power Stations.*					
Madras	1	37	98	55	96
		13%	*34%*	*19%*	*34%*
Bombay	11	265	383	259	513
		19%	*26%*	*19%*	*36%*
Bengal	4	278	235	136	189
		33%	*28%*	*16%*	*23%*
Punjab	1	29	114	18	63
		13%	*51%*	*8%*	*28%*
U.P.	1	641		476	383
		43%		*32%*	*25%*
Total (except U.P.) ..	17	609	830	468	861
		22%	*30%*	*1 %*	*31%*

NOTE.—Figures in italics give the percentage to total workers.

Permanent and Temporary Classification.—Generally there are no special privileges to form the basis of distinction between permanent and temporary operatives, the usual privileges as regards bonus, medical aid or leave being open to all workers without any distinction. The classification, therefore, is often vague and some of the concerns treat all their workers either as temporary or as permanent. The following table refers to such classification :—

TABLE 95.

Factories with or without Classification.

Province	Total No. of concerns.	No classification	All temporary.	All Permanent.	Classification.
Madras	4	..	1	2	1
Bombay	20	4	..	5	11
Bengal	15	6	..	4	5
Punjab	2	2	..	..	..
U.P.	1	..	..	..	1
Bihar	1	1	.	..	..

In the Bihar factory, as in a number of other factories, all appointments in normal times are on a permanent basis unless a few workers are taken on specially for temporary work. However, war-time requirements have caused considerable increase in personnel and many of these are classed as " temporary war-time employees " because it is unlikely that they will be retained in peace time. In a number of factories a period of service varying from 3 months to 3 years is a condition precedent to declaring a worker permanent. In factories where a classification is made, the proportion of temporary workers is generally small, except where the factory has had to take on men for the duration of war. The following table shows the proportion of temporary workers :—

TABLE 96.

Percentage of Temporary Workers.

Concern	Madras	Bombay		Bengal		U.P.
	E	E	P	E	P	P
I	9 %	26 %	19 %	2 %	4 %	10 %
II		33 %	51 %		5 %	
III		85 %	4 %		10 %	
IV		65 %	50 %		40 %	
V		5 %				
VI		59 %				
VII		4 %				

NOTE :—E. Electrical Workshops P. Power Stations.

Permanent workers are entitled to the benefits of provident fund, co-operative credit society, leave (about 15 days in a year) according to rules and 15 to 30 days' notice for their termination of service. There is, however, no uniformity about these privileges and some of them are available even to temporary workers. Other privileges which are common to all the workers are dearness allowance, bonus, cheap grains, holidays, housing accommodation, etc.

Apprentice System.—The technical nature of work in this industry involves the necessity of training freshers and hence apprentice system, in diverse forms,

exists in a number of factories. Some of the details are given below :—

TABLE 97.

Apprentice System.

Province.	Concern.	System Meant for—	Period.	Remuneration.
Madras ..	I	Electrical Deptts.	3 months	Nil.
	II	,,	4 years.	6 months nil ; then 8 as. to Rs. 2 per day.
Bombay ..	I	Skilled workers	5 ,,	Rs. 12 to Rs. 30 per month.
	II	(*a*) Wiremen & Linesmen	2½ ,,	6 months nil ; then Rs. 12 to Rs. 15.
		(*b*) Technical students	,, ,,	6 months nil ; then Rs. 15 to Rs. 20 p.m.
	III* to IX	(*a*) Trade Leaners ..	3 years	Grade.
		(*b*) Govt. Apprentice Scheme ..	4 ,,	
		(*c*) School Apprentices	3 ,,	Nil.
		(*d*) College Apprentices	3 to 6 months	,,
Bengal ..	I	For ordinary posts ..	4 to 6 months.	8 as. to 10 as. per day.
	II	(*a*) Junior or Mistry grade	2 years	5 to 21 pies per hour.
		(*b*) Senior grade 'A'	2 years.	Rs. 15 to Rs. 20 p.m.
		(*c*) ,, ,, 'B'	4 ,,	Rs. 5 to Rs. 20 p.m.
	III	(*a*) Skilled Technicians	5 months	Rs. 50 to Rs. 75 p m.
		(*b*) Skilled labour ..	3 months	Rs. 15 to Rs. 20 p.m.
		(*c*) Semi-skilled labour	15-20 days	Rs. 15 p. m.
	IV	(*a*) Engineer Apprentice	1 year	6 months nil ; then Rs. 30 to Rs. 60 p. m.
		(*b*) Supervisor ,, ..	3 years.	6 months nil ; then Rs. 15 to Rs. 30 p.m.
		(*c*) Fitter Apprentice ..	3 years	6 months nil ; then Rs. 5 to Rs. 20 p.m.
	V	Ordinary posts ..	3 years	4 as. to 8 as. p. d.
	VI	Supervisory posts ..	3 years	Rs. 13 to Rs. 20 p.m.
	VII	Ordinary posts .	6 months	12 as. p.d. with monthly increment of 4 to 8 as. per day.
	VIII	(*a*) Workshop Apprentices	4 years	3 months no pay , then grade of Rs. 16-3-Rs. 25. p.m.
		(*b*) Engineering ,, ..	5 ,,	Grade of Rs. 20—5—Rs. 40 p.m.
		(*c*) Student ,, ..	3 to 12 months.	Nil.
	IX	Switch Board operatives	..	Rs. 10 p.m.
	X	Government student-apprentices ..	3 years	Nil.
	XI	Ordinary workshop training ..	5 years	Grade of Rs. 5—2½—15.
Punjab ..	I	(*a*) Trade Apprentices ..	5 years	Grade of Rs. 0—4—6 Rs. 0—13—0 p.d.
	I	(*b*) Apprentice Mechanics	5 years	Grade of Rs. 10—5—Rs. 30 p.m.
U.P. ..	II	(*a*) Trade Apprentice ..	5 years	Rs. 10 to Rs. 16 p.m.
		(*b*) Student ,, ..	3 years	Rs. 20 p.m.
		(*c*) Trade Probationers..	5 years	Rs. 10 to Rs. 18 p.m.
Bihar ..	I	Fitters, turners and electrical mistries ..	3 years	Grade of Rs. 0—12—0 Rs. 0—4—3 Rs. 1—8—0

*These concerns belong to one undertaking in Bombay.

In a few concerns the apprentices, who are unpaid, have to pay fees for training varying from Rs. 60 for a three months' course in a Madras factory to Rs. 300 for a 3 years' course for school apprentices in a Bombay concern. Most of the schemes lay down conditions about age, minimum qualifications and conditions of service. The age limits are generally 16 and 25 years.

The educational qualifications, such as the passing of Matriculation Examination, the Apprenticeship Examination of a Provincial Board, or a technical course (Degree or Diploma) in an Engineering College, etc., are laid down generally for the supervisory or higher technical posts. Training in some factories is open to apprentices who desire to qualify for diplomas like the Second Class Wiremen's Certificates and First Class Competency Certificate granted by the P. W. D. Licensing Board for wiremen and linesmen. Some factories admit, for practical training, students sent or recommended by Universities and Technical Institutes like the Bangalore Institute of Science or the Benares University. These student-apprentices are generally not paid any wages. Some factories make it compulsory for their apprentices (who may get a small stipend) to attend technical classes at a technical institute (such as the V. J. T. Institute, Bombay). After the expiry of the probationary period which may vary from three to six months, an apprentice is generally paid the minimum remuneration, which by regular or *ad hoc* increments, is raised during the rest of the apprenticeship period. The factory, however, does not give any guarantee of employment after the period of apprenticeship is over. A Madras factory, for example, trained during 1938-43, 51 apprentices, out of whom 36 qualified and left, 12 qualified and were absorbed in the concern, while 3 were dismissed. If at the end of the apprenticeship period there are any vacancies in the regular cadre, apprentices are appointed to them and then the period of apprenticeship is counted towards total service. The conditions of service for apprentices are generally the same as those for temporary workers.

Labour Turnover.—In most of the cases, labour turnover has increased in war time. The establishment of new factories in Electrical Engineering and Ordnance in this period created a greatly increased demand for skilled and semi-skilled workers, necessitating a redistribution of the available supply and causing thereby a lot of turnover. Retirements are few and turnover, normally, is caused mostly by dismissals and discharges. Of course, employers are often apt to report dismissals under the category of voluntary quits. Other reasons for labour turnover are old age, ill health, death, unauthorised absence and resignation on personnel grounds. The following table gives data in regard to turnover in the sampled units :—

TABLE 98.

Labour Turnover.

	Year	No. of factories.	Average daily No. of workers	No. of workers who left				% of annual turnover
				Retd.	Dismissed	Voluntary	Total	
I. *Electrical Workshops.*								
Madras ..	1944	3	150	..	..	..	..	..
Bombay ..	1939	3	867	10	27	18	55	6
	1943	6	2,300	10	65	491	566	25
Bengal ..	1939	6	1,554	@	@	474	474	31
	1943	6	2,653	@	@	1,145	1,145	43
Bihar ..	1938	1	993	..	13	49	62	6
	1943	1	1,542	..	169	134	303	20
II. *Power Stations.*								
Madras ..	1944	1	228	..	..	1	..	..
Bombay ..	1939	7	954	5	123	52	180	19
	1943	11	1,421	8	158	82	248	17
Bengal ..	1939	4	512	1	4	19	24	5
	1943	4	693	3	24	66	93	13
Punjab ..	1939	1	157	1	..	185	186	118
	1943	1	162	4	1	212	217	134
U.P.	1939	1	1,534	7	26	28	*	*
	1943	1	1,687	19	362	99	480	28

@These figures were not available.

* Figures about temporary workers in 1939 were not available. The figures given are for permanent workers only.

Absenteeism.—The absenteeism figures furnished by the factories were found in many cases to be defective. Some of the factories, for example, included absenteeism for all reasons such as sickness, leave with or without pay, etc., while some others included only unauthorised absence. The following table gives data as regards absenteeism and they should be taken for what they are worth :—

TABLE 99.

Absenteeism (Percentages).

Concern	Madras.		Bombay.				Bihar.		
			1939		1943		1939	1943	1944
	E.	P.	E.	P.	E.	P.	E.	E.	E.
I ..	25 %	2·1 %	11·8 %	1·9 %	11·4 %	3·2 %	12·3 %	10·7 %	11 %
II ..	2·5 %	..	1·8 %	3·5 %	3·5 %	3·1%	..	..	..
III ..	7·2 %	..	0·5 %	12 %	0·5 %	30 %	..	.	..
IV ..	..	..	..	0·02 %	3·5 %	0·02 %	..	..	..
V ..	..	..	..	..	2·5 %	0·8 %	..	..	..
VI ..	..	..	..	..	0·1 %	2·1 %	..	..	..
VII ..	..	..	..	..	.	0·02 %	..	..	..

E. Electrical Workshops.
P. Power Stations.

Absenteeism based on the figures available from 5 out of 9 Electrical Workshops surveyed in Bengal is shown below :

TABLE 100.

Absenteeism in Electrical Workshops in Bengal.

	1939	1943
Estimated maximum mondays	2,69,923	4,27,342
Mondays lost	29,834	39,737
Percentage	11·05	9·29 %

Unauthorised absence in the U. P. factory in 1940 was 0.7 day per man per year ; in the first half of 1944, it was 1.7 days per man in the half year. The main cause of absenteeism in this industry is sickness. The employment in this industry shows little or no seasonal fluctuations, because most of the workers constitute a stabilised and trained class and are recruited from urban areas.

Standing Orders.—The relations between employers and employees in 18 of the factories surveyed are governed by standing orders which are variously known as Service Rules, General Conditions of Service, Terms of Service or Rules and Regulations of Employment. Two other factories have an Agreement Form to be signed by the workers. This form contains some conditions of employment. In a majority of factories, however, the industrial relations are regulated by the Manager in his discretion.

Recruitment.—All factories, except two in Bengal, employ labour directly. For skilled and semi-skilled jobs, candidates are generally recruited at the factory gate, where they present themselves whenever informed of any vacancy. Generally this is made known to them through existing workers. In a few cases, notices in regard to vacancies are put up on boards. From amongst the applicants the required number are selected by the Manager, the Engineer, the Foreman or the Labour Officer. Skilled workers are also recruited at the gate, if available. The other method is to invite applications by means of advertisement in papers or by posting notices. The applicants are then interviewed, and, if found suitable, are placed on trial. Trade test seems to be compulsory for skilled jobs. Some of the concerns, as we have seen above, train apprentices for skilled jobs. Only six concerns have so far tried to utilise the Employment Exchanges, but the experience of some of them is not very happy. The complaints are, on the one hand, that the men sent by the Exchanges are not up to the mark and, on the other, that the applicants seeking jobs through them have seldom got any.

Labour Officer.—Very few factories appoint a labour officer to look after the grievances of workers. Only one, out of the four Madras factories investigated, has a labour officer. Investigation in Bombay showed the employment of only three labour officers in all the units surveyed. One of them was, however, employed jointly by one of the concerns investigated and a textile mill of which the former constituted a part, while another was the labour officer of a large undertaking, of which the seven factories investigated formed a minor proportion. Besides in these seven factories, workers' grievances are looked after both by the Works Engineer and by the Labour Officer. The only other concerns, which have employed labour officers, are two, one each in the Punjab and the U. P. The labour officer in the Punjab factory is known as the Personnel Officer.

II.—Wages and Earnings.

The details of wages and earnings vary from Province to Province and so are, therefore, given separately.

A. Madras.

Among the factories surveyed in Madras, two have not changed the rates of wages paid to their employees since 1939. In the third factory wage rates were fixed in 1940 and these rates continued in force till the 30th November 1944, when they were raised slightly. In the fourth factory, it was stated that in the course of the war wages had increased by 50 to 100 per cent. and that this increase in the basic rates was to be regarded as pemanent.

Graded promotions are given only in two factories. In one of them, two to four grades are fixed for several occupations. Workers are given increments at the rate of one anna in two years, while promotions from grade to grade depent on strict merit, utility and efficiency. For example, there are four grades of fitters, with daily wages as : (i) 12 as. to 15 as. ; (ii) Re. 1 to Rs. 1-3-0; (iii) Rs. 1-4-0 to Rs. 1-6-0 and (iv) Rs. 1-8-0 to Rs. 2. The other concern has an elaborate system of grading. Workers are placed in different schedules, which are further divided into divisions. For each division in

each schedule there is an increment in wages or salary. The following table gives detailed information in this regard :—

TABLE 101.

Graded Wages for Daily-rated Employees.

Year of Service	Schedule I		Schedule II Divisions				
	Boys	Males	I	II	III	IV	V
1st	0 7 0	0 10 0	0 12 0	1 1 0	1 7 0	1 11 0	2 4 9
2nd	0 7 3	0 10 3	0 12 6	1 2 0	1 8 0	1 12 0	2 6 0
3rd	0 7 6	0 10 6	0 12 9	1 2 6	1 8 6	1 13 0	2 6 9
4th	0 7 9	0 10 9	0 13 0	1 3 0	1 9 0	1 13 9	2 7 6
5th	0 8 0	0 11 0	0 13 3	1 3 6	1 9 6	1 14 6	2 8 3
6th	0 8 3	0 11 3	0 13 6	1 4 0	1 10 0	1 15 3	2 9 0
7th	0 8 6	0 11 6	0 13 9	1 4 6	..	2 0 0	2 9 9
8th	0 8 9	0 11 9	0 14 0	1 5 0	.	2 0 9	2 10 6
9th	0 9 0	0 12 0	0 14 6	1 5 6	..	2 1 6	2 11 3
10th	..	..	0 15 0	1 6 0	..	2 2 3	2 12 0
11th	..	..	0 15 6	..	.	2 3 0	.
12th	..	..	1 0 0	..	.	..	.

TABLE 102.

Graded Wages for Monthly-rated Employees.

Year of service	Schedule III Divisions						
	I	II	III	IV	V	VI	VII
1st	17 12 0	26 12 0	41 12 0	55 12 0	65 0 0	75 0 0	26 12
2nd	18 12 0	27 12 0	43 12 0	58 12 0	67 0 0	77 0 0	27 12
3rd	19 12 0	28 12 0	46 12 0	60 12 0	69 0 0	79 0 0	28 12
4th	20 12 0	29 12 0	49 12 0	62 12 0	71 0 0	81 0 0	29 12
5th	21 12 0	30 12 0	52 12 0	.	73 0 0	83 0 0	30 12
6th	22 12 0	31 12 0	.	.	.	..	31 12
7th	23 12 0	32 12 0	.	.	.	..	32 12
8th	24 12 0	33 12 0	.	.	.	..	33 12
9th	25 12 0	35 12 0	.	..	..	.	35 12
10th	.	37 12 0	..	..	.	.	37 12
11th	..	39 12 0	..	..	.	.	39 12
12th	.	..	..	..	..	..	41 12
13th	..	..	.	..	.	..	43 12
14th	..	.	.	.	.	.	46 12
15th	..	.	.	..	..	.	49 12
16th	..	.	.	..	..	.	52 12
17th	..	..	.	..	..	..	55 12
18th	.	..	..	..	..	..	58 12
19th	..	..	.	..	..	..	60 12
20th	..	..	..	..	..	..	62 12

Workers like blacksmiths, carpenters, drillers, fitters, hammermen, riveters, turners, welders, winders, wiremen, firemen, serangs, cranemen, etc., may be put in any one of the divisions of Schedule II. *Mistries*, serangs, turbine-drivers, etc., are found in divisions I to V of this Schedule. Exceptionally skilled workmen may be given special terms. Among monthly paid employees in Schedule III, the main categories found in Divisions I to VI are chargemen, clerks, time keepers, storemen, foremen, electricians, etc. Station Attendants and Switch Board Attendants are placed in Division VII. All appointments above Rs. 83 per month are regarded as special appointments.

As we have seen above, some of the superior staff is paid monthly. The following figures give the wages and earnings for such staff :—

TABLE 103.

Wages and Earnings (in rupees) of Monthly-rated Staff (January 1944).

Name of occupation.	Monthly Basic Wages			Monthly Earnings.		
	Max.	Min.	Avr.	Max.	Min.	Avr.
Engineer—						
Senior	425	140	279	468	154	305
Junior	125	47	86	138	59	98
Foreman	85	36	66	96	50	78
Switch-board Attendants	36	26	32	49	42	46

The maximum, minimum and average rates of wages and earning for daily-rated categories of workers based on figures of the four concerns investigated are given below :—

TABLE 104.

Wages and Earnings (in rupees) of Daily-rated Employees (January 1944).

Name of occupation	Daily Basic Wages			Monthly Earnings		Average daily Earnings.
	Max.	Min.	Aver.	Max.	Min.	
Blacksmith	2 3 0	0 8 0	1 5 11	51 9 0	29 5 0	1 13 3
Carpenter	2 4 0	0 7 0	1 6 1	55 3 0	31 8 0	1 12 9
Driver (crane, turbine)	1 6 0	1 1 0	1 5 4	67 13 0	51 9 0	1 13 2
Fitter	2 8 0	0 7 0	1 10 6	84 2 0	33 3 0	2 2 9
Driller	2 3 0	0 12 0	1 0 6	35 9 0	33 6 0	1 7 4
Fireman	2 3 0	0 10 0	1 7 7	78 2 0	43 5 0	1 14 9
Greaser	1 6 0	0 12 0	0 12 9	40 12 0	40 12 0	1 5 0
Hammerman	1 4 0	0 7 0	0 15 6	45 8 0	24 11 0	1 10 4
Maistry & Serang	2 12 0	1 1 0	1 7 1	80 3 0	48 7 0	1 14 8
Moulder	2 0 0	0 8 0	1 13 9	49 0 0	57 0 0	2 8 4
Painter	1 0 0	0 11 0	1 3 5	72 12 0	30 6 0	1 9 11
Turner & Machineman	2 8 0	0 7 0	1 6 2	62 6 0	26 2 0	1 13 0
Wireman	2 8 0	0 12 0	1 10 0	107 0 0	40 7 0	2 10 8
Cleaner	1 7 0	0 8 0	0 13 8	56 8 0	24 13 0	1 1 7
Coolie	2 0 0	0 5 0	0 10 5	43 13 0	17 12 0	1 1 8

Note.—The figures refer to basic wages and monthly earnings for the month of January 1944 in the sampled concerns. As the number of days worked by workers in the different concerns differs, the average daily earnings are given in the last column for purposes of comparison. As there are no deductions of a non-beneficiary character in the concerns, gross earnings and net earnings are the same.

B. Bombay.

The twenty concerns investigated in Bombay can broadly be divided into three classes : (i) six concerns, almost all generating and transforming stations, belong to the Tata Hydro-Electric Power Supply Company, (ii) seven concerns form a part of the Engineering side of the Bombay Electric Supply and Tramways Company, and (iii) the remaining seven concerns of a miscellaneous character. The Power Stations of the Tatas are both in the mofussil (generating stations) and in the urban areas (receiving stations) and naturally wages differ from unit to unit. In the mofussil factories, skilled labour such as overhaul men, fitters, turners, coppersmiths, blacksmiths, carpenters, etc., are paid from Rs. 50 to Rs. 119 p. m. and the unskilled workers (coolies) are paid from Rs. 22 to Rs. 40 p. m. Temporary hands, such as fitters, carpenters, blacksmiths, are paid from Rs. 1-8-0 to Rs. 2-8-0 per day and temporary coolies are paid from 8 as. to Re. 1 per day, as and when

required for special job. In the urban areas, permanent workers get monthly fixed salaries as follows :—(i) Operators and Assistants ; Rs. 100 to Rs. 245 ; (ii) Fitters : Rs. 160 ; (iii) Helpers : Rs. 105 to Rs. 110 ; (iv) Carpenters : Rs. 85 and (v) Coolies : Rs. 30 to Rs. 41. Temporary workers are daily-rated as follows : (i) Fitters : Rs. 1-12-0 to Rs. 5 ; (ii) Carpenters : Rs. 2 ; and (iii) Coolies : Re. 1 to Rs. 1-12-0.

The BEST Company has two sets of wage rates, one for the workers who joined the Company's service prior to 1927, and the other for those who joined after 1927. The following table gives the wage rates of a few important categories of workers out of the total list of 122 occupations.

TABLE 105.

Daily Wage-rates in the BEST Company.

Designation	For Workers who joined the Company's Service.						Superior Grade.
	Prior to 1927		Efficiency Bar.	After 1927		
	Min.	Max.		Min.	Max.	
	Rs. as. P.	Rs. as. P.	Rs. as. P.	Rs. as. P.	Rs. as. P.	Rs. as. P.
Blacksmiths	1 5 9	2 7 0	2 1 9	1 3 10	2 10 6	2 13 4 to 3 3 0
Cabinet makers	1 5 6	2 10 4	..	2 10 6	2 13 4	3 0 2 to 3 5 10
Carpenters	1 0 0	2 4 6	1 6 0 & 1 13 7	1 3 10	2 7 8	..
Cleaners (Machine, office, etc.)	0 11 4	0 13 10	..	1 1 0	1 1 0	..
Coolies	0 11 4	0 11 4	..	1 1 0	1 1 0	..
Drillmen	1 6 2	1 13 7	1 10 2	1 3 10	1 15 2	..
Engravers	2 5 6	2 10 4	..	2 7 8	2 13 4	3 0 2 to 3 5 10
Fitters ..	1 4 9	2 5 1	..	1 3 10	2 7 8	2 10 6 to 3 8 8
Furnaceman	1 4 9	1 11 1	..	1 9 6	1 15 2	..
Greasers	0 12 10	0 13 10	..	1 1 0	1 6 8	..
Hammermen	0 12 10	0 13 10	..	1 1 0	1 3 10	..
Learners (Trade) . ..	0 11 4	0 13 10	..	0 11 4	1 1 0	..
Masons	1 2 3	1 8 8	..	1 9 6	2 2 0	2 4 10 to 2 10 6
Moulders	1 2 6	2 2 0	1 12 0	1 3 10	2 4 10	2 7 8 to 2 13 4
Mucoadams	0 14 10	1 3 3	..	1 1 0	1 3 10	..
Oilers	0 12 10	0 13 10	..	1 1 0	1 3 10	..
Painters	1 0 3	1 13 7	1 4 3 & 1 9 9	1 3 10	2 2 0	2 4 10 to 2 10 6
Patternmakers	2 0 2	2 10 4	..	2 10 6	2 13 4	to 2 13 4
Polishers ..	1 4 9	1 13 7	1 9 9	1 3 10	1 12 4	..
Sawyer (Machine) ..	1 4 9	2 4 6	1 8 8 & 1 15 8	1 3 10	2 7 8	..
Shunters	0 14 10	1 3 3	..	1 1 0	1 6 8	..
Tailors	1 4 0	1 8 8	..	1 9 6	2 2 0	..
Tinmen	1 6 2	2 4 6	1 13 2	1 3 10	2 2 0	..
Turners	1 0 3	2 2 0	1 4 3 & 1 11 9	1 3 10	2 4 10	2 7 8 to 2 13 4
Winders	1 0 3	3 1 9	1 4 3	1 3 10	3 5 10	..
Wiremen	1 0 3	1 15 1	..	1 3 10	2 2 10	2 4 10 to 2 10 6

NOTE : (a) In case of those who joined before 1927, initial increases at the rate of one anna per day are granted to workmen on completing every two years' service.

After the initial increase, workmen are granted further increases of one anna per day on completion of each year's service provided their work has been entirely satisfactory and they have not attained the efficiency bar rate, or the maximum rate of pay for their designation. On reaching the efficiency bar, no further annual increases are granted until the workmen have passed an efficiency test.

In the case of those who joined after 1927, initial increases at the rate of 2 as 10 ps. per day are granted to all employees on completing 2 years' approved service provided the maximum rates of wages for their designations are not exceeded. Further increases are granted at the rate of 2 as. 10 ps. every two years in case of men drawing less than Rs. 2-7-8 per day and at the rate of 2 as. 10 ps. every year in the case of men drawing Rs. 2-7-8 and over per day provided always that their work has been entirely satisfactory, and that the maximum rates of wages for their designations are not exceeded.

(b) In the above table, assistants and other grades in an occupation have been grouped together under the main head of occupation as fitters, carpenters, etc.

(c) Where there is no increment, maximum and minimum rates are the same.

The following table has been compiled from the figures given by three Miscellaneous Electrical Workshops, three Power Stations (other than the Tata's or the BEST), and four BEST factories. All the factories are in urban areas :—

TABLE 106.

Wages and Earnings (in rupees).

Name of occupation	Nature of industry.	Monthly Basic Wages.			Monthly Gross Earnings.		
		Max.	Min.	Avr.	Max.	Min.	Avr.
Fitter	E	111	50	70	119	73	83
	P	120	23	53	152	41	79
	B	90	25	51	132	25	107
Carpenter .	E	90	44	77	102	67	93
	P	60	20	36	76	57	63
	B	71	26	41	163	37	86
Blacksmith	E	83	48	71	106	60	75
	P	67	23	43	83	54	67
	B	56	28	33	98	56	79
Wiremen	P	60	13	35	81	41	61
	B	65	17	37	119	40	70
Coolie	E	42	20	31	49	29	43
	P	32	13	18	55	34	46
	B	27	13	22	77	38	61

NOTE—
E for Miscellaneous Electrical Workshops.
P. for Miscellaneous Power Stations.
B for BEST factories.

C. Bengal.

(a) *Electrical Workshops.*—The basic wage rates for different occupations in the industry show much improvement on pre-war figures, the degree of rise varying from unit to unit. Generally speaking, wage rates for the skilled trades have shown a greater rise than those for the unskilled ones. Rise to the extent of 12 as. has taken place in the daily wage rates of some of the occupations, but the average rise was to the extent of 6 to 7 as. Out of the nine units investigated, only one has been found to have standardised the wage rates. All workers in this concern are recruited on a basic pay of Re. 0-6-3 per day, which rises by Re. 0-1-6 every second year of service up to 6 years, after which the same increment is granted annually.

The following table give the wages and earnings of the workers employed in the concerns investigated. The first table shows the basic wages and gross earnings paid in three units manufacturing lamps. The second table gives similar figures about six concerns manufacturing electric fans and general electrical goods :—

TABLE 107.

Daily Wages and Earnings in Electric Lamp Manufacturing Companies, Bengal.

Occupation.	Basic Wages			Gross Earnings.		
	Max.	Min.	Aver.	Max.	Min.	Aver.
Ageing	2·31	0·56	1·14	4·72	0·94	2·09
Vacuming	2·31	1·00	1·20	4·72	1·38	2·15
Sealing	1·63	0·56	1·04	3·27	0·94	1·87
Gettering	1 41	0·58	1·14	3·27	1·41	2·19
Filament mounting	1·41	0·58	1·14	3·27	1·41	2·19
Foot making	1·41	0·50	0·98	3·16	0·88	1·73
Mounting	1·41	0·50	1·11	3·35	0·88	2·05
Inserting	1·41	0·50	1·05	3·25	0·88	1·99
Capping	1·41	0·50	0·82	2·26	0·88	1·57
Stamping	1·41	0·50	0·86	1·82	0·88	1·40
Soldering	1·41	0·69	0·96	2·13	1·45	1·80
Designing & Spiralling	4·23	0·50	2 03	9·62	9·62	4·09
Neck making	1·41	0·63	0·96	2·35	1·00	1·66
Gas filling	1·41	0·50	1·03	1·82	0·88	1·43
Photometre attendants	1·41	0·88	1·10	1·82	1·25	1·50
Chemical	1 41	0·81	1·02	1·82	1·19	1·42
Sorting	1·41	0·58	1·01	2 85	0·96	1·78
Washing	1·41	0·58	0·87	1·82	0·99	1·27
Packing	1·73	0 58	1·06	4·41	1·42	2·01

TABLE 108.

Daily Wages and Earnings in Factories Manufacturing Electric Fans and General Electric Goods, Bengal.

Occupation	No. of men employed.	Basic Wages			Gross Earnings		
		Max.	Min.	Avr.	Max.	Min.	Avr.
Machine Fitter .. .	58	2·48	1 21	1·51	3·30	1·81	2·12
Latheman	8	2 42	1·05	1·60	2·67	1·36	1·88
Viceman	8	1·52	0·82	1·17	1·74	1·01	1·38
Turner	54	1·96	1·03	1·45	2·61	1·53	2·01
Diceman	46	2 97	2·23	1·69	3·82	1·88	2·41
Electric Fitter	14	1·44	0·33	0·95	1·88	0·62	1 25
Electric Armature Winder ..	4	1·93	1·54	1·74	2·28	1·63	1·94
Painter	44	2·16	0·89	1·34	3·27	1·48	2·1
Blacksmith	30	1·45	0·90	1·19	1·99	1·49	1·73
Carpenter	33	1·55	1·20	1·35	2·23	1·82	2·00
Nickel plater	20	1·31	0·88	1·00	2·02	1·53	1·67
Checker	13	1·13	0 81	0·99	1·78	1·47	1·64
Gauge Checker	5	2·06	0·81	1·63	2·86	1·47	2·1
Shaping man	11	2 06	1·00	1 51	2·86	1·66	2 [illegible]
Tinsmith	6	1 56	0·75	1·02	2·27	1·41	1 [illegible]
Driller	7	1·41	0·94	1·15	2·03	1·40	[illegible]
Grinder	10	1·88	0 94	1·26	2·67	1·59	1·9
Finisher	7	1·25	0 75	0·99	0·91	1·41	1·64
Armature winders	216	2 10	1·15	1·53	2·84	1·78	2·29
Moulder	63	2·60	0·99	1·32	3·83	1·38	1·92
Fanshop winder	80	2·96	0·95	1·65	3·78	1·33	2·27
Pattern maker	13	3·79	1·08	2·01	4·37	2 01	3·14
Tool setter	11	2 96	1·07	1·73	3·44	1·[illegible]	2·23
Electrician	3	3·60	2·03	2·82	4·45	2 [illegible]	[illegible]
Coolies	4	1·41	1·03	1·22	1·82	1·45	1 [illegible]

b) *Power Stations.*—Of the 6 units surveyed, three have graded system of pay for their workers. The wage rates for different occupations in the units not having graded scales of pay show some improvement on those obtaining in 1939 but this is more apparent than real as the increased wage-rates prevailing at present in two of these three units represent the consolidated amount of basic wages and dearness allowance. The average daily basic wages and gross earnings, based on figures of 4 units are given below :—

TABLE 109.

Daily Wages and Earnings in Power Stations—Bengal.

Name of Occupation	No. of workers	Basic Wages			Gross Earnings		
		Max.	Min.	Avr.	Max.	Min.	Avr.
Carpenter	1	1·23	1·23	1·23	1·23	1·23	1·23
Pumpman	33	0·95	0·88	0·92	1·23	1·06	1·17
Engine-driver	8	1·51	1·24	1·36	1·84	1·55	1·65
Machine fitter	23	4·61	1·46	3·02	1·96	1·51	1·76
Electric fitter	6	2·81	1·47	1·99	2·97	1·45	1·99
Fireman	11	1·50	1·39	1·44	..	..	..
Lineman	11	1·74	1·11	1·40	2·33	1·60	1·94
Switch Board Attendant ..	32	1·22	0·83	0·99	1·86	1·32	1·56
Boiler tindel	14	2·06	1·37	1·74	1·81	1·48	1·68
Ashman	66	1·11	1·00	1·04	1·81	1·16	1·37
Machine & Power House Attendant	9	1·13	0·65	0·80	1·69	0·97	0·91
Water Attendant .. .	16	0·97	0·65	0·69	1·32	0·97	1·04
Cleaner	3	0·65	0·65	0·65	1·17	1·15	1·15
Khalasee	92	07·6	0·64	07·0	1·10	1·05	1·07
Cable joiner .. .	1	2·50	2·50	2·50	..	..	..
Wireman	5	1·11	0·65	0·88	1·70	1·29	1·49
Fuseman	8	0·58	0·48	0·53	1·60	1·22	1·41
Meter reader	7	0·87	0·65	0·78	1·49	1·23	1·36
Turbine Attendant	5	1·36	0·81	1·08	1·92	1·37	1·65
Head Linesman	2	2·58	2·18	2·37	3·72	3·57	3·64
Asstt. Turbine Attendant ..	5	0·71	0·65	0·68	1·27	1·21	1·24
Asstt. Boiler tindel	5	0·81	0·65	0·73	1·37	1·21	1·29
Mason	2	1·61	1·55	1·58	1·61	1·55	1·58

D. United Provinces.

In the Power Station that was investigated, there was no definite official system of graded or time-scale promotion. A list of designations and grades was in existence, but this list has been soperseded. The following figures

show minimum and maximum wages in 1939 and 1944 for some important occupations :-

TABLE 110.

Wages in a U. P. Power Station.

Designation.	31st May 1939 Basic Wages		January 1944 Wage Rates		Average.	
	Min.	Max.	Min.	Max.	Wages	Earnings
Armature winder (Heavy)	32	80	53	100	..	..
Attendants (Turbine, Boiler, Switch Board, etc.)	35	70	80	110	..	..
Asst Attendants (Boiler, Switch Boards, etc)	35	45	35	80	..	..
Blacksmith	24½	52½	43	60	51	93
Carpenter	37½	60½	38	68	.	..
Chargeman	85	130	75	200	..	..
Cleaner	..	..	18	21	..	..
Coolie	..	..	18	..	18	49
Jamadar Coolie	18	20¾	20	27	..	..
Craneman	30	..	27	40	..	..
Driller	30	37½	35	40	..	..
Electrician	135	..	63	..	..	..
Fireman	18¾	..	23	..	..	..
Fitter	18¾	65	37	67	49	84
Grinder	..	..	25	..	..	..
Improver	25	30	20	30	..	..
Linesman	18¾	37	25½	31½	..	..
Masons	37½	41½	25	48	..	..
Fan Mechanic	55	..	70	..	..	..
Motor Mechanic	45	67½	70	80	..	..
Moulder	30	60	48	75	57	89
Painter	..	50	25	60	38	71
Fan Repairer	30	45	35	60	..	..
Sweeper	16	..	17	..	..	..
Tinsmith	37½	..	52	..	..	..
Turner	22½	56½	35	65	52	84
Welder	45	90	45	90	..	..
Wireman	22½	45	27½	60	..	..

E. Punjab.

In both the Power Stationr, workers are employed on graded scales. The scales are as follows in one concern :—

TABLE 111.

Wages in a Punjab Factory.

Category	Old scale applicable to workers appointed before 16-7-1931.			Revised scale applicable to workers appointed after 15-7-1931.		
	Min.	Increment (annual)	Max.	Min.	Increment (annual)	Max.
	Rs. as. p.	Rs. as. p.	Rs. as. p.	Rs. as. p.	Rs. as. p.	Rs. as. p.
Coolie	0 9 0	0 1 0	0 11 0	0 10 0	0 1 0	0 12 0
Semi-skilled workers	0 12 0	0 1 0	1 0 0	0 14 0	0 1 0	1 2 0
Skilled workers	1 2 0	0 1 0	1 8 0	1 4 0	0 2 0	2 8 0
	1 10 0	0 2 0	2 0 0	..	..	..
	2 4 0 (fixed)					
Mistry	2 6 0	0 3 0	2 12 0	2 10 0	0 3 0	4 2 0
	3 0 0	0 4 0	3 8 0	4 4 0	0 4 0	5 8 0
	3 12 0	0 4 0	4 12 0			

The standardised wage rates in the other concern are as follows :—

TABLE 112.

Monthly Wage-scale in a Punjab Factory.

Occupations	Scale of Pay (in rupees)
Switch Board Operators and Turbine Drivers	50—5—75
Assistant Switch Board Operators (Junior)	30—3—45
Relief and Turbine Drivers, Fitters, and Turners (Junior)	50—4—70
Firemen	35—4—55
Water Attendants and Outside Pump Attendants	25—2—35
Condenser Attendants	20—1—25
Coal coolies and Turbine room cleanrers .. .	17—1—22
Turbine fitter	125—10—175
Fitters (senior), Turners (senior) and Boiler fitters (senior) . ..	70—5—95
Assistant fitters and Assistant turners	35—3—50
Blacksmiths	50 (fixed pay)
Kiln attendants	17 „

Monthly wages and earnings of unskilled workers in the two concerns are given below :—

TABLE 113.

Monthly Wages and Earnings of Unskilled Workers.

Concern	Basic Wages		Gross Earnings	
	Daily-rated	Monthly-rated	Daily-rated	Monthy-rated
	Rs as. P.	Rs. as.P.	Rs. as. P.	Rs. as. P.
I	30 14 0	19 * 8 0	30 14 0	30 8 0
II	16 4 0	..	33 4 0	..

In both the concerns, basic wages have not increased during war time. Only temporary coolies who are paid daily wages seem to be receiving their wages at a rate higher than the pre-war rate. The earnings of coolies have increased from 8 as. in 1939 to about Rs. 1-2-0 to Rs. 1-4-0 now.

F. Bihar.

Basic wages now are generally higher than they were in 1939. The present position (in February 1945) is shown below :—

TABLE 114.

Wages and Earnings in a Bihar Electrical Workshop.

Name of Occupation	Wage-rates		No. of workers employed	Basic Wages Earned			Gross Earnings		
	Max. Rs as. p.	Min. Rs. as. p.		Max. Rs.	Min. Rs.	Avr. Rs	Max. Rs.	Min. Rs	Avr. Rs.
Fitters	2 8 0	2 4 0	31	60	30	45	87	48	67
Turners	2 8 0	2 4 0	18	84	36	48	120	55	69
Electricians	2 4 0	1 4 0	8	48	24	38	72	35	58
Blacksmiths	2 0 0	1 4 0	4	60	48	53	86	71	77
Carpenters	1 10 0	1 4 0	30	51	27	36	75	45	56
Khalasis	1 0 0	0 12 0	3	..	..	24	..	..	37
Welders	2 8 0	2 4 0	2	60	54	57	89	81	85
Machinemen (tool)	1 4 0	1 0 0	80	39	17	24	60	20	40
Helpers	1 0 0	0 12 0	51	21	14	16	37	27	29
Setters (Dies)	piece-rated		13	41	24	32	105	66	77
Block stoppers	,,	,,	41	35	15	27	93	48	67
Coolies	,,	,,	23	16	12	14	48	25	36
Rejas	,,	,,	3	..	.	12	.		44
Coolies	0 9 0	0 8 0	371	17	12	13	31	22	25
Rejas	0 12 0	0 7 6	138	15	9	11	25	19	21

NOTE :—Number of days to which wage figures above refer : 24 days in February 1945.

Dearness Allowance.—Various methods, as shown in the following table, are utilised for the payment of dearness allowance :—

TABLE 115.

Methods of Payment of Dearness Allowance.

Province	Number of Concerns paying Dearness Allowance on the following system						
	No. of concerns	Flat rate for all	Different flat rates for different groups	Sliding scale based on cost of living index	Based on percentage basis	Mixed (more than one method)	No of concerns paying no d a.
Madras ..	4	1	2	..		1	..
Bombay ..	20	4	6	9	..	..	1
Bengal.. ..	14	2	2	..	5	3	2
U. P.	1	..	..	1	..	..	..
Punjab ..	2	..	..	..	..	2	..
Bihar	1	..	1	..	..	..	..
Total ..	42	7	11	10	5	6	3

Only three out of the forty-two concerns investigated have no system of dearness allowance. Two (both Bengal concerns) of these three used to pay cash dearness allowance up to December 1943, when the wage rates were increased so as to include dearness allowance. Out of the seven concerns which pay dearness allowance at a flat rate, three pay at daily rates, while the remaining four pay at monthly rates. The daily rates are between 6 as. and 15 as. and the monthly rates vary from Rs. 8 to Rs. 16. Eleven concerns pay dearness allowance at flat rates, but the amount varies according to different income groups. Out of these eleven concerns, six are Bombay Power Stations where the present schedule is (i) Rs. 19 p. m. for the first Rs. 50 or less of monthly salary and (ii) Re. 1 for each Rs. 10 of monthly salary in excess of Rs. 50 p. m. ; allowance payable in accordance with the above is subject to a maximum limit of Rs. 200 p. m. The flat rates of dearness allowance paid in the remaining five concerns are given below :—

TABLE 116.

Flat Rates of Dearness Allowance.

Province	Concern	Per month or per day	Income Groups and Rates of Dearness Allowance				
			I	II	III	IV	V
Madras ..	1 I. G	P.m.	Up to Rs. 20	Rs. 21 to Rs. 60	Rs. 61 to Rs. 100	Rs. 101 to Rs. 200	..
	D.A.	,,	Rs. 9	Rs. 12	Rs. 19	Rs. 30	..
	II I. G.	,,	Up to Rs. 40	Rs. 40 and over	..	..	..
	D.A.		Rs. 10	Rs. 13	..	..	..
Bengal.. ..	I I. G.	p. d.	Up to Rs. 1-4-0	Rs. 1-5-0 to Rs. 1-9-0	Rs. 1-10-0 to Rs. 2-8-0	Rs. 2-9-0 and over	..
	D.A.	p.m.	Rs. 12-8-0	Rs. 14	Rs. 15	Rs. 18	..
	II I. G.	p. d.	Up to Re. 1	Re. 1 to Rs. 1-7-0	Rs. 1-7-0 to Rs. 1-8-0	..	..
	D.A.	,,	5 as.	6 as.	7 as.	..	..
Bihar	I.I. G.	p. m.	Up to Rs. 100	Rs. 101 Rs. 200	Rs. 201 Rs. 300	Rs. 301 to Rs. 400	Rs. 401 to Rs. 500
	D.A.		Rs. 10	Rs. 13	Rs. 16	Rs. 20	Rs. 25.

I. G. Income Group
D. A. Rate of Dearness Allowance.

It will be seen from the above figures that the actual amount of dearness allowance increases with the higher income groups but that as a percentage of basic wages, it decreases considerably.

Out of nine Bombay concerns, seven follow the sliding scale prepared by the Bombay Milloweners' Association and based on the cost of living index. One days 2½ as. as dearness allowance for every point of the Cost of Living Index.

The remaining concern, a Power Station in Ahmedabad, has the following scale :—

TABLE 117.

Dearness Allowance Paid in an Ahmedabad Power Station.

Income Group.	Rate of Dearness Allowance.
(*i*) Up to Rs. 65 p.m.	One and a half times the basic allowance.*
(*ii*) For the next Rs. 40 p.m. of salary ..	10% of basic allowance for each Rs. 5 or part thereof increase in salary above Rs. 65. p.m.
(*iii*) For the next Rs. 200 p.m. of salary ..	10% of basic allowance for each Rs. 40 p.m. or part thereof, increase in salary above Rs. 80 p.m.
(*iv*) For the next Rs. 219 p.m. of salary ..	10% of basic allowance for each Rs. 80 p. m. or part thereof, increase in salary above Rs. 280 p.m.
(*v*) For all salaries exceeding Rs. 524 P.M	No allowance.

*Basic allowance is at the rate of 2 as. per point for each point by which the Ahmedabad Cost of iving Index exceeds 70 but does not exceed 150.

The following Schedule of the War Dear Food Allowance, based on the ost of living index figures declared monthly by the Employers' Association of Northern India, Cawnpore, operate in the U. P. Power Station investigated :—

TABLE 118.

Dearness Allowance in a U. P. Power Station.

Wage Category.	Dearness allowance (as. in the rupee) when the Cost of Living Index Figure is between					
	101-120	121-140	141-160	161-180	181-200	201 & over.
Under Rs. 19	2	4	5	7	Minimum 6½ as. per worker per day (equivalent of Rs. 10-9-0 p.m. of 26 working days	Last column plus 1-4 pies per point of increase 201 to 220 points per worker per day (calculated to the nearest anna).
Rs. 19 to Rs. 25 ..	1½	3	4	5½		
Rs. 25 to Rs. 32-8-0 ..	1	2½	3½	5		
Rs. 32 -8-0 to Rs. 40 ..	¾	2¼	3¼	4½		
Rs. 40 to Rs. 59 ..	½	2	3	4		
Rs 59 Rs. 75	½	2	3	4		
Rs. 57 to Rs. 150 ..	*Nil*	1½	2½	3		

NOTE.—An Emergency War Allowance 20 per cent. of the salary with a minimum of Rs. 50 p.m. paid to employees drawing from Rs. 500. The percentage of this allowance for employees drawing over Rs. 500 is lower.

Only five concerns, all in Bengal, grant dearness allowance as a percentage of the monthly wages earned. These percentages are : (i) 10 per cent., (ii) 10 per cent. with minimum of Rs. 5 p.m. and a maximum of Rs. 15 p. m., (iii) 25 per cent. subject to a minimum of 4 as. per day, (iv) 50 per cent. and (v) 10 per cent. subject to a minimum of Rs. 17-8-0 p. m. Six factories use more than one method for the payment of dearness allowance. In a Madras factory, for example, dearness allowance is calculated according to the cost of living index, and amounts to : (i) for those getting less than Rs. 50 p. m. : Rs. 16-8-0 p. m. at index 200, plus 2 as. for each point of rise in the index ; (ii) for those getting Rs. 50 or more up to Rs. 100 : Rs. 14 p. m. at index 200, plus 2 as. for each point of rise ; and for those getting more than Rs. 100 p. m., it is 10 per cent. of pay. Dearness allowance is proportionately reduced according to the number of days the worker is absent in a month. In a Bengal concern, the rate is 10 as. per day for the daily-rated workers and 15 per cent. of the pay or Rs. 16 p. m. whichever is higher, for the monthly paid staff. In another Bengal concern, dearness allowance is fixed at 2 as. per rupee earned plus 4 pies per hour worked. In a third concern in Bengal, the rate is Rs. 14-8-0 p. m. for those whose basic wage does not exceed Rs. 97 p. m. and at the rate of 15 per cent. of the basic wage per month for those whose basic wage exceeds Rs. 97. Both the concerns investigated in the Punjab have a mixed method for the payment of dearness allowance as follows :—

TABLE 119.

Dearness Allowance in the Punjab (Based on the figures of 2 concerns).

Concern	Income Groups and Dearness Allowance.				
I	I. G. (*i*) Below Rs. 40 (*ii*) Rs. 40 and above D.A. (*i*) Rs. 17 (*ii*) Rs. 19 or 17% of pay, whichever is less				
II	I.G. (*i*) Up to Rs. 30 (*ii*) Rs. 30-40. (*iii*) Rs. 100-150 (*iv*) Rs. 150-250. (*v*) Rs. 250-275.				
	D.A. (*i*) Rs. 11.	(*ii*) Rs. 14.	(*iii*) 10% of pay or Rs. 14 whichever is greater.	(*iv*) 10% of pay.	(*v*) At such rate which will raise the total remuneration to Rs. 275.

Bonus and Other Allowances.—27 concerns (Madras : 1, Bombay : 16, Bengal : 7, U. P. : 1, Punjab : 1 and Bihar : 1) were paying bonus to their workers in war time. In most of the cases bonus is temporary and depends upon increased production and profit.

In Madras, only one of the four concerns investigated has given bonus equivalent to one month's wages since 1942. Another concern grants a special pay of Re. 0-1-9 per day per worker and also two hours' wages per week as 'Saturday Bonus' to those who attend regularly throughout the week and to those who are absent on leave with wages for a period not exceeding two days in a week.

In Bombay, 16 out of 20 concerns investigated, grant war bonus, the details of which are given below :—

TABLE 120.

Bonus in Bombay Factories.

Concern	Amount of Bonus granted	Conditions
A	12½% of annual basic earnings	Worker must be on the roll at the end of the previous financial year.
B	1 to 3 months' wages ..	
C	1 month's salary.	
Tata Hydro Electric (6 concerns).	Generally 1 month's salary ..	It is paid after 1 year's satisfactory service provided the worker is in service at the time the bonus is declared.
BEST (7 concerns)	1/12th of the basic earnings (paid in May 1944 & Nov. 1944).	Full amount in case of employees having 12 month's service and over.

Like dearness allowance, bonus system has also undergone many a change. In the BEST factories, for example, during a period of less than 4 years (May 1940 to February 1944) bonus was paid ten times at the rate of 1|24th of the annual basic earnings. Besides dearness allowance and bonus, other allowances are given only in two factories. In a Sholapur Power Station, since the introduction of the rationing scheme in December 1943, the grain allowance is paid in cash which comes to approximately Re. 0-4-9 per day. This allowance will be stopped when rationing is withdrawn. In the other Bombay concern, a Heavy Duty Allowance of 1 as. per day is given to those who are engaged on coal and ash handling and boiler cleaning.

In Bengal, bonus system exists in five electrical workshops and two power stations. In one electrical workshop, an attendance bonus is paid at the rate of 10 per cent. of basic wages subject to a maximum of Rs. 6 per month, and on the condition that the worker is present on every day and is not late beyond 10 minutes allowed as grace. To the foundry workers and supervisory staff a production bonus is paid at the rate of Rs. 2-8-0 per cwt. produced over 10 tons per month and at the rate of Rs. 3 per cwt. beyond one ton in case of non-ferrous metal production. Supervisory staff is also paid one month's pay in the year as bonus. Excepting the attendance bonus, other bonuses are temporary. Another electrical workshop grants bonuses in the form of an annual profit bonus to its workers twice a year at the rate of one month's pay subject to good record of service. In a third concern, a special war bonus equal to 15 days' pay was paid to all the workers in September 1943, subject to the condition that any one leaving the service of the company within the next three months would have to refund the amount ; another war bonus equal to 26 days' wages was paid in September 1944, on similar conditions. The only permanent bonus allowed every year is 15 days' pay subject to good attendance. In the fourth electrical workshop, an annual production bonus was granted thrice, in March 1943, and in May and June 1944. For the payment of this bonus a lump-sum amount was fixed for each department and the departmental head distributed the amount in accordance with the quality and quantity of individual output subject to

the condition of a minimum length of service of one month previous to the declaration of the bonus. The fifth electrical workshop awards bonuses to its workers at the rate of one month's pay twice a year (at Puja and Christmas) to ensure regularity of attendance and careful workmanship. The only condition attached to the payment of this bonus is that the total period of absence during the year should not exceed one month. One of the Bengal Power Stations grants an annual profit bonus only to those whose basic wages are above Rs. 220 p. m. with the result that the lower paid workmen are deprived of this benefit. In another power station, a bonus equivalent to one month's pay was paid to all permanent workers who worked throughout the year 1944.

In the power stations investigated in U. P., a bonus and a special war gratuity were paid for the financial year ending December 1943, to employees whose services during that year had been satisfactory, who had completed full calendar year's service, and, in the normal way, were in the employment of the Corporation when these privileges were sanctioned. The rate declared was one anna per rupee for bonus and 6 pies per rupee for special war gratuity of the basic earnings (excluding allowances) of the employees for the year 1943. Those payments are *ex-gratia* and are payable entirely at the discretion of the Agents from year to year. The rate of bonus is linked to the rate of dividend paid on ordinary shares.

One of the two factories investigated in the Punjab pays a bonus equal to 3 months' wages.

The Bihar factory paid bonus equivalent to basic wages of 4 weeks for 1940-41, of 8 weeks for 1941-42, of 2 months each for 1942-43 and for 1943-44. The bonus is paid to every employee who has worked throughout the financial year with which the payment is connected and who is still in the employment of the factory when the annual bonus is declared. The factory also granted from 1st May 1942, to 31st January 1945, an A. R. P. Allowance of 20 per cent. of the basic salary with a minimum of Rs. 10 and a maximum of Rs. 100 to every employee who volunteered to be a member of the various A. R. P. services and who attended lectures, parades and practices. This allowance has now ceased. Another allowance granted by the factory is food concession. It is a financial concession against food purchases to stabilise the rates of essential foodstuffs at the October 1942, levels and has been given since early 1943.

Overtime.—At the time of *ad hoc* enquiries, overtime was being worked in 41 out of the 43 concerns investigated. The rate of overtime payment lacks uniformity but the provisions of the Factories Act in regard to extra payment for overtime are generally observed. Hours worked beyond the daily hours of work are treated as overtime and are paid at 1¼ times the normal rate up to a maximum of 10 hours per day and at 1½ times for hours worked in excess of 10 hours. In some concerns, however, the payment is more liberal. In a Madras factory, for example, over and above the overtime rates [which are (i) ordinary rates for overtime worked between 6 p.m. and 9 p.m., (ii) 1½ times the normal rate for hours worked between 9 p.m. to 12 midnight, and (iii) twice the normal rate for hours worked between 12 midnight to 8 a.m.], the worker on overtime is also paid Rs. 1-4-0 extra for food and other expenses. In a Bengal electrical workshop, workers working overtime are given the option of compensatory leave or payment at the normal basic rate. Many factories make 100 per cent. extra payment for work on Sundays and holidays. Overtime seems to be voluntary, except in the Bengal Power Stations and in the Bihar factory. Separate registers are generally main-

tained for recording overtime. It has been stated by the employers that the registers are open to inspection by the workers or their representatives.

Deductions and Fines.—Deductions are made in 30 concerns and fines are imposed in 17 concerns. Deductions were made and fines imposed mainly for the reasons mentioned in the previous chapter. The U. P. factory, however, mentions following additional items for which deductions may be made : (i) amounts for purchase of Defence Saving Certificates on behalf of employees or contribution towards War Fund ; (ii) adjustments due to excess payment in previous months or due to rounding off to nearest rupee or nearest anna of the net payment on account of shortage of small coins ; and (iii) decretal amount against the employee on the orders received from the Court of Law. The amount in the Fine Funds varies from factory to factory. In Bombay out of the eight concerns which impose fines, seven belong to the BEST Company, whose consolidated fines fund has an amount of nearly a lakh of rupees and is utilised for granting interest-free loans or small donations to poor workmen or those injured in tramway accidents. In a Bengal electrical workshop, there were 326 cases of fines with a total amount of Rs. 44-10-0 in the Fine Fund in 1943. In another workshop, the amount in this account in 1943, was found to be Rs. 29-13-9. In the other section of the industry, according to the management, fines are generally not imposed, but it was gathered during the course of investigation that fines were imposed for careless and negligent work, often in contravention of the provisions of the Payment of Wages Act. In a Calcutta power station, employing more than 4,000 workers, the amount outstanding in the Fine Fund is only Rs. 492-14-6. In a Punjab power station, employing about 750 workers, the total amount of fine collected from September 1940 to February 1945, was only Rs. 36-6-6, while the total deductions from June 1942, to November 1943, amounted only to Rs. 42-10-0. The fine fund, wherever it exists, is at the disposal of the Works Manager and is spent on welfare activities such as sports, medical aid, etc., for the workers. The fine fund of a Calcutta power station is usually spent on celebrating ' Viswakarma Puja ' (worship of the tools) every year. In a Punjab factory, the whole amount realised as fines is credited, it is claimed, to the Staff Benefit Fund, for such purposes as medical relief, diet charges of the families of lower paid staff, supply of spectacles, supply of artificial limbs to low paid staff, recreation and amusement including grants to Boy Scouts Association and educational assistance to the workmen's children. It was, however, alleged by others that only a part of the amount collected as fines was credited to the Staff Benefit Fund

Wage-Period.—All the factories investigated in Madras, Bombay, U. P. and the Punjab pay their workers monthly. In Bengal, out of the nine electrical workshops investigated, two pay their workers monthly, two fortnightly, four weekly ; in the remaining concern payment is made every ten days. Of the five power stations surveyed in Bengal, one makes weekly payments, two make monthly payments, while in the remaining concerns, permanent workers are paid monthly and casual labour weekly. In the Bihar factory, the period is weekly for all workers whose daily basic rate does not exceed 8 as. ; for all other workers the period is a calendar month.

The waiting period, however, differs from unit to unit and in a few cases from department to department in the same unit. Monthly-rated workers are, in some concerns, paid on the last day of the month or on the first day of the next month, while daily-rated workers are paid before the seventh or tenth of the month following, according to the Payment of Wages Act. In the electrical workshops, in Bengal, the waiting period ranges from 2 to 6 days.

Holidays.—There is no uniformity as regards closed holidays in the factories investigated. The following table, however, has been prepared from the statements obtained from the various factories, though its accuracy is limited because the number of holidays are affected by such factors as the extent and nature of leave facilities, the working of the shifts, the nature of work carried on, etc.

TABLE 121.

Nature of Holidays.

Province	No. of Concerns Granting			
	1½ weekly holidays plus public holidays	1½ weekly holidays	One weekly holiday	One weekly holiday plus public holidays
Madras	2	1	..	1
Bombay	..	..	10	10
Bengal	..	1	7	7
U. P.	..	..	..	1
Punjab	..	..	1	1
Bihar	..	..	1	..
Total ..	2	2	19	20

The weekly holiday is Sunday, but if a festival or public holiday comes in the week, Sunday is considered as a working day. In one factory, Friday is a weekly holiday for Muslims, whereas Sunday is for all others. The number of public holidays, which are granted in addition to the weekly holiday, varies from 2 (in seven Bombay factories) to 18 (in the U. P. factory). Holidays may be with or without pay. For example, in one Bengal factory, all Sundays are observed as holidays with pay, whereas Bank holidays are observed as holidays without pay. In another Bengal factory, Sundays are regular closed days without pay, whereas nine festival holidays with pay are granted. In a third factory in the same Province, all Sundays and in addition seven festival holidays are closed holidays and all of them are without pay. The U. P. factory, which grants Sundays plus eighteen other holidays, all with pay, seems to be very liberal ; there are about 85½ days, including Sundays and leave excluding sick leave, in the year as non-working days for all employees except those on a temporary basis. In a Bengal electrical workshop, 15 days bonus in lieu of holidays is allowed.

III.—Working Conditions.

Shifts and Hours of Work.—Due to war conditions requiring intensive production and because of the nature of work in this industry, it was found necessary to run various types of shifts in different sections of the factory to balance the production ; single, double and multiple shifts, generally with different sets of people, are worked. In the U. P. factory, for example, the workers have been divided into seven main groups with as

many as 57 shifts. The Bihar factory has also 5 groups of workers with 19 shifts. A number of factories (1 in Madras, 9 in Bombay and all the six Power Stations in Bengal) have three continuous shifts, almost all of which are of 8 hours' duration. In seven cases, these shifts are in addition to the general or the normal shift which is worked by the majority of factory workers, who are not employed on continuous-process work. Besides these continuous shifts, some of which are naturally night-shifts, very few factories (2 in Bombay and 2 in Bengal) actually work the night-shifts, with daily hours of work varying between 7½ and 8½. All the four factories in Madras, four in Bombay, one in Bengal and one in Bihar work less than the normal hours on Saturdays ; the actual hours of work vary from 4½ to 6 and the majority of them work 5 or 5½ hours without any rest interval. The general idea of the hours of work and shifts, bearing in mind the above-mentioned exceptions, can be had from the following table which takes into consideration the main shift in each factory investigated.

TABLE 122.

Shifts and Hours of Work.

Nature of Normal Shift.			Number of factories in which this arrangement obtains.					
Actual hours of work	Rest interval	Spread over	Madras	Bombay	Bengal	U.P.	Punjab	Bihar
7½	1	8½	..	1	..	..	..	..
8	½	8½	..	..	2	..	..	..
8	1	9	1	2	2	..	..	..
8	2	10	..	1	..	..	..	..
8½	½	9	..	..	1	..	..	..
8½	1	9½	3	6	..	..	..	..
8½	1½	10	..	3	..	1	..	1
9	1	10	..	4	..	..	1	..
9½	½	10	..	..	1	..	..	..
10	1	11	..	..	1	..	..	..

Overlapping shifts seem to be rare. One of the Bombay factories works three shifts, two of which are overlapping as follows : (i) 8 a.m. to 5-30 p.m. and (ii) 1 p.m. to 10-30 p.m. Such shifts, however, are worked with different sets of workers.

Ventilation, Lighting, Congestion, Flooring, etc.—Almost all the electrical workshops have pucca flooring with roofs constructed of corrugated iron sheets or asbestos. To ensure sufficient light and air most of the units have a number of ventilators as well as electric lighting arrangements. The nature of work both in electrical workshops and in the power stations forbids any congestion. This is the general picture of the working conditions in the units investigated. However, there are a few exceptions. One of the electrical workshops in the City of Bombay, employing more than 500 workers, has been housed in a small one-storeyed residential building. In a

room of approximately 30 ft. × 30 ft., about 200 workers were working, standing in six rows. The room was ill-ventilated and no attention was being given to cleanliness and protection from heat. The Company, however, intends to shift to a better locality in the suburbs. On the other hand, one of the Bengal factories has fitted an air conditioning plant to regulate the temperature inside the chamber. In another factory, workers working in a heated atmosphere get free milk once a day. A number of factories utilise exhaust fans, glass panes, skylights and ventilators.

Shelters.—Only 8 factories (3 in Bombay and one each in Madras, Bengal, U. P., Punjab and Bihar) have provided shelters for their employees during rest intervals. The main reason for not providing shelters is the absence of opportunities to avail of them in factories working on continuous processes. In such factories there are no regular rest intervals. The Madras factory has four well-built rest shelters with paved floor for Hindus, Muslims, Christians and *Adi-dravidas* separately. In Bombay, the area of one shelter is only 13 ft. × 50 ft. ; another shelter is a tin-shed while the third is a double storeyed rest-house of cement-brick construction. The Bengal concern, an electrical workshop, has an area of 140 ft. × 50 ft. The U. P. factory has two rest-houses—one at the generating station and the other at the receiving station ; the former is about 85 ft. × 55 ft., with several rooms, while the latter is a big hall of 100 ft. × 18 ft. Both are provided with ventilators, windows, electric lights, electric fans, water taps, *takhats*, tables, chairs, racks, wooden partitions, mats, spitoons, etc. The Punjab factory has a pucca-built shelter with benches. The Bihar factory has a tiffin-room with a steel frame building, 18½ ft. high and a roof of asbestos cement sheets. The building measures 25 ft. × 45 ft. and contains two water taps. Besides, there are two gardens, with cement seats and drinking water taps, which are regularly used by the aboriginal workers at rest intervals.

IV.—Welfare Activities.

Sanitary Arrangements.—Sanitary arrangements, on the whole, seem to be satisfactory, except in some Bengal factories which do not keep latrines and urinals clean. Sometimes the municipal drains in front of the factory get water-logged and give out a very offensive smell exuding from putrifying matter. In the absence of clean latrines and urinals, workers often make use of municipal drains. In the Bihar factory, for 795 male and 190 female workers, there are 36 latrines (24 for men and 12 for women) and 20 urinals. Washing and bathing facilities and supply of cool water for drinking are not very common in this industry.

Medical Aid.—Very few factories have provided proper and adequate medical aid as can be seen from the following figures :—

TABLE 123.

Medical Aid.

Province	No. of factories investigated	Number of Factories having		First Aid box
		Dispensaries	Doctor	
Madras	4	1	..	3
Bombay	20	13	6	1
Bengal	15	4	1	10
U. P.	1	1	..	..
Punjab	2	1	1	..
Bihar	1	1	..	..
Total ..	43	21	8	14

Many of the factories included in the last two columns utilise public dispensaries or hospitals, with or without a contribution. The Tata Hydro-Electric Agencies in the Bombay Province maintain a dispensary at each of their generating stations which are in rural areas. In receiving stations which are in urban areas, workers getting Rs. 100 and less are given free medical treatment by Company's Medical Officer. In a number of factories the doctors employed are on a part-time basis and work more or less as medical consultants. Some of the factories have more than one dispensary ; for example, a Calcutta Power station has six dispensaries, each being attached to the generating stations and sub-stations or the Mains and Testing Departments, and under a qualified Medical Officer. The U. P. Power Station has two dispensaries. Details about the dispensaries are given below :—

TABLE 124.

Details about Dispensaries.

Province	No. of Concern	Details about dispensaries.		Cases treated per day	Remarks
		Doctor's pay (Rs. p.m,)	Doctor's Qualifications.		
Madras		79	Licentiate ..	..	(i) Doctor is part-time. (ii) Full-time compounder on Rs. 39-12-0 p.m.
Bombay ..	I	425	M. B. B. S.	58	
	II	525	L. M. & S. ..	70 to 77	
	III	350	M. B B S.	90	
	IV	100	L. C. P. S .	..	Dispensary in common with a textile mill.
	V	150	M B B. S.	20	
	VI	75	L. C. P. S. ..	44	(i) Doctor gets Rs. 7-8-0 in addition as visit fee. (ii) Compounder on Rs. 50 p.m.
	VII	250	M. B. B. S.	120	One more doctor (M.B.B. S.) on Rs. 120 p.m.
Bengal	I	..	M. B. ..	30	
	II	..	Physician ..	84	
	III	..	M.B .	38	
U. P.	I	250	Licentiate ..	80	(i) Doctor is part-time.
Bihar	I	170	M. B. ..	197	(i) Provision for medical and surgical treatment. One more L.M.P. doctor on Rs. 130-p.m.

NOTE :—Generally the doctor gets dearness allowance in addition to his salary.

The usual diseases are fevers—mostly malarial—colds, coughs, bronchitis, asthma and occasional diarrhoea, dysentery, skin troubles and very occasionally infectious diseases like measles, small-pox, chicken-pox, influenza, enteric fever, etc. The only occupational disease found was dermatitis in a very

few cases. In some factories, however, the workers are exposed to unhealthy fumes of chromium which accumulate in the electro-plating chamber and to effects of chemicals used in paints and varnishes when the painting of blades of electric fans is done. Regular periodical examination takes place only in 3 or 4 factories six-monthly, annually or biennially. In many factories, however, workers are medically examined before recruitment.

Canteens.—Only fourteen factories have canteens for their workers. The details are as follows :—

TABLE 125.

Canteens.

Run and managed by	Number of factories having canteen in—		
	Bombay	Bengal	Punjab
Company	4	1	..
Contractors	5	1	1
Workers' Co-operative Societies	1	1	..
Total ..	10	3	1

None of the factories investigated in Madras, U. P. and Bihar has a canteen. The most common justification for the non-establishment of a canteen is that the workers can utilise the restaurants nearby. However, there are a number of factories, especially power stations, which are situated far away from urban areas. None of the power stations in Bengal, for example, runs a canteen. Similarly the power station, investigated in Madras, is situated in a place where there are no restaurants or other places which supply food or refreshments. Workers come from far-off places and have to work at all odd hours according to shift arrangements. Some of the factories, however, which have no canteens of their own, make some alternative arrangements. The U. P. factory, for example, utilises a canteen run in its sister-concern by the Tea Market Expansion Board. The canteen arrangements vary from unit to unit. In one of the Bombay factories, only tea is provided for day shift workers once in the evening at a nominal charge of as. 8 per month ; tea is supplied free to the night shift workers. Another Bombay factory has the 'Bhat' (Brahmin tea supplier) arrangement. Light refreshments and cigarettes are also available in most of the canteens. Only four canteens (three in Bengal and one in Bombay) supply midday meals. Two of these canteens are run on a co-operative basis by the workers. The establishment charges (cost of utensils, kitchen) of these co-operative canteens are borne by the Company and the cost of the meals, which is very low, is shared by the members. A feature of a few canteens is the communal division. One of the Bombay factories, for example, has two canteens, one for Hindus and the other for Christians. A Bengal canteen has been partitioned into two sections, one for Hindus and one for Muslims.

Creche and Education.—Female labour is practically absent, except in the Bihar factory. This factory, therefore, is the only one, which maintains a

Creche, which is intended for the use of workers' children up to six years of age. Educational facilities for workers and their children are inadequate and have been made only in 14 factories (1 in Madras, 10 in Bombay 2 in Bengal and 1 in U. P.). One of the factories investigated in Madras is owned by Government and utilise a Government Training School for the training of its workers. In one of the Bombay factories, as a part of the literacy drive, two night classes impart free education to workers. Another factory has maintained a Recreation Club Library, while the B. E. S. T. Company gives encouragement to its employees for technical education by allowing them to attend certain recognised coaching classes and refunding tuition and examination fees. The only Bombay factory, providing education for workers' children, is a mofussil power station, which runs a primary Marathi School. In Bengal, only two factories, both power stations, have provided educational facilities ; these are restricted only to workers' children, who get free primary education. In the U. P. factory, a night school for workers is conducted chiefly for imparting literacy in Urdu, Hindi, and English ; suitable books, newspapers and magazines are provided and also a radio for news, lectures and music. As for the education of the workers' children, the privilege of admitting them in the Boys' and Girls' schools, run by the Managing Agents of the factory, has been granted. In the Bihar factory, there were educational facilities in peace time, but now the military occupation of the buildings has made the imparting of education a very difficult proposition.

Grain Shop.—As many as 34 factories (Madras, 2 ; Bombay 17 ; Bengal, 12 ; U. P., 1 ; Punjab, 1 and Bihar, 1) have maintained grain shops, most of which are ration shops, selling rationed (and often other) articles at Government controlled prices. Grain shops in three of these factories (Madras, 1 and Bombay, 2) are managed by the Workers' Co-operative Societies. Many of these shops sell the articles at rates cheaper than the market ones. In a Bengal power station, all employees are debited monthly with the Government price of rationed foodstuffs purchased (on credit) and receive a "Cheap Food" rebate of Rs. 7-3-0 per month representing the difference between the Government price of rice, wheat and wheat products and sugar and the subsidised prices at which these articles were sold before the introduction of rationing. Employees also derive some benefit out of the purchase of non-rationed articles such as *dal*, mustard oil, kerosene and matches at prices lower than the bazaar rates. The benefit from these is about Rs. 5-8-0 per head per month. The U. P. factory supplies grains in the quantities and at the rates announced by the Employers' Association of Northern India, Cawnpore, from time to time. These rates are considerably lower than the market rates. In the Bihar factory, a cash concession is allowed on such purchase to adjust the food prices to the October 1942 basis. In Bombay, all the B. E. S. T. factories (seven of which were investigated) have two grainshops, where the rates are lower than the market rates by few annas.

V.—Housing Accommodation.

Most of the power stations in this industry are situated in far-away places and the nature of work demands the presence on the premises of a certain proportion of workers at all odd hours. Consequently, these workers are provided with housing just near the factories by the Management. Of the factories investigated, 15 factories (Madras, 1 ; Bombay, 5 ; Bengal, 7 ; Punjab, 1 and Bihar 1) have provided housing accommodation for their workers. Out of these 15 factories, 11 (Bombay, 5 ; Bengal, 5 ; and Punjab, 1) are power stations, while at least two of the remaining four (electrical

workshops) are situated far-away from urban areas. The details of housing provided by the sixteen factories are given below :—

TABLE 126.

Housing Accommodation.

Province	Concern*	Proportion of workers housed	Types of housing provided
Madras	E	100%	Government quarters with electric light.
Bombay	P1	75%	Permanent structure of stone and lime machinery.
	P2	60%	(i) Walls of rubble masonry, cement mortar asbestos sheet or tiled roofing.
	P3	100%	(ii) Flush lavatories, water-taps with Chlorinated water.
	P4	..	3 brick chawls of its sister-concern (cotton-mill).
	P5	20%	(i) Brick cement construction; tube-well water.
			(ii) Flush system with septic tanks and soak pits.
Bengal	E1	45%	2 pucca and 2 katcha houses.
	E2	86%	One katcha house.
	P1		Only for shiftmen in Power Stations.
	P2	16%	Single-storey pucca building with kitchens.
	P3	75%	100 pucca quarters (each 12′×12′).
	P4	90%	60 pucca single-storey quarters (each 10′ ×12′) with tiled roofs.
	P5	90%	Stone houses with iron or thatched roof. (Some are of bamboo matting and some are of concrete) ; service type latrines.
Punjab	P	50%	69 single rooms and 2 three-room quarters.
*Bihar	E	21%	Details are given in the next table.

E—Electrical workshop and P—Power Station

Note :—(i) Rents are not charged except in the first factory (Madras), where the rent is 10 per cent of the wages.

(ii) In factory P5 of Bengal, workers get either rent free quarters or house allowance at the rate of 22½ % of pay.

TABLE 127.

Housing Provided in the Bihar factory.

Type of quarter	No. of quarters	Types of housing provided	Electricity		Rent (Rs.) p.m.
			Fans	h	
A	8	2 rooms (each 10′×10′), kitchen (10′×7½′), 2 verandahs and open yard .		3	9
M4	28	2 rooms (12′×9′ and 8′×9′) kitchen, verandah and yard..	.	..	5
B	10	2 rooms (10′×10′ and 10′×7½′) verandah and yard	.	..	4
RN	24	1 room (10′×10′), verandah and yard	..	..	2½
New C ..	40	1 room (10′×10′) and verandah ..	..	..	*Nil.*
Old C ..	20	1 room (10′×10′) and verandah ..	..	..	*Nil.*
Modified RN ..	12	1 room (9′×10½′), kitchen, 2 verandahs and yard (These are for Watch and Ward)	..		2½
G5	4	3 rooms (14′×12′, 13′×12′ and 12′×12′), kitchen (10′×9′), store-room (9′×8′), 2 verandahs and yard	3	10	18
H6	8	2 rooms (each 12′×12′) kitchen (8′×13′) store room (8′×8′), 2 verandahs and yard	2	7	14
L4	8	2 rooms (10′×10′, 11′×11′), kitchen (8′×8′), 2 verandahs and yard .	1	6	9
Modified M4 ..	52	2 rooms (each 9′×11½′), kitchen 2 verandahs and yard	1	5	6
Modified M4 ..	60	Same as above, but war-time construction	..		5½

NOTE: (*i*) The first seven types are in Old Housing Estate and the last five types are in New Housing Estate.

(*ii*) Types A, M4, B, RN, Modified RN, G5, H6, L4 and Modified M4 are all family quarters, while types C (Old and New) are for bachelors.

Water-supply is satisfactory, except in a few power stations, which are situated in hilly tracts or in forests. Sub-letting is prohibited, but because of war-time shortage of houses, congestion seems to be inevitable.

Information regarding workers living in houses other than those provided by their employers is scanty. Unskilled labour employed on outdoor work in the Generating Stations of the Tatas in the Western Ghats live in neighbouring villages mostly in their huts. In Madras, workers live mostly in rented quarters in several parts of the city of Madras and sometimes in suburbs about five miles away from the city ; the rent paid by workers ranges from Rs. 3 to Rs. 10 per mensem, being nearer the upper than the lower limit in most cases due to war-time congestion in the city. More than 50 per cent. of the workers in the Bihar factory are aborigines, who prefer to live in *Bastis* situated on the outskirts of the town or in villages. In spite of the absence of modern facilities like electricity and tap-water, the workers had better physique than the residents of the town.

VI.—Trade Unions and Strikes.

Trade Unions.—Some workers in two of the four concerns investigated in Madras are members of their respective unions. The details about unions in the Bombay Province are given below :—

TABLE 128.

Trade Union in Electrical Engineering—Bombay (compiled from Labour Gazette, Bombay).

Name of the Union	Date of Formation	Date of Registration	Membership
1 Engineering Workers Union, Bombay (Red Flag)	August 1939	February 1940	3,008
2 Calender's Cable and Construction Co. Ltd Employees' Union, Bombay..	August 1942	November 1942	318
3 Electrical Engineers' and Wiremen's Association, Ahmedabad ..	October 1935	Unregistered	232
4 Tramwaymen's Union, Bombay ..	April 1927	May 1928	433
5 B.E.S.T. Workers' Union, Bombay..	September 1938	October 1938	800
6 Bombay Suburban Electric Supply Employees' Union, Santa Cruz ..	December 1943	June 1944	60
7 Poona Electric Supply Co Kamgar Sangh, Poona	January 1944	..	255

Out of these, the first is a ' General ' Union. Both the tramwaymen's Union and the B. E. S. T. Workers' Union have far more members in the traffic staff of the B. E. S. T. than in the electric workshops. The Poona Electric Supply Co., Kamgar Sangh, which sent detailed replies to our *ad hoc* survey questionnaire, came into being when an agitation was being carried on by the workers of the Poona Electric Supply Co. for dearness allowance and bonus. The Union after about ten months' negotiations with the Company and the Government Labour Official gave a notice of strike on 8th November 1944. The Government, however, intervened and appointed an Adjudicator to settle the dispute. The monthly subscription of the Union is 2 as. for members earning Rs. 25 or less and 4 as. for others. In January 1945, out of 295 workers employed by the Company, 265 were members of the Union. In none of the nine electrical workshops investigated in Bengal, have the workers formed a Union. Workers in two factories, however, did make attempts in war time to start unions, but they did not succeed partly because of the discouragement on the part of employers. The Power Stations in Bengal, however, have organised two active unions, viz., the Calcutta Electric Supply Workers' Union and the Dacca Electric Supply Workers' Union. The former is a registered union with a membership of 1,532 and it realised during the year 1943-44 subscription to the extent of Rs. 1,532. The other union, though not recognised by the employers, has a large following, because it has shown some vigour in demanding an increase in dearness allowance or grant of good subsidy. In U. P., the Cawnpore Electric Supply Workers Union has a membership of about 700 and its subscription is 8 as. per annum per member. One of the power stations investigated in the Punjab belongs

to the N. W. Railway and its workers are members of the N. W. Railway Workers' Union. 93 workers of the other power station investigated in the Punjab have formed a trade union of their own. In the Bihar factory, a union had been formed on two occasions in 1937-38. On both the occasions the formation of the union coincided with considerable labour trouble in the local steel plants and the attempts proved unsuccessful mainly because of lack of interest among employees. The Secretary (a non-employee) of the second union was prosecuted and convicted by the Bihar Government for failure to submit a statement of Union accounts. The Company claims that every effort was made to work with the Union, though there had never been any agreement. The second Union was officially recognised after it had become a registered union.

Some of the factories are prepared to recognise workers' unions, if they fulfil and subscribe to certain conditions. Conditions about registration (under the Indian Trade Union Act, 1926), restriction of membership largely to the actual workers, audit and accounts, etc., are certainly desirable. However, a Poona factory lays down the following condition :

" The Union shall restrict its ordinary membership to active staff of the Company up to and including the rank of Supervisors. No ex-employee of the Company shall be an honorary member or office bearer of the Union ". Similarly, a Bengal factory has got the following among its conditions :—

(i) Not less than half the total number of officers of the Union shall be persons actually employed by the Company. If the Company consider that a person has been included in the Union as an honorary member who has not a *bona fide* interest in Trade Unionism and in the collaboration and promotion of good relations between the Company and their employees, and in the settlement of disputes constitutionally through the process of representation, mediation and conciliation, the Union may be required to satisfy the Company as regards the *bona fides* of such person.

(ii) Recognition will not be granted unless the Company have been given facilities to check the membership and to see that the Books and Accounts are in order and the Company have satisfied themselves that the funds of the Union are sufficient to provide a living wage for all employees for one month in the event of strike.

Works Committee.—Works Committees were found only in two factories a power station in Bengal and an electrical workshop in Bihar. The Bengal factory has a Welfare Committee, while the Works Committee of the Bihar factory comprises the Assistant Works Manager and three representatives of workers chosen by the Union. The Workers' representatives submit any subjects for discussion and meetings are called at their request. There have, however, been no meetings for about 4 years. One of the power stations, investigated in the Punjab, is allied with the railway workshops, who have their workshop committees.

Strikes.—There have been no strikes in the concerns investigated in Madras and U. P. In Bombay, the B. E. S. T. workshops experienced some unrest during the period between 21st September 1931 and 1st April 1932. The workers resorted to picketting on a notice by the Company that the workshops would be closed on every Monday. Consequent upon the picketting, a lock-out was declared from 29th September to 21st October. Full working was resumed from 1st April 1932. Except for this strike, there was no industrial dispute in the factories investigated in the Bombay Province. Workers in two concerns, however, gave notices of strike in war time, and

demanded increase in wages. In both cases, the Provincial Government intervened and mediated. In one of the two concerns a Heavy Duty Allowance at the rate of 4 as. per day for workers, engaged on arduous and continuous work, was sanctioned. In Bengal, five out of the fifteen factories investigated experienced seven strikes in war time. Two of them occurred in 1939, two in 1941 and three in 1943. Of these strikes, two were successful, three unsuccessful and two ended in compromise. The duration was from one day to 21 days, but most of them lasted for less than a week. The main cause of all the strikes was a demand for wage increase. In the Punjab, one of the two factories investigated experienced a strike in 1937, when the workers demanded pay for Sunday, the 23rd May instead of accepting holiday on the next day, as declared by the Railway Administration. In the other factory in the Punjab, a strike for increase in the rates of dearness allowance was contemplated in 1941, but it did not materialise. In the Bihar factory, a strike of 7 months duration (from May to December) was launched in 1938, the occasion synchronising with the general industrial unrest in the Province at the time. The workers resumed work on the understanding that their grievances would be the subject of discussions.

VII.—General.

Accidents.—It has been claimed by the employers that in view of the nature of industry which calls for precision work, the chances of serious accidents are rare. However, in actuality accidents have occurred and some of them were fatal, caused by electric shock and falling in molten lead. The following figures show the extent of accidents in 1943, in some of the concerns investigated.

TABLE 129.

Accidents in 1943.

Province	Concern	Total Number of accidents	No. of accidents compensated	Amount of Compensation Rs.
Madras	I	1	1	1,050
	II	2	2	96
	III	2	2	11
Bombay .. .., ..	I	27	..	..
	II	7	7	72
	III	33	21	173
	IV	1	1	2,100
	V	8	4	103
	VI	12	12	97
	VII	59	59	1,116
	VIII	2	..	..
	IX	17	..	..
	X	3	..	..
Bengal	I	5	5	242
	II	4	4	71
	III	44	4	..
	IV	137	137	3,585
	V	34	1	50
	VI	22	20	188
U. P.	I	227	38	641
Punjab	I	68	..	..
	II	103	..	..
Bihar	I	32	29	283

It was found that many of the factories pay more as compensation than what is legally due to the injured worker ; small injuries, for which less than seven days are lost, are also paid. For example, in the above table two Bombay factories have paid Rs. 97 and Rs. 1,116 as compensation in 1943 ; the obligatory compensation in these cases, amounted only to Rs. 20 and Rs. 476 respectively. On the other hand, there were cases in which the workers could not get adequate compensation. It has been alleged by workers in one of the Madras factories that in one case of electric shock, compensation was not paid because it could not be proved that the death was due to electric shock. A few factories insure their liability to pay compensation.

Indebtedness.—32 factories have made some provision to grant loans to their workers. The following table gives details in this regard. .

TABLE 130.

Methods of granting Loans.

Province	No. of concerns investigated	No. of concerns giving loans through—			
		Co-operative Societies	Welfare Fund	Provident Fund	Advances
Madras	4	3	..	..	..
Bombay .	20	7	7	1	1
Bengal	15	1	2	1	6
U. P.	1	1	..	..	..
Punjab	2	..	..	1	..
Bihar	1	1	..	..	..
Total ..	43	13	9	3	7

The above classification is not perfect, mainly because many of the factories utilise more than one method. The seven B. E. S. T. factories grant interest-free loans like the Evacuation Loan or loans from the Employees' Welfare Fund. Loans can also be had from the Provident Fund Account and from the Co-operative Credit Society, where the rates of interest are 6 per cent. and 9¾ per cent. per annum, respectively. Similarly in the Punjab factory, workers having more than three years' service, who do not subscribe to the Provident Fund, can obtain loans up to a maximum of four months' pay from the Lower Paid Staff Loan Fund.

Of the thirteen factories, which have Co-operative Credit Societies, six are the Tata Generating and Receiving Stations. The rate of interest is 1¼ pies per rupee per month or 7-13|16 per cent. per annum. The rate in the remaining Society as well as in three societies in the Madras factories is 6¼ per cent. per annum. The Co-operative Credit Society in a Calcutta power station, whose rate of interest is the same, had, at the close of the year 1944, 813 workmen indebted to it and the amount they owed to the Society was Rs. 1,12,718-8-0. Another rich society is the one in the U. P. factory. The

number of members on 30th June 1944 was 859 and the total amount of loan taken by the members in the year ending that date was Rs. 84,167. The interest charged is one pie per rupee per month. The rate of interest charged by the Society of the Bihar factory is 9.375 per cent. per annum. Advances are generally short-term loans, not exceeding, usually, the amount of one month's pay and are interest-free. However, a few companies grant long-term advances (with interest ranging between 4 to 6¼ per cent. per annum) and the amount is recovered by monthly instalments, which are usually deductions of small amounts from monthly wages. Loans from Provident Fund are also granted with or without interest.

Provident Fund.—Twenty-nine factories (Madras 2 ; Bombay, 17 ; Bengal, 6 ; U. P., 1 ; Punjab, 2 and Bihar 1), out of which 19 are power stations, have Provident Fund benefits for their workers. The Tata Power Consolidated Fund is common to the six factories investigated in Bombay. Similarly, the B. E. S. T. Provident Fund Institution covers a number of factories, of which seven were investigated. The Provident Fund Rules of most of the companies are broadly similar though differing in details. These details are considered below :

(i) Only four schemes are compulsory, the rest being voluntary. One of the schemes is compulsory only for workers getting Rs. 50 per month or more. For those getting between Rs. 20 and Rs. 49 p. m., it is voluntary ; another scheme is compulsory for those getting over Rs. 60 p. m. and optional for permanent workers getting less than Rs. 60.

(ii) *Membership.*—Some conditions such as permanency of service, minimum income limit, period of service, etc., are attached to membership. Sometimes, there are several other conditions. For example, in the Bihar factory " all permanent employees aged eighteen years and who at such time are in receipt of a salary or wage paid monthly amounting to not less than Rs. 13 shall be eligible to join the Fund....." Only three out of the 29 factories surveyed, place no conditions for eligibility on membership and allow any employee to join the Fund. All others require a worker to be permanent and some of them restrict the membership only to monthly-rated workers. Twelve factories, of which seven belong to the BEST Company, and one to N. W. Railway, require a worker to put in continuous service for a minimum specified period to be eligible for membership. This period is one year in ten factories and three years in the remaining two. Fifteen factories have placed a minimum income limit, which ranges from Rs. 13 p. m. (in the Bihar factory) to Rs. 60 p. m. (in a Bombay factory). Of these, ten factories (seven BEST factories, one more of Bombay and one each in Bengal and Punjab) put the limit at Rs. 15 p. m., whereas another Bombay factory has put it at 12 as. per day. The U. P. factory's limit is Rs. 25 p. m. In most of these cases, however, the Management reserve the right of admission to the Fund.

(iii) *Contribution.*—The member's contribution to the Fund varies from 3⅛ per cent. to 8⅓ per cent. of his monthly salary. The most common percentages, however, are 6¼ per cent. (in 5 factories) and 8⅓ per cent. (in 18 factories including 6 of Tatas and seven of BEST), i.e., one anna and 1-1|3 anna in a rupee respectively. In the BEST factories, however, the rate of 16 pies in a rupee is for those receiving Rs. 100 per month or more while for a member receiving less than Rs. 100, the rate is 12 pies, or at his option (to be signified in writing) 16 pies. Members engaged after 1st January 1926 on consolidated flat rates of wages are to contribute at the rate of 9 pies or at their option (to be signed in writing) 12 pies in the rupee. Similarly, in a Bengal power station the rate of subscription is 6¼ per cent. for those who became members of the Fund prior to 1930 and 5 per cent. per

annum for those who became members after that date. In the Punjab power station, 8⅓ per cent. is the rate for monthly-rated workers. For daily-rated workers, it is equal to 2 days' wages. The lowest rate of subscription is in two Bengal power stations, where it is at the rate of six pies in the rupee of the salary subject to a maximum contribution of Rs. 9-6-0. One of the Madras factory's provident fund is arranged by a system of insurance with an Insurance Company and contributions are according to the salary of the employees, ranging from Re. 1 per month for those getting below Rs. 30, to Rs. 13 per month for those getting Rs. 300 and over, divided into grades.

In all the above cases, except four, the employer's contribution is equal to the aggregate contributions made by the members. In two cases, the employer's contribution is half of that of the workers. In the remaining two cases, it is not less than half the aggregate amount of the subscriptions of the members, but not exceeding such aggregate.

(iv) *Investment and Interest.*—All the amounts thus contributed are invested by the Trustees in securities, authorised under the provisions of the Indian Companies Act and the Income-Tax Act and the interest realised every year from these investments is credited to the members' individual accounts on a *pro rata* basis. Only three factories have specifically mentioned the rate of interest, which is 3 per cent. in two cases and 2½ per cent. in one.

(v) *Conditions of Claims.*—The worker is not entitled to employer's contribution on his voluntary retirement or dismissal before completion of a specified period of approved service. This period varies from 3 to 30 years; it is 3 years in one concern, 7 years in another, 10 in 2 concerns, 15 in 5 concerns, 20 in 2 concerns, and 30 in 1 concern. In at least seven cases, the worker is entitled after a minimum period of service to a proportion of the employer's contribution, even if he voluntarily leaves or is dismissed before the specified period mentioned above. The details are as follows :—

TABLE 131.

Claim to Employer's Contribution (and interest thereon).

Years of approved service	Proportion of Employer's Contribution with Interest thereon due in—						
	Madras	Bombay I	BEST	Bengal I	Bengal II	U.P.	Bihar
3 ..	..	..	..	a	..	..	..
4 ..	a	..	a	40%	..	a	..
5 ..	50%	..	33⅓%	50%	..	..	a
6 ..	50%	..	33⅓%	60%	..	..	35%
7 ..	50%	..	33⅓%	70%	..	..	40%
8 ..	50%	..	33⅓%	80%	..	..	45%
9 ..	50%	a	33⅓%	90%	a	..	50%
10 ..	b	50%	66-2/3%	b	40%	..	..
11 ..	..	60%	66-2/3%	..	40%	*	Like this for
12 ..	..	70%	66-2/3%	..	40%	..	each additional
13 ..	..	80%	66-2/3%	..	40%	..	year of service
14 ..	..	90%	66-2/3%	..	40%	..	5%
15 ..	..	b	b	50%	50%	..	
20 ..	..	..	..	..	70%	b	b
25 ..	..	..	..	..	85%	..	..
30 ..	..	..	..	..	b	..	..

NOTE :—(i) 'a' shows the minimum limit up to which the employer's contribution cannot be claimed.
(ii) 'b' shows the limit after which cent per cent employer's contributions can be claimed.
*In the U. P. factory the calculation is: 70-5/20 ths of the amount standing to his credit in "Proprietors' Contribution Account" there shall be added for each year of such employee's service in excess of 5 years' 1/20th of the amount so standing to his credit.

In most of the Funds, however, the workers get, in whole or in part, the employer's contribution if they retire because of causes over which they have no control (such as retrenchment, insanity, accidents, etc.). In the event of death, survivors get the benefits.

Gratuity.—Gratuity system is in existence in 15 factories (Madras 2, Bombay 8, Bengal 3, U. P. 1 and Punjab 1). In all cases the service of the worker must be approved and continuous and the gratuity is given on retirement after a specified period of service or on death. Both the Madras factories which give gratuities, have no Provident Fund. One of them pays gratuities to workers on retirement or death at the rate of 3 months' pay for every five years of service, up to a maximum of 12 months' wages or Rs. 1,000, whichever is less. The rate of the other factory is one month's wages for a service of not less than 5 years but less than 10, three months' wages for a service of 10 years or more but less than 15, and six months' wages for a service of 15 years or more.

In a Bombay factory, gratuity is given after 10 years' service or on death at the rate of one anna per rupee of monthly pay at the time of retirement, multiplied by the number of years of service. To be eligible for the gratuity in the BEST factories, a worker besides fulfilling the usual conditions, must be over 35 years of age, except in cases of death and of compulsory retirement due to disablement, ill-health or retrenchment. If he leaves his duty for the purposes of going on strike he forfeits all his claims to any gratuity on retirement. For purposes of gratuities, workers may be divided into three classes : (i) All officers and employees (excluding Traffic and Engineering staff) who joined the service prior to 12th February 1926 ; (ii) same categories of workers, who joined after 12th February 1926, and (iii) Traffic and Engineering staff (scheduled and non-scheduled employees). The scales for these categories are as follows :—

TABLE 132.

Gratuities in BEST Company, Bombay.

Years approved service.	Class I	Class II	Class III
7	..	..	..
10	1/3 of 1 month's pay for each year of service.	..	3 months' pay.
12	..	..	6 Do.
15	..	..	9 Do.
18	⅓rd of 1 month's pay for each year of service.	4 months' pay	12 months' pay
20	..	8 Do.	..
25	1 month's pay for each year of service	12 Do.	..

Only one electrical workshop and two power stations in Bengal have gratuity systems. In the electrical workshops, permanent workers on attaining the age of 65 after 20 years' service or if compelled by the Company to retire earlier but with a minimum continuous service of 5 years, are entitled to the payment of gratuity at the rate of half a month's salary or wages for every completed year of service. Workers who participate in any strike are

debarred from getting the gratuity. The following table shows the number of persons to whom gratuities have been paid :—

TABLE 133.

Gratuities Paid in an Electrical Workshop, Bengal. (Employment : 646 in 1939 and 1,118 in 1944).

Year.	No. of persons to whom paid.	Total amount paid.
		Rs. as. p.
1941	5	801 14 0
1942		562 8 0
1943	3	304 11 0
1944	1	3,602 8 0

In a Calcutta power station, the amount of gratuity paid depends upon the length of service and the rates of wages at the time of retirement ; it varies from 5 per cent. to 6¼ of wages in the case of employees retiring after 19 years of service. In another Bengal power station, gratuities are occasionally granted at the discretion of the management.

The U. P. factory, for some years past, at the discretion of management, has been paying gratuities to all employees not members of the Provident Fund, who complete 10 years' service and who leave on account of ill-health certified by the factory's medical officer. Similarly, an *ex-gratia* payment is made to the next of kin of those who die while in employment and who have completed 5 years' service and are not members of the Provident Fund. The total amount paid out as gratuities during 1942, was Rs. 10,347.

CHAPTER IV.—RAILWAY WORKSHOPS.

If the number of workers employed is taken into consideration, railway workshops, which employed about 140,000 workers in 1943, form the most important branch of the engineering industry. The employment in railway workshops forms about 27 per cent. of the total employment in engineering. As the Royal Commission on Labour (p. 136) remarked, the railway administrations are the largest employers of organised labour in India and their working policy as regards wages and other terms of employment reacts to some extent on industrial labour conditions throughout the country.

The Non-Gazetted Railway Services, of which services in the railway workshops form a part, have been the subject of an independent report by Dr. Ahmed Mukhtar, one of the Members of the Labour Investigation Committee. Railway workshops, which have been studied in this chapter, have been treated as a branch of engineering, but this study can also serve as a supplement to the Report on Non-Gazetted Railway Services. To avoid duplication, most of the facts that are common under different railway administrations have been omitted and only the important conclusions arising out of an independent investigation in 45 workshops have been discussed below.

The following table compiled from the Factory Statistics, shows that most of the railway workshops are situated in 6 Provinces.

TABLE 134.

Railway Workshops.

Province.	State-owned workshops.				Company-owned workshops.			
	No. of factories.		No. of workers.		No. of factories.		No. of workers.	
	1939	1943	1939	1943	1939	1943	1939	1943
Madras	..	..	..	..	23	23	12,313	16,622
Bombay	16	31	9,101	24,405	20	8	8,914	2,984
Bengal	16	17	15,173	23,949	12	10	11,599	9,887
U. P.	17	17	9,107	8,168	6	6	3,917	5,073
Punjab	7	17	11,402	19,781	1	2	50	124
Bihar	10	14	9,111	13,494	15	9	3,565	2,563
Other Provinces ..	8	22	1,890	12.078	12	8	7,916	2,224
Total	74	118	55,784	101,875	89	66	48,274	39,477

The total number of employees (gazetted and non-gazetted, permanent and temporary) on all railways in British India and Indian States at the end of the year 1943-44 was 8,89,056 workshop labour constituting a little more than 17 per cent. of the total.

Since the outbreak of the war, the railways had to face a great task, considered both from the variety of work as well as the degree of skill required. While selecting the samples for investigation, the diversity of nature of work was the main criterion, though other factors have not been overlooked. For example, nine workshops (3 of G. I. P. Railway and 6 of M. & S. M. Railway) not coming under the Factories Act, have been included so as to enable an enquiry into the conditions of unregulated labour. As the following statement shows a number of workshops situated in mofussil areas have also been investigated.

TABLE 135.

Workshops Investigated.

Nature of work done	Details of the concerns investigated.		
	Number	Railways *	Centres.
(i) Mechanical workshop (Loco-carriage-wagon repairs and construction).	9	One each in G.I.P., B.B. & C.I., Barsi Light, M. & S.M., B.N., E.I., Martin & Co., D.H.and N. W.	Bombay (2), Kurduwadi, Hubli Kharagpur, Lillooah, Makarda, Tindharia and Lahore.
(ii) Loco Sheds (Repairs and maintenance of engines and steam pumps).	16	G.I.P. (5), M. & S.M. (10), N. W. (1)	Kalyan, Dhond, Bhusawal, Nandgaon, Igatpuri, Hubli, Alanawar, Karajgi, Dharwar, Gadag, Hospet, Telgi, Hotgi, Ghorpuri, Madras and Lahore.
(iii) Mechanical & Structural Engineering (small repair workshops).	8	G.I.P. (4), B. B. & C. I. (2) and M. & S.M. (2).	Bombay (2), Manmad, Poona, Dhond, Sholapur, Hubli and Madras.
(iv) Electrical Workshops (including generators, Charging batteries, overhauling dynamos, etc.)	6	B.B. & C.I. (3) and M. & S. M. (3).	Hubli (3), Bombay, Dohad and Ajmer.
(v) Telegraph workshop	1	G.I.P.	Bombay.
(vi) Maintenance of Buildings	1	G.I.P.	Bhusawal.
(vii) Repairs to A.V.B. cylinders.	2	G.I.P. (2)	Igatpuri and Poona.
(viii) Small Carriage Repair Workshops.	2	G.I.P. (2)	Bombay and Kurla.

*The Railways investigated are G.I.P. Rly., B.B. & C.I. Rly., Barsi Light Rly., M. & S. M. Rly., B. N. Rly., Martin & Co.'s Rly., D. H. Rly., & N.W. Rly.

I.—Employment.

The following table, compiled from the Factory Statistics, shows the expansion in the number both of workshops and of workers employed during 1939-43.

TABLE 136.

Factories and Employment in War time.

Year.	State owned workshops.		Company-owned workshops.		Total.	
	Factories.	Workers.	Factories.	Workers.	Factories.	Workers.
1939	74	55,784	89	48,274	163	1,04,058
1940	87	61,454	91	49,323	178	1,10,777
1941	89	69,098	91	51,730	180	1,10,828
1942	109	89,818	73	41,255	182	1,31,073
1943	118	1,01,875	66	39,477	184	1,41,352

The decline in the figures of company-owned workshops is due to the fact that some of the company-owned railways were taken over by the State. It may be said, however, that compared to other branches of engineering, the number of railway workshops has not increased much, though considerable increase is seen in the number of workers employed.

TABLE 137.

Number of Workers Employed.

Railways	August 1939			A month in 1944-45			Percentage
	Work-shops.	Workers	Workers per workshop	Work-shops.	Workers	Workers per workshop	increase or decrease.
G.I.P.	13	5,588	430	16	13,124	820	90%
B. B. & C. I.	6	3,299	550	6	4,015	669	22%
M. & S. M.	15	7,715	514	16	9,903	619	20%
Barsi Light	1	234	234	1	210	210	10%
B.N.	1	8,633	8,633	1	8,875	8,875	3%
E.I.	1	5,948	5,948	1	7,076	7,076	19%
Martin & Co.	1	129	129	1	141	141	9%
D. H.	1	316	316	1	370	370	17%
N.W.	2	9,826	4,913	2	12,122	6,061	23%
Total	41	41,688	1,017	45	55,836	1,241	22%

The increase in employment is mainly due to greater pressure of work like servicing, running locomotives and repairing carriages and wagons in war-time. Except two workshops in Bengal (B. N. Railway's at Kharagpur and Martin & Co.'s at Makarda), all other workshops pay their workers at time rates. The number of piece-rated workers in the above-mentioned two workshops was 1,693 in August 1939 and 4,471 in January 1944, showing a percentage increase of 164.09. In these two Workshops, contract labour also is employed and its extent is given below.

TABLE 138.

Contract Labour (in two Bengal Workshops).

	Aug. 1939.	Jan. 1944.
Men	52	1,398
Women	..	1,044
Total ..	52	2,442

Contract labour is also employed in varying numbers by the M. & S. M. Railway for the stacking of coal and for the removal of ashes but no exact data are available. Only 4 factories employ female labour. No children are employed. Women are employed as sweepers and coolies and the extent of their employment is shown in the table below.

TABLE 139.

Female Labour.

Railway Workshop		Total No. of workers.		No. of female workers.	
		1939	1944	1939	1944
G. I. P.	I	232	293	1	1
	II	47	48	5	5
	III	67	98	8	16
B. N.	I	8,633	8,875	351	410

Length of Service—The length of service of workers in some of the concerns investigated is given below :—

TABLE 140.

Length of Service.

Railway.	N. of concerns.		Workers who have served for			
			Less than one year.	1 to 5 years.	5 to 10 years.	Over 10 years.
G. I. P.	11	Workers	1,057	2,920	531	2,948
		% age	14%	39%	7%	40%
B.B. & C. I.	6	Workers	365	1,332	451	1,905
		% age	9%	33%	11%	47%
M. & S. M.	14	Workers	241	352	189	548
		% age	18%	27%	14%	41%
Barsi Light	1	Workers	53	62	18	161
		% age	18%	21%	6%	55%
E. I	1	Workers	906	1,595	818	3,666
		% age	13%	23%	12%	52%
N. W.	3*	Workers	1,279	6,070	2,119	6,027
		% age	8%	39%	14%	39%
Total	36	Workers	3,901	12,331	4,126	15,253
		%age	11%	35%	11%	43%

* The third concern in Punjab is a Power House of the N. W. Railway. This concern has already been included under electrical engineering. The Management have supplied combined figures for all the three concerns.

Permanent and Temporary Workers.—The policy of the railways is to treat all new employees recruited in war time as temporary for the duration of war. Temporary workers may be confirmed only when permanent vacancies arise and their former service is taken into account if it has been continuous. The following table gives the percentage of permanent workers in a number of concerns investigated.

TABLE 141.

Percentage of Permanent Workers.

Railway	Concern	Percentage of Permanent Workers.			
		Percentage of permanent workers to total.	Railway	Concern.	Percentage of permanent workers to total.
G. I. P.	I	85·0%	D. H.	I	51·0%
	II	47·9%	M. & S. M.	I	97·1%
	III	57·9%		II	92·9%
	IV	14·4%		III	73·3%
	V	40·2%		IV	74·0%
	VI	38·0%		V	84·0%
	VII	26·7%		VI	100·0%
	VIII	34·0%		VII	100·0%
	IX	68·4%		VIII	100·0%
	X	68·8%		IX	92·5%
	XI	85·1%		X	95·5%
	XII	62·1%		XI	100·0%
B. B. & C. I.	I	32·5%		XII	76·0%
	II	65·4%		XIII	70·0%
	III	67·1%		XIV	100·0%
Barsi Light	I	17·6%	M. & S. M.	XV	90·0%
E I.	I	74·0%		XVI	60·0%
Martin & Co.	I	67·0%			

The railway staff are governed by different sets of rules. In the G. I. P. for example, they are governed by three different sets of rules according to their date of appointment : (i) G. I. P. Railway Rules for staff engaged prior to 1st July 1925 ; (ii) Fundamental Rules for those engaged from 1st July 1925 to 31st August 1928 , and (iii) State Railway Rules for those engaged on and from 1st September 1928.

Apprenticeship.—The system of training apprentices exists in almost all the railways. In the Transportation Workshop of the G. I. P. Railway in Bombay, there are two classes of apprentices (a) Apprentice Telegraph Workmen, and (b) Apprentice Telegraph Maintainers. The period of apprenticeship in each case is 4 years. On successful completion of the period, the former are appointed as workmen in the workshop, whereas the latter are appointed as Telegraph Maintainers to work in Districts. In G. I. P. Railway's Chief Mechanical Engineer's Workshop, apprenticeship is confined to the provision of personnel for (a) Supervisory posts for which " Apprentice Mechanics " are trained : and (b) Artisan posts for which " Trade Apprentices " are trained. " Mechanical Apprentices " are recruited by the Chief Mechanical Engineer, and are sent to workshops, such as the Loco Shed, Dhond, for practical training.

Three of the M. & S. M. Railway workshops have apprentice-system. The Train Lighting Workshop of Hubli has ' B ' and ' C ' class apprentices, which are trained for ordinary artisan posts only. The normal period of training for both the classes of apprentices is 5 years. The other two M. & S. M. workshops are in Madras. One of them takes fitter apprentices, boiler apprentices, and firemen apprentices, who are all selected by a Staff Selection Board and are trained for a period of three years in the workshops and two years in the running shed. These apprentices are taken on Rs. 21 or Rs. 27 as starting pay and go up to Rs. 30 by annual increments of Rs. 1-8-0. In the other Madras concern, four classes of apprentices, two for Supervisory posts and two for ordinary posts are taken.

Four of the six B. B. & C. I. workshops have the apprenticeship system. One of them, the Signal Reconditioning Workshop in Bombay has at present two Apprentice Signal Inspectors, being trained for supervisory posts. In the three other workshops (Electrical Workshop in Bombay, Dohad and Ajmer), apprentices are trained for supervisory posts of Electrical Chargemen. The apprenticeship period is 5 years.

Kharagpur Workshop of the B. N. Railway has grade I apprenticeship for supervisory staff and grade II apprenticeship for skilled and semi-skilled artisans for workshop. The apprenticeship period for both the grades is five years. For Grade I, 60 candidates are taken every year and are paid from Rs. 33 to Rs. 65 per month during the five years' period. After completion of the full term of apprenticeship of 5 years and thereafter two years of improvership, trained men are eligible for promotion as vacancies occur, to the grades of charge heads, Inspectors, Supervisory Fitters, Boiler makers, Draughtsmen, Assistant Foremen or Foremen. Recruitment to grade II is made by the Superintendent, Mechanical Workshop and during the period of apprenticeship the following stipends are granted : 1st year, Rs. 11 p. m., 2nd year, Rs. 12 p. m., 3rd year, Rs. 14 p. m., 4th year Rs. 17 p. m. and 5th year Rs. 20 p. m. These apprentices receive practical training in the workshop and theoretical training in the B. N. Railway Grade II Apprentices' Technical School. On successful completion of the apprenticeship period, grade I and grade II apprentices get a good conduct bonus of Rs. 100 and Rs. 15 respectively.

The period of apprenticeship at Lilooah workshop (E. I. Railway) is 5 years, both for supervisory and skilled workmen's posts. In the former case, practical training was in the workshop and theoretical training in the Jamalpur Technical School. During the training, apprentices live in hostels provided by the railway and a boarding allowance of Rs. 55 p. m. is granted to them. In addition to this a stipend of Rs. 10 in the first year is given and this is increased by Rs. 5 every year up to the 5th year, when they are appointed as T. T. Chargemen. For skilled workmen's post, apprentices are trained for 5 years and a stipend starting from Rs. 8 and rising by Re. 1 every year up to Rs. 12 is given. In the Martin & Co.'s workshop (Makarda) supervisors have to undergo 5 years' mechanical apprenticeship ; for ordinary posts the period varies from post to post. In the N. W. R. workshops, there are two classes of apprentices : Trade apprentices and Apprentice Mechanics. The first are daily-rated whereas the second are monthly-rated. The period of apprenticeship is 5 years for both and the stipends are as follows :

TABLE 142.

Stipends to Apprentices in N. W. Railway Workshops.

Year.	For Trade Apprentices.		For Apprentice Mechanics.	
	Rs. a. p.		Rs. a. p.	
1st	0 4 6	per day.	10 0 0	per month
2nd	0 7 0	„	15 0 0	„
3rd	0 9 6	„	20 0 0	„
4th	0 11 6	„	25 0 0	„
5th	0 13 6	„	30 0 0	„

Apprentice Mechanics are given training in the Punjab College of Engineering and Technology and in the workshops On completion of their service, they are retained as journeymen (Grade Rs. 65—5|2—85).

In most of the cases the apprenticeship period, if continuous, is counted towards total service, though retention in service after completion of the course is not guaranteed.

Labour Turnover and Absenteeism.—The figures of labour turnover and of absenteeism of a number of concerns are given below :

TABLE 143.

Labour Turnover.

Railway.	Period.	No. of workers employed	No of workers who left during the period.				Percentage of labour turnover	Percentage of absenteeism.
			Retired	Dismissed	Voluntary left	Total.		
G. I. P. I	1939	213	2	1	10	13	6·1%	..
	1943	268	4	7	3	14	5·3%	3·4%
II	1939	2982	@	@	@	264	8·8%	8·1%
	1943	5083	@	@	@	398	7·8%	18·5%
III	1939	191	4	..	..	4	3·1%	..
	1943	331	8	..	2*	10	3·3%	0·2%
IV	1939	647	..	3	..	3	0·4%	0·1%
	1943	1472	..	4	..	4	0·2%	8·2%
V	1943	343	2	..	—	2	0·6%	..

TABLE 143—*concld.*

Railway.	Period	No. of wo kers employed	No. of workers who left during the period.				Percentage of labour turnover.	Percentage of absenteeism
			Retired	Dismissed	Vol. left.	Total.		
VI	1939	88	..	2	1	3	3·4%	0 9.0%
	1943	86	11	12	..	13	15·1%	15 8%
VII	1939	47	1	.	..	1	2·1%	0.5%
	1945	77	2	..	..	2	2·5%	0.3%
VIII	1939	67	1	..	.	1	1·4%	0 8%
	1943	128	1	..	.	1	0·8%	0.2%
IX	1939	279	..	1	5**	6	2·2%	2 3%
	1943	343	3	8	3x	14	4·6%	4 5%
X	1939	64		.	1	1	1·6%	
	1943	92	1	1	.	2	1·1%	.
XI	1939	598	3	24		27	4·5%	
	1943	616	13	26		39	6·5%	
G. I. P. & C. I.	1943	3827	2	14	2	18	0·5%	0·7%
II	1939	51		3	1	4	8·0%	
	1943	71	..	5	2	7	9·9%	..
III	1939	150	..	2		2	1·3%	
	1943	179	1	1	1	3	1·7%	
Barsi Light	1939	240	.	2	1	3	1·3%	.
	1943	310	..	3	4	7	2·3%	..
M. & S. M. I	1939	70	.	.	1	1	1·4%	1·8%
	1943	70	1	1	2	3	4·2%	1·5%
II	1939	13		..		1	7·6%	..
III	1943	13	.	1		1	7·6%	1·0%
IV	1943	381	8	9	..	17	4·4%	..
V	1943	7	2	..	..	2	28·5%	..
VI	1939	325	@	@	@	15	4·6%	..
	1943	400	@	@	@	16	4·0%	4·7%
VII	1939	4,844	@	@	@	132	2·7%	
	1944	6,096	@	@	@	244	4·0%	9·8%
B.B.R. I	1939	5,414	60	..	203	263	4·9%	11·0%
	1944	600,0	104	8	418	530	8·8%	12·7%
Martin I	1939	129	..	51	1	52	4·0	..
	1944	141	1	25	8	34	2·%	
B. W. I	1944	6,944	74	5	737	816	11·8%	.

@ Figures not available.
* Both these persons were declared medically unfit.
** Four of these five persons were declared medically unfit for all classes.
x These three persons died.

Recruitment and Labour Officers.—In the case of inferior staff, such as coolies, sweepers, etc., recruitment is direct, while for skilled jobs, suitable persons are generally selected from among the lower grades and from apprentices. In many cases a Selection Board nominated by the Chief Mechanical Engineer selects the candidates for technical jobs. Preference is given to sons of railway employees. Labour Officers are rare in the railway workshops. B. N. Railway's workshop maintains a wholetime Welfare Officer, assisted by competent staff. In other workshops, the grievances of workers are looked after by the Works Manager, Staff Warden, Personnel or Employment Officer, Foreman, or any other officer in charge of the workshop. Many workshops have Works Committees, which discuss problems concerning the staff. Besides, workers have the right of appeal to the higher authorities.

II.—Wages and Earnings.

All the railway administrations have fixed definite grades for different categories of workers, both skilled and unskilled. These grades are fixed in some cases by taking into consideration the cost of living in the particular locality. In the B. B. & C. I. Rly., for example, an ordinary carpenter gets Rs. 1-8-0 per day in Dohad or Ajmer, while he gets Rs. 1-14-0 in Bombay. The skilled and unskilled workers are divided and sub-divided into a number of categories and in some cases the sub-division is carried on to such an extent that the workers think it to be an ingenious device adopted by the authorities to keep the workers always at a low level of wages. For example in a M. & S. M. Rly. workshop, the Train Lighting Fitters are sub-divided into seven classes, with daily wage-rates ranging from 14 as. to Rs. 3-12-0 per day. In G. I P. Rly. some of the categories have been sub-divided into 'special', 'superior' and 'ordinary' grades with two scales of payment, Old and New or Revised. Similarly in B. B. & C. I. Rly., the workers under the old scale have been divided into 'ordinary', 'superior' and 'special' grades, but those under the new scale are called 'Assistant', 'Ordinary' and 'Superior'. Only a certain fixed proportion of workers in each category is entitled to get upper grade maximum pay. For example, only 25 per cent. of wagon carpenters can go up to Rs. 2-11-0 which is the maximum pay given to 'Special' grade wagon carpenters. These conditions can be seen in the following table of B. B. & C. I. Rly. wage-rates.

Table 144.

Wage-rates in B. B. & C. I. Workshop (Parel).

Designation.	Old Scale.						Revised Scale.						Remarks.
	Ordinary.		Superior.		Special.		Assistant (30%)		Ordinary 50%		Superior (20%)		
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
Acetylene welders ..	..	..	2 11	3 9	4 1	4 5*	1 1	1 7	1 10	2 6	2 9	3 5a	a=50 % * 10% only in special grade.
Blacksmiths ..	1 8	2 9	2 15	3 9	4 1	4 5*	1 1	1 7	1 10	6	2 9	2 14	
Carpenters, Wagon ..	1 5	2 4	2 8	2 11b		.	..	..	1 0	1 8	.	..	b=25% of wagon carpenters. can go up to Rs. 2 11.
Carpenters, carriage ..	1 7	2 11	3 1	3 5	3 13	4 5*	1 1	1 7	1 10	2 0	2 3	2 9	
Crane drivers ..	..	..	1 8	2 9	..	..	..	..	1 2	1 6	1 8	1 14	
Electric Welders ..	..	..	1 8	2 4	2 9	3 12c	1 1	1 7	1 10	2 6	2 9	3 5	c=50 %
Fitters C & W ..	1 7	2 11	3 1	3 5	3 13	4 5*	1 7	1 7	1 10	2 6	2 9	2 14	
Fitters Loco ..	..	..	2 9	3 5	3 13	4 5*	.	..	..	..	..	.	
Moulders ..	1 5	2 4	2 9	3 5	3 13	4 5*	.	.	.	..	..	..	
Machinemen ..	1 9	2 10	..	..				.	1 4	2 10	2 3	2 9	
Painters& Polishers ..	1 9	2 10	3 0	3 5			1 1	1 7	1 10	1 14	2 0	2 9	
Spring makers ..	1 8	2 9	2 15	3 9	4 1	4 5*	1 1	1 7	1 10	2 6	2 9	2 14	
Tin smiths ..	2 9	2 15	.	..	..	.	1 1	1 7	1 10	2 6	2 9	2 14	
Turners ..	1 9	2 10	3 0	3 5	3 13	4 5*	1 1	1 7	1 10	2 6	2 9	2 14	
Trimmers ..	1 9	2 10	3 0	3 5d	3 13	4 5d	1 1	1 7	1 10	2 0	2 3	2 9	d=Only 4 can go up to Rs. 3/5/- and 3 can go up to Rs. 4-5.
Drillers ..	1 4	1 14	..	.				.	1 2	1 8	.	..	
Firemen ..	1 0	1 5	..	.	..		.	..	0 12	1 0	..	..	
Cleaners ..	0 14	1 2	..		1 3	1 5e	.	.	0 12	1 0	..	..	e=25% can go to spl.
Coolies ..	0 12	1 0	.	.	1 1	1 2e	..	.	0 12	0 14	0 14	0 15	
Helpers ..	0 14	1 2	..	.	1 3	1 5	..	..	0 12	1 0		.	
Oilers ..	0 14	1 2	..	..	1 3	1 5e	..	..	0 14	1 0	.	..	

The wage-rates in three other workshops of the B. B. & C. I. Railway are given below :—

TABLE 145.

Wage-rates in B. B. & C. I. Railway's Workshops.

Occupation		Workshop I				Workshop II				Workshop III			
		Old Scale		New Scale		Old Scale		New Scale.		Old Scale.		New Scale.	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max	Min.	Max.	Min.	Max.
	*	Rs. p. m.	Rs. p. m	Rs. p. m.	Rs. p. m.	Rs. p. d.	Rs. p. d.	Rs. p. d.	Rs. p. d.	Rs. p. d.	Rs. p. d.	Rs. p. d	Rs. p. d.
Fitter	Sp.	80 0	105 0	60 0	7.	13	4 5	2 9	2 14				
	Su.	65 0	80 0	45 0	60	3 1	3 5	1 10	2 6				
	Or.	45 0	65 0	30 0	4	1 7	2 11	1 1	1 7				
Turner	Sp.					13	4 5	2 9	2 14	2 8	3 1	1 12	2 6
	Su.					3 0	3 6	1 10	2 5				
	Or.					0	2 10	1 1	1 7	1 4	2 8	1 2	1 12
M/c man	Su.							2 3	2 9				
	Or.					1 3	1 14	1 0	1 8				
Carpenter	Sp.	80 0	105 0	50 0	7	13	4 5	2 3	2 9	2 8	3 0	2 0	2 9
	Su.	65 0	80 0	45 0	5	1	3 5	1 10	2 0				
	Or.	45 0	65 0	30 0	4	2	2 11	1 1	1 7	1 8	2 4	1 2	1 4
Painter	Su.	65 0	80 0			3 0	3 5	1 10	1 14				
	Or.	40 0	60 0	25 0	40	1 9	2 10	1 1	1 7				
Blacksmith	Su.	80 0	105 0	60 0	7	2 15	3 9	2 3	2 9				
	Or.	45 0	65 0	30 0	4	1 8	2 9	1 10	2 0				
Tinsmith	Su.	65 0	80 0										
	Or.	40 0	60 0	25 0	40	2 9	2 15	1 1	1 7	0 8	2 0	0 12	1 10
Coolie		24 0		22 0		0 12	1 0	0 12	0 14				

* Sp., Su., and Or. mean 'Special' 'Superior' and 'Ordinary' classes respectively in which the workers have been divided. In many cases, each class is divided into two categories, 'A' and 'B' with varying grades. Only the lowest category is mentioned above.

The categories, special, superior and ordinary are found in the railway workshops of the G. I. P. Railway also. The following table, compiled from the figures of six workshops, gives the wage-rates in this railway.

TABLE 146.

Wage-rates in G. I. P. Railway Workshops (based on figures of 6 workshops).

Occupation. class.		Old Scale.		New Scale.	
		Minimum. Rs. p. m.	Maximum. Rs. p. m.	Minimum. Rs. p. m.	Maximum. Rs. p. m.
Instrument Fitter ..	Special	90 0	100 0	75 0	85 0
	Superior	70 0	86 0	66 0	75 0
	Ordinary	45 0	65 0	40 0	62 0
Fitter ..	Special	50 0	100 0	45 0	85 0
	Superior	35 0	86 0	40 0	75 0
	Ordinary	26 0	65 0	26 0	62 0
Turner ..	Special	90 0	100 0	75 0	85 0
	Superior	48 0	86 0	45 0	75 0
	Ordinary	35 0	74 0	26 0	62 0
Machineman ..	Superior	35 0	86 0	30 0	75 0
	Ordinary	35 0	60 0	26 0	62 0
Carpenter ..	Special	90 0	100 0	75 0	85 0
	Superior	39 0	86 0	43 0	75 0
	Ordinary	26 0	60 0	30 0	62 0
Blacksmith ..	Ordinary	32 0	60 0	26 0	62 0
Tinsmith ..	Superior	61 0	74 0	55 0	66 0
	Ordinary	37 0	60 0	30 0	52 0
Coolie { male ..		14 0	26 0	13 0	24 0
Coolie { female ..		12 0	18 0	12 0	16 0

In the above table, the higher wage rates are generally for the railway workshops in the City of Bombay, while the lower ones are for the mofussil workshops such as those in Dhond or Manmad.

Wage rates in M. & S. M. workshops (in Bombay and Madras Provinces) are given below :

TABLE 147.

Wage-rates in M. & S. M. Railway Workshops.

Occupation	Bombay Workshops		Madras Workshops			
	Old Scale (Grade)	New Scale (Grade)	Minimum Rs. p. m.	Maximum Rs. p. m.	Minimum Rs. p. d.	Maximum Rs. p. d.
Train Lighting Fitters.	(*a*) 0/14—0/1—1/	0/11—0/$\frac{1}{2}$—0/13	..		1 0 0	1 4 0
	(*b*) 1/1—0/1—1/4	0/13—0/1—1/2	.		1 4 0	1 12 0
	(*c*) 1/4—0/2—1/12	1/4—0/1—1/8	..	..	1 14 0	2 4 0
	(*d*) 1/14—0/3—2/4	1/10—0/1—2/2	..	..	2 7 0	2 13 0
	(*e*) 2/7—0/3—2/13					
	(*f*) 3/—0/4—3/8	2/4—0/2—2/14	.		3 0 0	3 8 0
	(*g*) 3/12—0/4—4/4	2/15—0/2—3/8	..	.	3 12 0	4 4 0
Mechanical fitters ..	(*a*) 1/4—0/2—1/12	1/4—0/1—1/8	21 0 0	30 0 0	..	.
	(*b*) 1/14—0/3—2/4	1/10—0/1—2/2	110 0 0	150 0 0	.	..
	(*c*) 3/—0/4—3/8	57/8—2/8—75 p.m.	..	..	..	..
Electric fitters ..	(*a*) 1/1—0/1—1/4	0/13—0/1—1/2	..	..	..	..
	(*b*) 1/4—0/2—1/12	1/4—0/1—1/8	..	..	..	..
	(*c*) 1/14—0/3—2/4	1/10—0/1—2/2	..	..	..	..
	(*d*) 3/—0/4—3/8	2/4—0/2—2/4	..	..	..	..
Blacksmiths ..	..	..	21 0 0	30 0 0	(*a*)1 4 0	1 12 0
					(*b*)1 14 0	2 4 0
Carpenter ..	..	.	22 0 0	50 0 0	1 0 0	1 4 0
Hammermen ..	..	..	14 0 0	21 0 0	0 14 0	0 15 0
Machinemen .	1/14—0/3—2/4	1/10—0/1—2/2	..	..	1 4 0	2 4 0
Coolies (spl)	0/14—0/1—1/	0/11—0/$\frac{1}{2}$—0/13	..	..	..	..
Coolies	0/10—0/1—0/13	0/8—0/$\frac{1}{2}$—0/10 p.d. 13/—0/8—16/ p.m.	13 0 0	18 0 0	0 11 0	0 15 0

Unskilled workers like coolies in all the occupations get a monthly salary of Rs. 13 to Rs. 18 or a daily wage of 8 as. to 15 as. Semi-skilled categories get Re. 1 to Rs. 3-8-0 per day according to the grade in which they are placed. Especially capable workers get Rs. 3-12-0 to Rs. 5-4-0 a day. The daily-rated workers get annual increments ranging from 1|2 anna to 2 as. per day within their grades. The wage rates in Barsi Light Railway's workshop are not high, because the workshop is in a small town (Kurduwadi). There the wage-rates are : (i) Fitter Re. 1|- to Rs. 4|- ; (ii) Carpenter Rs. 1|4|- to Rs. 3|8|- ; (iii) Painter Re. 1|- to Rs. 2|8|- ; (iv) Welder, Rs. 1|6|- to Rs. 3|- , (v) Moulder, Rs. 1|4|- to Rs. 3|8|- ; (vi) Blacksmith, Rs. 1|4|- to Rs. 3|- ; (vii) Tinsmith, Rs. 1|8|-, etc.

In the E. I. Railway's workshop at Lilloah the grades for workmen are as follows :

TABLE 148.

Grades for Lilloah Workshop Employees.

Category	Grade
Unskilled	Rs. 18—1—21
Semi-skilled (Boys)	Rs. 12—1—18
,, (Adults)	Rs. 22—1—28
Skilled	(*i*) Rs. 22—1—28
	(*ii*) Rs. 30—1—40
	(*iii*) Rs. 44—2—60
Charge heads (Gr. I)	Rs. 30—3—45—5—60
(Grade II)	Rs. 65—5/2—85
Non T.T. Chargemen	Rs. 100—10/2—120

In the Kharagpur Workshop of B. N. Railway, workers have been divided into various classes and the following grades have been fixed :

TABLE 149.

Wage-rates in B. N. Railway's workshop (Kharagpur).

Group	Some important occupations included in the Group	Revised scales of pay Rs.	Old scales of pay. As. per day
I skilled ..	Semi-Diesel Driver, spl. Electric Welder, Gauge Fitter, Gauge turner, etc.	60 0 0	48—2—50—3—56
II „ ..	Boiler-maker, Carpenter, Die-sinker, (Fitter, Moulder, Turner, Welder Winder, Pattern-maker, Wireman, etc.	60 0 0 48 0 0 36 0 0	(*i*) 32—2—46 (*ii*) 16—2—31
III „ ..	Driver, Grinder, Machinemen (Driller, Forging-Machine, Gear Cutter) Miller, Slotter, Sawyer, Turner, Wheel, Trimmer, etc.	45 0 0 39 0 0 33 0 0	(*i*) 30—2—40 (*ii*) 12—1—16—2—29
IV „ ..	Carpenter (Rough), Core maker, Crane Driver, Mason, Painter, Rivetter, etc.	36 0 0 30 0 0	(*i*) 24—2—32 (*ii*) 12—1—16—2—33
V Semi skilled ..	Fu naceman. Paint mixer. Motor T olly Driver, Machine Attendant, Muccadum (male), etc.	30 0 0 27 8 0	(*i*) 21—2—25 (*ii*) 12—1—16—2—19
VI „ ..	Machinemen (Hydraulic, Press, Sand mixer, Sawman, Screwer, Shearer, etc.)	30 0 0 27 0 0	(*i*) 18—2—23 (*ii*) 11—1—17
VII Inferior ..	Fettler, Fireman Hammerman, Machine Feeder, Cleaner and Oiler, etc.	21 0 0	12—1—16
VIII „ ..	Carpenter Boy, Female Mucoadam, Rivet Boy	18 0 0	10—1—14
IX „ ..	Pointsman	18 0 0	11—1—12
X „ ..	Cleaner, Male Coolie, Trollyman	17 4 0	10½—1—11½
XI „ ..	Carpenter Boy and Rivet Boy (both below 17 years.)	9 1 11	6—1—10
XII „ ..	Female coolie	12 0 0	8—1—9

The rates of wages in the larger workshops, *viz.*, E. I. Railway and B. N. Railway workshops are fixed rates in the sense that they do not fluctuate with the supply and demand position in the labour market. The rates have been fixed with regard to relative importance and nature of work done, though the cost of living and the wages paid in the adjacent railways and similar engineering concerns in the locality have also some influence on the fixation of the wage rates. In the following table wage rates of two small workshops in Bengal are given.

TABLE 150.

Wage-rates in two small Bengal Workshops

Occupation	Martin & Co.'s Makarda Workshop		D. H. Rly.'s Tindheria Workshop	
	Minimum Rs. p. d.	Maximum Rs. p. d.	Minimum Rs. p. d.	Maximum. Rs. p. d.
Fitter	0 12 6	2 2 3	0 6 0	2 0 0
Turner	0 12 6	1 13 0	0 6 0	1 10 0
Driller	0 15 6	1 3 3	0 6 0	1 1 0
B ltman	..	0 13 9	0 10 0	0 12 0
Fireman	0 11 3	0 15 6	0 8 0	0 11 0
Blacksmith	0 11 3	1 11 9	0 6 0	2 0 6
Boiler-maker	1 1 3	1 15 0	0 12 0	1 10 0
W lder	0 12 6	1 15 0	..	1 13 0
Painter	0 9 3	0 12 6	0 5 0	1 5 0
Carpenter	0 12 6	1 8 9	0 12 0	2 5 0
Khalasy	0 9 3	1 2 0	0 6 0	0 11 6

TABLE 151.

Daily Wage-rates in N. W. Railway Workshops (Lahore).

Occupation	Revised scale (applicable to staff engaged after 15-7-1931)	Old Scale (applicable to staff appointed before 16-7-1931)
Cooly .	9 As.—1 anna—11 As.	10 As.—1 anna—12 A
Semi-skilled . .	12 As.—1 anna—Re. 1	14 As.—1 anna—Rs. 1-2
Skilled ..	(a) Rs. 1-2—1 anna—Rs. 1-8 (b) Rs. 1-10—2 As—Rs. 2 (c) Rs. 2-4 (fixed)	Rs. 1-4—2 As.—Rs. 2 ..
Maistry .	(a) Rs 2-6—3 As —Rs. 3-12 (b) Rs. 3—4 As.—Rs. 3-8 (c) Rs. 3-12—4 As.—Rs. 4-12	Rs. 2-10.—3 As.—Rs 4-2 Rs. 4-4—4 As —Rs 5 8

Dearness and other Allowances.—A detailed account of Dearness and other Allowances has been given in the Report on Non-Gazetted Railway Services. Most of the railways have adopted the scale prescribed by the Railway Board, which provides for the payment of dearness allowance at the rate of 17-1|2 per cent. of pay, subject to certain minima. Some of the company-managed railways have their own scales. For example, skilled hands in Martin & Co.'s workshop are given dearness allowance at the rate of Rs. 9 per month and the unskilled workers at the rate of Rs. 7 per month. In the D. H. Railway's workshop, dearness allowance is at the rate of Rs. 20 for 26 working days. Various local allowances are in existence in many workshops. The B. B. & C. I. Railway workers in Bombay get a Bombay Local Allowance at the rate of 20 per cent. to subordinate staff drawing up to Rs. 50 and 15 per cent. to those drawing over Rs. 50. This allowance is permanent. In some of the M. & S. M. Railway workshops, workers employed in connection with munition work are granted a bonus of 20 per cent. of pay, up to 48 hours per week and 25 per cent. for time over 48 hours. In Barsi Light Railway Workshop, the workers get one month's wages as bonus. In many railways, workers who are members of D. of I. units are granted 25 per cent. of their basic pay as Military Compensatory Allowance and a ration allowance varying from 4 as. to Rs. 1-1-0 per diem. The ration allowance is higher in the case of Anglo-Indians than that given to Indians. Members of the A. R. P. organisations in B. N Railway and E I. Rly. get an allowance at the following rates.

TABLE 152.

Allowances paid to Members of A. R. P. Organisations.

Pay	Fire Fighting Staff	Others
	Rs.	Rs.
Not exceeding Rs. 30 p.m.	4	3
Rs. 31 to Rs. 65 p.m.	6	5
Rs. 66 to Rs. 100 p.m.	10	8
Rs. 101 to Rs. 200 p.m.	12*	10
Rs. 201 and above	24	20

Earnings.—The monthly wages and earnings of some important categories of workers in some railways are given below :

TABLE 153.

Monthly Wages and Earnings in G. I. P. Railway Workshops.

Occupation	Concern	No. of workers	Basic wages earned			Gross Earnings		
			Maximum	Minimum	Average	Maximum	Minimum	Average
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Fitters ..	I	16	99	49	65	137	75	94
	III	82	60	50	58	92	66	79
	VII	15	53	34	43	69	47	52
	VIII	2	57	44	50	71	58	64
	IX	2	55	46	51	65	55	60
	X	1	..	..	42	..	..	57
	XI	17	112	45	73	127	57	84
	XII	9	66	38	48	75	47	57
	XIII	11	86	45	78	104	56	87
	XIV	4	68	45	62	97	56	79
	XV	12	69	41	54	93	58	72
Turners ..	I	5	91	46	62	118	73	87
	III	12	62	48	55	73	44	59
	XIII	1	..	..	88	..	..	99
	XV	1	..	..	73	..	..	94
Machinemen ..	III	4	37	35	36	46	39	43
	VII	1	..	..	50	..	..	64
	XI	3	112	75	88	124	86	99
	XV	3	86	55	67	104	71	84
Carpenters ..	I	19	89	45	66	117	61	93
	VIII	2	52	36	44	66	50	58
	IX	2	55	30	43	64	38	51
	X	3	55	33	51	70	46	62
	XI	1	.	.	45	.		56
Painters ..	I	4	73	59	63	89	75	79
	VIII	1		..	38			51
	IX	1			48			62
	X	1			18		.	27
	XV	3	68	44	54	95	60	77
Blacksmith	III	2	42	35	39	51	50	50
	VII	2	50	28	39	63	41	52
	VIII	1			47			61
	IX	1			32			41
	X	1			32			46
	XI	2	75	66	71	86	77	82
	XII	2	62	38	50	71	47	59
	XIII	1		.	88		..	99
	XV	7	74	35	56	95	51	74
Masons	VIII	2	49	28	38	63	46	52
	IX	2	55	26	34	64	35	48
	X	3	55	29	41	69	43	59
	XV	1			49		.	68
Strikers ..	VII	1	.		26		.	40
	XII	1	..	..	26	.	.	35
	XV	6	29	22	26	47	38	43
Boiler maker .	III	23	57	41	49	68	50	59
	XIV	1		..	45	.	.	78
	XV	2	66	63	65	92	82	87
Coolies .	I	34	26	19	22	50	35	40
	VII	54	28	12	16	47	24	30
	VIII							
	Male	15	20	14	19	34	27	31
	Female	5	16	13	15	30	27	29
	IX							
	Male	13	18	13	15	27	22	23
	Female	8	16	11	14	25	20	24
Coolies	X	16	18	13	16	32	27	28
	XII	60	23	15	23	32	24	27
	XIII	27	25	15	22	48	24	33
	XV	67	28	20	25	48	36	40
Box-boys ..	XIV	5	15	14	15	24	23	23

NOTE.—Concerns I & XV (Bombay), X (Sholapur) and Nos. VII & VIII (Poona) are in big cities, while others are in smaller towns. Hence the disparity in wages.

TABLE 154.

Wage-rates in B. B. & C. I. Rly. Workshops.

Occupation	Concern	No. of workers	Basic Wages earned			Gross earnings		
			Maximum	Minimum	Average	Maximum.	Minimum	Average
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Fitter ..	II	11	85	70	56	..	..	..
	V	17	96	63	56	114	67	70
Turner .	V	5	74	39	43	89	52	53
Carpenter ..	V	3	89	70	72	105	87	86
Painter ..	V	1	..		55	..	..	70
Welder ..	V	1	.		63	.	.	79
Moulder ..	V	1			64		..	77
Blacksmith ..	V	1	..		90		..	107
Striker ..	V	1	..	.	17	..	..	24
Cleaners	V	8	27	27	21	40	39	31

NOTE.—No. II is in Bombay and No. V is in Dohad.

The average monthly wages and earnings in seven workshops of the M. & S. M. Railway are given below. These workshops are small units and are divided as follows : (i) 4 workshops (in Hubli, Karajgi, Dharwar and Alanawar) in Dharwar District, (ii) one workshop in Gadag; (iii) and (iv) two workshops in Madras. The first five workshops belong to the Operating Department, while the two in Madras are (a) Signal Workshop and (b) Loco Running Shed.

TABLE 155.

Monthly Wages and Earnings in M. & S. M. Railway Workshops.

Occupation	Dharwar District (4 workshops)		Gadag (1 workshop)		Madras (Signal Works)		Madras (Loco Running Shed)	
	Wages	Earnings	Wages	Earnings	Wages	Earnings	Wages	Earnings
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Fitters	42	56	36	50	57	95	40	74
Turners	43	57	45	59	..	.	59	87
Machinemen ..	32	44	40	51	..	.	40	76
Carpenters ..	59	77	46	64	50	87	..	..
Painters ..	11	19	15	27	..	..	..	..
Blacksmiths ..	50	65	46	63	23	52	54	68
Tinsmiths ..	59	76	..	..	21	48	21	50
Boilermakers ..	38	52	34	46	..	..	45	82
Hammermen ..	..	..	..	..	21	50	24	57
Lascars ..	..		..	..	21	48	21	50
Coppersmiths ..	..	.	59	70	..	..	59	73
Maistries ..	19	28	24	33	..	..	30	56
Coolies	12	22	14	32	..	..	14	36

NOTE.—'Wages' and 'Earnings' in the above table refer to 'Average Monthly Basic Wages' and 'Average Monthly Gross Earnings'.

Lastly, the Wages and Earnings in the Kurduwadi Workshop of the Barsi Light Railways are given below.

TABLE 156.

Monthly Wages and Earnings in Barsi Light Rly.'s Workshop.

Occupation	No. of workers	Basic Wages			Gross Earnings		
		Max.	Min.	Ave.	Max	Min	Ave
		Rs.	Rs	Rs.	Rs	Rs	Rs.
Fitters	28	104	18	58	141	30	71
Machinemen	17	86	36	48	121	54	70
Carpenters	9	78	20	52	87	32	67
Painters	8	65	21	35	83	34	49
Welders	3	62	49	53	75	65	70
Moulders	7	91	20	55	115	32	73
Blacksmiths	6	72	21	51	98	34	73
Tinsmiths	1			18			27
Boilermakers	9	78	42	50	87	59	61
Coppersmiths	2	46	44	45	59	61	60
Riveters	10	39	21	35	54	35	45

Overtime, Deductions and Fines.—Overtime is worked in the larger workshops according to exigencies of the situation and is paid for in accordance with the provisions of the Factories Act. Except in one or two workshops, overtime is not compulsory, nor is it necessary to make it so because workers themselves are anxious to work overtime for the extra earnings they get.

Deductions on the following counts which may be compulsory or voluntary, are made from wages : (i) Adjustment of over-payment of wages for absence from duty and advance of pay, (ii) Provident Fund, (iii) Fines, (iv) Death Benefit Fund, (v) Postal Insurance, (vi) Income-Tax and Surcharge, (vii) House Rent, (viii) Conservancy and Water Charges, (ix) Meter and Electric Charges, (x) Duty on Electricity, (xi) Loss or Damage directly attributable to neglect or default, (xii) Diet charges, (xiii) School Fees, (xiv) Defence Loans, (xv) Defence Savings from Provident Fund, (xvi) E. C. Bank Loans, (xvii) Mutual Benefit Society, (xviii) Railway Institute Fees, (xix) Court Attachments and (xx) Miscellaneous such as penalty for loss of railway passes or of ration cards.

In the case of State Railways, the amount of fines is credited to the Staff Benefit Fund, maintained for the Railway as a whole. This Fund is administered by a Committee presided over by the General Manager, and is utilised for the education of the staff and their children, recreation and amusement, relief of distress, etc. In the G.I.P. Railway alone, the amount outstanding in the Fund at the end of the financial year 1943-44 was Rs. 3,67,145.

Wage Periods.—Monthly system prevails in all the units. In the smaller workshops wages are paid within the seventh of the next month and in the larger workshops by the 10th according to the provisions of the Payment of Wages Act.

Holidays.—Workshops are generally closed on Sundays. In some concerns no additional holidays are granted, while in others the number of such holidays varies from 2 to 15. These may be paid or unpaid. For example, the N. W. Railway's Loco. and Carriage & Wagon Shops have 25 holidays, of which 5 are unpaid.

III.—Working Conditions.

Hours of work, Shifts and Rest-interval.—The following table gives the details about hours of work, shifts, rest interval and spreadover in the concerns investigated.

TABLE 157.

Hours of Work, Shifts, Rest-interval and Spreadover.

Railway	Concern	No. of shifts	Working hours	Rest hours	Actual hours worked	Total spread-over	Remarks.
G. I. P.	I	1	8 to 12 & 13 to 17·30	1	8½	9½	Monday to Friday.
			8 to 13·30		5½	5½	On Saturday
		2	(i) 8 to 12 & 13 to 19	1	10	11	Machine screw production workers. From Monday to Saturday.
			(ii) 20 to 24 & 1 to 7	1	10	11	
	II	2	(i) 8 to 12 & 13 to 19	1	10	11	
			(ii) 20 to 24 & 1 to 7	1	10	11	
	III	3	..		8	8	For 'continuous' workers.
		1	.	.	9	9	
		2	..	..	12	12	For 'intermittent' workers.
	IV	2	(i) 7 to 12 & 13 to 18	1	10	11	
			(ii) 19 to 23 & 24 to 6	1	10	11	
		3	(i) 6 to 15·30		9½	9½	For 9 workers, i.e., 3 in each shift for shunting engines, etc.
			(ii) 14 to 23·30		9½	9½	
			(iii) 23 to 8·30		9½	9½	
	V to VII	3	(i) 0 to 8		8	8	
			(ii) 8 to 16		8	8	
			(iii) 16 to 24		8	8	
		1	8 to 12 & 13 to 20	1	11	12	
	VIII	1	8 to 13 & 14 to 18	1	9	10	
	IX	1	8 to 12 & 13 to 17	1	8	9	
	X to XII	1	8 to 13 & 14 to 18	1	9	10	
	XIII	2	(i) 8 to 12 & 13 to 17 30	1	8½	9½	For carriage repairs.
			(ii) 8 to 12 & 13 to 17	1	8	9	For wagon repairs.
	XIV	2	(i) 8 to 12·30 & 13·30 to 17·30	1	8½	9½	Repair shop.
			(ii) 9 to 13 & 13·30 to 17·30	1	8	8½	Inspection shed.
	XV	2	(i) 8 to 12 & 13 to 17	1	8	9	
			(ii) 17·30 to 20 30 & 21·30 to 0·30	1	7	8	
	XVI	1	7·30 to 12 & 13 to 16·30	1	8	9	
B. B. & C. I.	I	1	8 to 12·30 & 13·30 to 17·30	1	8½	9½	Monday to Friday.
			8 to 13·30	.	5½	5½	Saturday.
	II	1	8 to 12·30 & 13·30 to 18	1	9	10	
	III	2	(i) 8 to 12·30 & 13 30 to 17·30	1	8½	9½	
			(ii) 20·30 to 1·30 & 2·30 to 7·30	1	10	11	
	IV to VI	1	.	1	9	10	
		3	..	..	8	8	
Barsi Light		1	7·30 to 12 & 13 to 17	1	8½	9½	
M. & S. M.	I	1	8 to 12·30 & 13·30 to 18	1	9	10	Monday to Thursday.
			8 to 12·30 & 13·30 to 17	1	8	9	Friday.
			8 to 12		4	4	Saturday.
		3	(i) 0 to 8		8	8	For the battery charging staff who are allowed 24 hours off once in 14 days.
			(ii) 8 to 16		8	8	
			(iii) 16 to 24		8	8	

Railway	Concern	No. of shifts	Working hours	Rest hours	Actual hours worked	Total spread-over	Remarks
M. & S. M.	II	3	(*i*) 0 to 8·10	..	8-1/6	8-1/6	Overlapping of 10 minutes to give the charge of work to the next shift.
			(*ii*) 8 to 16·10	..	8-1/6	8-1/6	
			(*iii*) 16 to 0·10	..	8-1/6	8-1/6	
	III	2	(*i*) 8 to 12·30 & 13·30 to 19	1	10	11	
			(*ii*) 19 to 24 & 3 to 8	3	10	13	
	IV	2	(*i*) 8 to 12·30 & 13·30 to 18	1	9	10	Monday to Thursday.
			8 to 12·30 & 13·30 to 17	1	8	9	Friday.
			8 to 12	..	4	4	Saturday.
			(*ii*) 19 to 24 & 3 to 18	3	10	13	Sunday to Friday (night shift.)
	V to VIII	4	(*i*) 7·30 to 11·30 & 13·30 to 17·30	2	8	10	
			(*ii*) 9·30 to 13·30 & 15·30 to 19·30	2	8	10	
			(*iii*) 19·30 to 23·30 & 1·30 to 5·30	2	8	10	
			(*iv*) 21·30 to 1·30 & 3·30 to 7·30	2	8	10	
		4	(*i*) 8 to 12 & 14 to 18	2	8	10	
			(*ii*) 10 to 14 & 16 to 20	2	8	10	
			(*iii*) 20 to 24 & 2 to 6	2	8	10	
			(*iv*) 22 to 2 & 4 to 8	2	8	10	
	IX	2	(*i*) 8 to 12 & 14 to 18	2	8	10	
			(*ii*) 20 to 24 & 2 to 6	2	8	10	
	X	1	8 to 12·30 & 13·30 to 17·30	1	8½	9½	Monday to Friday.
			8 to 13·30	..	5½	5½	Saturday.
	XIV	1	8 to 13 & 13·30 to 17	½	8½	9	
	XV	7	(*i*) 8 to 12 & 13·30 to 17·30	1½	8	9½	General shift.
			(*ii*) 10 to 13·30 & 15 to 20	1½	8½	10	Continuous Process Shifts ' for some essential workers.
			(*iii*) 20 to 24 & 2 to 6	2	8	10	
			(*iv*) 22 to 2 & 4 to 8	2	8	10	For Lascars (who are governed by Hours of Employment Rules).
			(*v*) 24 to 8	..	8	8	
			(*vi*) 8 to 16		8	8	
			(*vii*) 16 to 24	..	8	8	
	XVI	3	(*i*) 8 to 12·30 & 13·30 to 17·30	1	8½	9½	General shift
			(*ii*) 8 to 12·30 & 13·30 to 19	1	10	11	
			(*iii*) 19 to 21 ; 21·30 to 1 & 2·30 to 7	2	10	12	
B. N.	I	*	(*i*) 7·30 to 12 & 13·30 to 18	1½	9	10½	General shift.
E. I.	I	2	(*i*) 8·30 to 12·30 ; 13 to 19 & 19·30 to 20·30	1	11	12	Day shift (including overtime).
			8·30 to 13·30	..	5	5	Saturday Night shift (including overtime).
			(*ii*) 20·30 to 1 & & 2 to 8·30	1	11	12	

Railway	Concern	No. of shifts	Working hours	Rest hours	Actual hours worked	Total spread-over	Remarks
D. H.	I	1	7 to 11 & 13 to 17	2	8	10	
N. W.	I & II	**	(*i*) 5 to 11 & 12 to 18	1	12	13	For 16 brass foundry workers.
			(*ii*) 7 to 12 & 13·15 to 18·15	1½	10	11½	For 1634 workers.
			(*iii*) 7 30 to 12 & 13 to 17	1	8½	9½	For 3284 workers.
			(*iv*) 7·30 to 12 & 13 to 18·30	1	10	11	
			(*v*) 7·30 to 13·30 & 14·30 to 20·30	1	12	13	For 1834 workers.
			(*vi*) 18 to 24 & 1·15 to 7·15	1½	12	13½	For 800 night-shift workers.
			(*vii*) 18·30 to 23 & 24 to 5·30	1	10	11	For 40 workers.

* There are about 54 relays for 19 groups of workers. The present shift arrangements are: three in shops on munition production, two in shops where there is load, and facilities exist for double shift and one in other shops.

** This workshop has at present 12 shifts, of which seven are mentioned.

Overlapping shifts have been shown in the above table. Such shifts, however, are very few and the staff of the overlapping shifts are simultaneously on duty for only less than half an hour. This procedure has been found necessary in order that the progress of a particular operation is not hampered by the change of workers.

Ventilation, Lighting, etc.—The conditions of ventilation, lighting, floor area, etc., were found to be satisfactory in most of the workshops and conform to the specifications laid down in the Factories Act. There is no doubt considerable room for further improvement. For example, some provision is necessary for workers who work in the open. The war-time expansion in certain workshops has inevitably caused some congestion in the workshops.

Shelters.—As the following table shows, very few workshops have provided shelters for their employees during rest-intervals.

TABLE 158.

Shelters.

Railway	Concern No.	Total No. of workers	Details of shelter provided
G. I. P. ..	II	5,377	Details not available.
	XIII	276	Shed (40′ × 12′), fenced on all sides, zinc sheet roofing, no seating arrangements.
	XIV	228	Shed (400 sq. ft.) of galvanised sheets; 12 benches (12′ long) and 4 tables (12′ × 4′) are kept.
	XVI	707	Structure with corrugated roof and with seating arrangements.
M. & S. M. ..	XVI	6,096	Different sheds for different communities.* Total floor area of the sheds for the carriage works is 16,704 sq. ft. and for the Loco Works 18,000 sq. ft. These sheds are with corrugated sheet roofs and sheet iron side walls and cement floors.
B. N. ..	I	8,875	Rest-shelter in shape of condemned carriage bodies, accommodating about 80 persons.
Martin & Co. ..	I	141	Condemned carriage bodies.

* For Anglo-Indian workers, spacious tiffin rooms are provided in both Carriage Works and Loco Works. The floor area is 1,176 sq. ft. These are well-ventilated buildings, with verandahs on all sides and roofs of Mangalore tiles, furnished with teak-wood tables and benches and clean table linen. Separate kitchens are attached and flush-away type bath rooms and washing facilities are provided. Drinking water is supplied in earthern gobblets by special waiters.

IV.—Welfare Activities.

Sanitary Arrangements.—Arrangements for water-supply, latrines, urinals, washing and bathing are generally in keeping with the requirements of the Factories Act. Latrines and urinals are provided usually in the proportion of one for every 50 workers. Water supply in almost all the cases is through water taps ; provision of water-tanks and tube-wells was found in Bengal workshops. Bathing facilities are non-existent, though washing facilities have been provided by a few workshops. Cool water during summer, usually in earthern jars, is provided in less than one-third of the concerns investigated.

Medical Aid.—Railway workers are much better provided for than workers in other industries, in respect of medical facilities. Generally, every workshop has a dispensary, staffed with a medical licentiate and a compounder and usually catering to all railway employees and their families. For example, for the sampled units in G. I. P., such dispensaries exist in Bombay (Victoria Terminus, Parel and Matunga), Kalyan, Poona, Dhond, Bhusawal, Sholapur and Igatpuri. Besides, in important industrial centres like Bombay (Byculla), Madras (Perambur), Lahore, Lillooah and Kharagpur, the State Railways maintain large hospitals for the railway workers and their families. These hospitals are provided with all modern equipment and staffed with a number of qualified medical officers. The Lillooah hospital and the Kharagpur hospital maintain 12 and 120 beds respectively for indoor patients. Among the company-managed railways, the D. H. Railway and the Barsi Light Railway maintain both a dispensary and a hospital. In the D. H. Railway, the hospital and the dispensary have 12 and 4 beds respectively and are in charge of a doctor assisted by one compounder, one dresser and two nurses. Number of cases treated daily is between 8 and 10. Periodical medical examination is absent, but in all workshops medical examination is taken prior to recruitment.

Canteens.—Satisfactory arrangements have not been made except in the workshops of the G. I. P., Martin Light and the N. W. Railways. In the G. I. P. Railway, 14 of the 16 workshops investigated maintain canteens. All of these, except one, are managed by private contractors, who make considerable profits. These contractors, however, make payment to the Administration in the form of rent or licence fee. The contractor in one of the workshops, for example, pays annually Rs. 72 as rent, while another pays Rs. 12 as licence fees per year. Only one canteen is run by the G. I. P. Railway administration, where tea and light refreshments are provided at rates lower than the market-rates and the loss is borne by the Administration. Separate arrangements are made for Hindus, Muslims and Christians. The Martin Light Railway also manages a small tiffin room, where cheap meals are supplied to workers. The canteens in the N. W. Railway workshops are run by a Committee of Management, selected from among the workers and profits are utilised for the welfare of the staff. In these canteens, tea and light refreshments are sold. In almost all the workshops, tea vendors cater for the workers and tea stalls, hotels or restaurants are situated nearby.

Creche, Education and Grain Shops.—Except in the Kharagpur workshop, which employs 410 female workers, women are rarely employed. None of the workshops, not even the Kharagpur one, maintains a creche. Only in Bhusawal, an infant Welfare and Maternity Centre was found. Facilities for adult education are generally absent, except perhaps the Trade Schools for apprentices mentioned before. The Railway Administrations, however, maintain schools in the bigger railway colonies and also contribute from the Staff Benefit Fund to other schools, where the children of railway employees are admitted. The G. I. P. Railway, for example, runs 9 primary schools and also contributes to

84 other schools providing primary and secondary education to railway employees' children. Besides, monetary help to these children is given from Sir Lawless Hepper Fund and Frank Clarke Educational Purposes Fund. The B. N. Railway at Kharagpur runs primary schools in addition to two high schools—one for boys and the other for girls. At Tindharia, there is one upper primary school managed by the D. H. Railway in which only nominal tuition fees are charged from the children of the workers. The D. H. Railway further contributes to two other mission schools 8 as. per month per head in respect of workers' children. In the State Railways, special and preferential educational facilities are available for Anglo-Indians and Europeans.

Grain shops exist in all the workshops and the prices charged are far below the market rates. This reduction is possible, because of certain advantages, such as transport facilities and existence of co-operative societies, enjoyed by the railways. Most of the essential provisions, including standard cloth, are sold in these shops.

V.—Housing Accommodation.

Most of the railways have provided housing to workers, but more than 75 per cent. workers employed in workshops do not enjoy the benefit of such accommodation. Railway quarters are usually occupied by the other staff. The details of housing of workshop employees are given below.

TABLE 159.

Housing provided by Railways.

Railway	Location or concern	Proportion of workers housed	Types of housing provided	Rental Rs. p. m.
G. I. P. ..	Parel .	6 (Supervisors) out of 5,377 workers.	C and F types	The assessed rent for the various types are as follows: 'C'—Rs. 50; 'D'—Rs. 35; 'E'—Rs. 45; 'F'—Rs. 42-8-0 'G'—Rs. 80; 'H'—Rs. 30; 'J'—Rs. 4-8-0; 'K'—Rs. 1-12-0
	Dhond	23%	'K' (single room) & 'J' (two rooms) types.	
			Types C D E F G H J K — Total No. of Qrs.	
	Bhusawal ..	34%	19 149 2 44 9 23 16 651—913	
	Nandgaon ..	62%	2 25—1—6 74 134=242	Sometimes the rent charged is 9 or 10% of wages earned.
	Igatpuri ..	22%	15 6 2 26 — — 19 23=91	
	Sholapur ..	14%	'K' type	
	Wadi Bunder (Bombay)	1% (3 persons)	'K' type	
	Kalyan ..	24%	B, C, E, F, G, H, J and K types	
	Kurla	5%	F, D and K types	
B. B. & C. I. ..	Bombay Dohad Ajmer	25%	Varying types according to scales of pay.	10% of wages or assessed rent, whichever is less.
Barsi Light ..	Kurduwadi ..	..	Various types as 'C' old 'B', 'I-C', 'I-B', '0-A', 'N.A', 'O.I.A', 'I.A', 'F.C', 'A.A' and Bungalows.	Rent fixed on capital cost subject to a maximum of 10% of salary.
M. & S. M. ..	Hubli ..	14·5%	Standard Types '7' and '2'.	10% of wages or assessed rent, whichever is less.
	"	50%	Type '7' for staff drawing pay between Rs. 40 and Rs. 79 p.m.	
	"	13·3%	Type '2' for staff drawing pay less than Rs. 39 p.m.	
	Hubli Alanawar Karjagi Dharwar	10·9%	Single and double room tenements given according to salaries.	

Railway	Location or concern	Proportion of workers housed	Types of housing provided	Rental Rs. p. m.
M. & S. M. ..	Ghorpuri ..	25%	Single and double room tenements given according to salaries.	10% of wages or assessed rent, whichever is less.
	Madras ..	7%	2B, 7B, 8B, 15, 16, 17, 18B types: tiled quarters, with a small verandah, one room with a floor area of 90 sq. ft. a kitchen of a floor area of 36 sq. ft. and a small bath room and lavatory in an open yard behind, the total area of the yard being about 72 sq. ft.	
B. N. ..	Kharagpur ..	36%	3,406 units—Types and rents are given in next table.	
D. H. ..	Tindharia ..	50 %	.. ..	....
N. W. ..	Lahore ..	4%	(i) One room quarters with verandah. (ii) Two-room quarters.	Rs. 1-10-0 to 1-15-0 (chowkidars free).

TABLE 160.

Housing provided by Kharagpur Workshop.

Type of quarters	Size (Area of rooms per unit) (sq. ft.)	No. of units under occupation of workshop staff	Monthly rent payable. (Rs. per unit)
I	112	2,084	1 2 0
A	99		1 5 0
A1	139		1 14 0
II	190	734	1 14 0
B	182		2 12 0
BI	224		3 6 0
III	287	206	2 14 0
IV	372 (New type)	24	3 12 0
	436 (Old type)		4 6 0
9367C/1	385		5 11 0
V	717 (New type)	69	7 3 0
	767 (Old type)		7 1 0
VI	1,239	5	12 0 0
VII	376	57	3 12 0
VIII	508	9	5 1 0
IX	856	10	8 9 0
Staff qrs.	345	42	2 5 0 (Elec. rent).
Kutcha qrs.	89	166	0 12 0

Sanitation is looked after by the Medical Departments of the Railways and water is generally supplied through taps. Sub-letting, except in the Kharagpur workshop, is not allowed but congestion during the war was inevitable.

VI.—General.

Accidents.—The following table gives details of accidents and of compensation paid for them.

TABLE 161.

Accidents in 1943.

Railway	Concern	No. of accidents	No. of accidents for which compensation was paid	Amount paid in compensation
G. I. P. ..	I	14	..	Full pay for injury periods was granted (all minor cases).
	II	602	..	Rs. 5,259-8-0.
	III	162	..	Rs. 1,699-8-0.
	V	245	245	Rs. 1,650-9-7 (including Rs. 429-9-7 for 3 cases of permanent disablement).
	VI	6	6	Rs. 33-7-0.
	VII	8	8	Rs. 65-11-0.
	VIII	19	13	Rs. 108-3-0.
	IX	20	..	All, except one, were minor cases and full wages for sick period were paid.
	X	3	3	Rs. 41-6-0.
	XI	5	5	Rs. 90-1-0.
	XII	5	5	Rs. 43-6-0.
	XIII	60	60	Rs. 1,906.
	XIV	54	..	Full pay for sick period (all minor cases).
	XV	..	1	Rs. 210.
	XVI	3	..	Rs. 53-11-0 (injury full-pay in all cases).
B. B. & C. I. ..	I	22	21	Rs. 2,491-3-0.
	II	4	4	Rs. 32-2-0.
	III	243	243	Rs. 5,669-0-0.
	V	2	..	Nil.
	VI	10	3	Rs. 48-9-0.
Barsi Light ..	I	17	8	Rs. 28-6-0
M. & S. M. ..	I	6	4	Rs. 7-5-0.
	II	2	2	Rs. 3-13-0.
	III	1	..	Nil.
	IV	131	131	Rs. 1,615-10-0.
	V to VIII	89	63	Rs. 442-2-0.
	IX	6	6	Rs. 41-12-0.
	XIII	6	..	Nil.
	XVI	240	..	Rs. 5,281-5-0.
E. I.	I	188	155	Rs. 2,975 (approx) (28 cases were serious).
B. N.	I	224	13	Rs. 11,205 (approx).
Martin Light ..	I	36	..	About Rs. 200.
N. W.	I	580	251	Rs. 6,511-11- 0.
	II	731	296	Rs. 2,558-4-0.

Indebtedness.—Most of the railways have started Co-operative Banks for the issue of loans to workers. In the G. I. P. Railway workers are granted loans only after the completion of five years' service. The rate of interest charged by the Employees' Co-operative Bank is 6-1/4 per cent. During the year 1943-44, loans issued to all railway workers totalled Rs. 34.4 lakhs. The

Bank is managed by the representatives of employees and Railway Administration. In the B. B. & C. I. Rly., about 30 per cent. of the staff is usually in debted and the interest charged is 3-1|4 per cent. per annum. The Co-operative Credit Society in the Barsi Light Railway Company charges at the rate of 9-3|8 per cent. per annum. In the M. & S. M. Railway, a majority of workers are members of the M. & S. M. Railway Employees' Urban Bank, Ltd. which lends money at the rate of 6-1|4 per cent., up to 12 times the monthly pay of a member and recovers by small instalments up to 36 in number. From the figures given by this Bank, it seems that the indebtedness of railway workers has been on the decline in recent years, as the total number of loans given as well as the total amount lent by the Urban Bank has been falling.

TABLE 162.

Loans given by M. & S. M. Rly. Employees' Urban Bank.

Year	Number of loans	Amount (Rs.)
1939-40	14,367	52,61,268
1940-41	13,982	52,19,918
1941-42	14,765	57,22,926
1942-43	11,444	42,76,765
1943-44	11,406	44,05,026

The E. I. Railway maintains two co-operative societies, one at Calcutta and the other at Lucknow, from which staff can borrow money up to 7 months' pay. These loans are recoverable in easy instalments ranging from 12 to 48. Lower paid employees, who are not eligible for loans from these societies are granted loans from "Lower Paid Staff Loan Fund". The E. N. Railway maintains a Railway Employees' Urban Bank, which advances loans on easy rates, *viz.*, 7-1|2 per cent. recoverable from employees' salaries. Of the 81,506 railway employees, 32,333 are members of this Bank and 27,912 members have outstanding loans to the extent of Rs. 1,20,25,300. Interest-free advances are also given from Provident Fund in case of sickness. The Tindharia workshop (D. H. Railway) also maintains a Co-operative Credit Society from which all employees can have loans on nominal rates of interest. The N. W. Railway staff is permitted to obtain loans up to 6 months' pay from the N. W. Railway Employees' Co-operative Credit Society and also up to 3 months' pay subject to a maximum of Rs. 500 from the P. I. Fund. Workers having more than 3 years' service, who do not subscribe to the P. I. Fund can obtain loans up to a maximum of 4 months' pay from the Lower Paid Staff Loan Fund to meet genuine demands.

For details in regard to Trade Unions, Staff Committees and Strikes, Provident Fund and Gratuity and Pension schemes, reference should be made to the Report on Non-Gazetted Railway Services by Dr. Ahmad Mukhtar.

CHAPTER V.—COACH-BUILDING AND MOTOR-REPAIRING.

Coach-building and Motor-repairing which is also known as Vehicle Assembling and Repairing, is one of the many minor branches of the engineering industry. In 1943, the engineering industry of British India claimed

1,923 factories with 5,13,613 workers, of which only 166 factories with 20,626 workers belonged to this branch. Even these figures are a considerable improvement over the pre-war figures, on account of huge war orders in the shape of repair and maintenance of a very large number of military trucks and lorries. A majority of factories in this industry have been mainly, and some solely, dependent on military work. The expansion of the industry in the chief industrial Provinces is shown in the following table :—

TABLE 163.

Employment in Coach-building and Motor-repairing Factories.

Province	1939		1943	
	No. of Factories	Workers employed	No. of Factories	Workers Employed
Madras	18	1,582	60	4,397
Bombay	41	2,414	31	8,620
Bengal	16	1,550	18	3,370
United Provinces	6	262	16	658
Punjab	6	232	6	1,652
Other Provinces	25	784	35	1,929
Total ..	112	6,824	166	20,626

Coach-building and motor-repairing industry is concentrated in urban and suburban areas. In all, 20 factories were investigated in five Provinces and the details are given below :—

TABLE 164.

Factories Investigated.

Province	Town	Number of Samples Investigated	
		Factories	Workers Employed
Madras	Madras	3	2,4
Bombay	Bombay and suburbs ..	6	7,779
Bengal	Calcutta and suburbs ..	7	2,746
United Provinces	Cawnpore	1	7
Punjab	Lahore	3	257

The nature of work carried on in these concerns falls broadly into four classes, as shown in the following table :—

TABLE 165.

Nature of Work.

Workshop doing	Number of factories in—					Total
	Madras	Bombay	Bengal	U. P.	Punjab	
(*i*) Repair works and overhauling ..	..	..	1	..	..	1
(*ii*) Manufacture of parts and accessories and undertaking body building.	2	3	4	1	3	13
(*iii*) Assemblage of plants	1	2	1	..	..	4
(*iv*) Miscellaneous work	..	1	1	..	..	2
Total ..	3	6	7	1	3	20

Though this branch, like all other branches of Engineering, has developed considerably during war-time, many of the factories have been in existence for a fairly long time. Out of the seventeen concerns which supplied information in this respect, one was established in 1840, one in 1873 ; seven during 1900—1920, four during 1920—30, two during 1930—38 and only two during the War

I.—Employment.

During the war, the transport system of India was geared to an unprecedented pitch of activity. Every effort was made to put to the maximum use all available vehicles. The result of this was to create an increasing amount of work for the coach-building and motor-repairing factories. These factories undertook repair work, overhauling, production of parts and accessories and assemblage work. As the following table shows, employment figures everywhere registered a phenomenal increase.

TABLE 166.

Increase in Employment.

Province	No. of concerns	Total daily employment.		Average employment		%increase or decrease
		1939	1944	1939	1944	
Madras	3	753	2,440	251	813	224
Bombay	6	1,278*	7,779	255	1,297	409
Bengal	7	1,122	2,746	160	392	145
United Provinces	1	31	74	31	74	139
Punjab	3	119	257	60	86	43

* 1939 figures of one factory are not available.

Some of the individual concerns, which concentrated on war production, showed a remarkable rise in employment. In two Bombay concerns, for example, employment in 1939 was 126 and 727. This rose to 1,247 and 6,022 respectively in January 1944 ! Similarly, in Bengal the number of workers employed in two concerns rose from 94 and 380 in 1939 to 671 and 1,289 respectively in 1944. One concern in Madras, which employed 430 workers in 1939, had 1,736 workers in its employment during January 1944. Employment figures in some of the concerns seem to be stationary, while in two of the concerns the level of employment in 1944 shows a decrease as compared to the 1939 figures, the reason being that these factories have not undertaken military work. However, the general level of employment was on the increase in wartime and an indication of this general increase in the size of workshops is evident from the following table :—

TABLE 167.

War-time Expansion in Industry.

No. of workers	Number of units employing the number specified	
	1939	1944
20—50	5	3
51—250	8	8
251—400	3	2
401—600	1	2
601—1,500	1	3
1,501—2,000	1	1
2,001—6,500	Nil	1

1939 figures of two concerns are not available.

Some salient features in the industry in the matter of employment are (1) preference shown to direct employment rather than employment through contractors, (2) non-employment of women and children and (3) payment of time-rated wages. Out of the 20 factories investigated, contract labour was found only in three factories (1 in Bengal and 2 in the Punjab). Contractor's labour in the Bengal factory is utilised for tailoring work and its extent is given below :—

TABLE 168.

Contract Labour in Bengal.

——	August 1939	January 1944
Total No. of workers in the factory	380	1,289
No. of workers employed through contractors	134	52
Percentage of contract labour to the total number of workers.	35·3%	4·03%

The privileges a permanent worker gets are : sick and privilege leave, a fortnight's notice for termination of service, holidays with pay and payment on monthly basis. However, in many factories, despite the fact that the position of temporary workers is insecure, such workers are offered all other privileges and facilities available to permanent workers. Lastly, in this connection, it may be mentioned that in Bengal, the Motor Industries Association has recently taken up this question with the member firms and has suggested that every firm should classify workers into two categories, *viz.*, permanent and temporary, on the basis of length of service.

Apprenticeship.—Only four concerns claim to have apprenticeship system. However, in most of these concerns, apprenticeship is not regular or well defined. For example one concern each in the Punjab, in Bengal and in Madras have no scheduled period of apprenticeship, it being left to the apprentices to determine their period of training. In other concerns, the training period varies from one year to five years, apprentices are then appointed as regular workers. The remuneration given to apprentices also varies in different factories. The Punjab factory makes no payment to apprentices. In Madras, one factory pays daily wages at the rate of 4 as. to 8 as. while another pays a monthly allowance of Rs. 5 to Rs. 15.

Graded or Time-scale Promotion.—Promotion at regular intervals seems to be common in Madras, Bombay and Bengal and is granted in ten of the concerns investigated. In Bengal, no system of graded or time-scale promotion existed till 1942 when five out of the seven concerns investigated started giving increment in wages at regular intervals on grounds of efficiency, subject to the discretion of the Management. One concern which has large establishments in Madras, Bombay and Calcutta, gives an annual promotion of 3 pies per hour of work for a period of four years. After that, there is an efficiency bar, and, if a worker is found fit, he is promoted to the higher grades. Another well established concern in Bombay gives an annual increment at the rate of 1|2 anna per hour ; there are five wage classes of workers and all the employees commence on a minimum rate, reaching the maximum by annual increments. In a few concerns, the promotions are irregular and generally dependent upon the will of the Manager. In one of the Bombay concerns, for example, permanent workers get an increment of Rs. 5 per annum, while the annual rate of increment for temporary workers varies from 2 as. to 4 as. per day. In another Bombay concern, promotions were given till the outbreak of war, on quality and speed of work, but later they were stopped, and instead dearness and other allowances were granted.

Labour Turnover.—Figures regarding labour turnover were available only in Madras, Bombay and Bengal and are given below :—

TABLE 171.

Labour Turnover.

Province.	Year.	No. of concerns	Average No. of workers employed	Average annual No. of workers left.				Annual % of Labour turn-over
				Retired	Dismissed	Vol. left	Total	
Madras	1943—44	3	2,280	..	4	540	544	19·0%
Bombay ..	1939	3	371	..	39	14	53	14·3%
	1943—44	6	7,799	156	1,586	1,165	2,907	37·3%
Bengal	1939	7	1,160	4*	19	209	232	20·0%
	1943—44	7	2,563	5*	140	342	487	19·0%

* These figures give the number of workers who died.

The above table shows that retirements (except in one concern in Bombay) are practically nil and that the turnover is caused, mostly by dismissals and resignations. This would appear to be the result of the policy of retrenching men in slack periods or of dismissals due to indiscipline.

Absenteeism.—Figures of absenteeism vary from factory to factory and from province to province. In Bengal, in 1939 the mandays lost were 13,412 showing an average daily loss of 4 per cent. In 1943, 26,191 mandays were lost, showing an average daily loss of 3.2 per cent. In the Punjab, absenteeism in one concern in 1944 was 14 per cent. Absenteeism in Bombay and Madras factories is shown below :—

TABLE 172.

Absenteeism.

Province	Year	No. of concerns	Percentage of absenteeism per day		
			Maximum	Minimum	Average
Bombay	1939	3	21%	3·2%	10·9%
	1943	4	11%	6·0%	7·7%
Madras	1939	1	..	..	2·6%
	1943	3	13·59%	2·1%	6·9%

The most common cause of absenteeism is illness, other causes being idleness, serving temporarily elsewhere for earning a daily wage and religious and social ceremonies. No remedial steps except occasional warnings to workers have been adopted by the concerns. The following figures show that absenteeism has a tendency to increase during the latter months of the year.

TABLE 173.

Absenteeism Month by Month.

Month.	Percentage of absenteeism in a Madras Factory.	Man-days lost in a Bombay Factory.
January	8·8	104
February	10·3	126
March	8·8	135
April	5·8	87
May	9·0	92
June	9·9	163
July	7·8	207
August	11·6	195
September	10·8	211
October	23·0	307
November	16·4	237
December	19·6	245

Standing Orders.—Out of twenty concerns investigated only one concern (a Bombay factory), has framed definite Standing Orders for its employees. The Cawnpore factory has adopted the Standing Orders framed by the Employers' Association of Northern India for its members. Four more factories (two in Bengal, one in Bombay and one in Madras) have formulated a few 'Conditions of Employment' to be signed by the workers when they take up employment with the company. These deal with notice for termination of employment, dismissal, payment of wages, obedience to the general rules and regulations of the Company, etc. The remaining fourteen concerns have no Standing Orders or Service Rules.

Recruitment and Labour Officers.—Unskilled workers are recruited either at the gates with the help of *maistries* or are obtained through the unskilled or skilled employees of the concern. Notices are also put up on the notice boards. Skilled workers are recruited sometimes by advertising in newspapers and with the assistance of Employment Exchange or National Service Labour Tribunal. Some concerns have several methods for recruiting worker. For example, one of the factories in Bengal (i) recruits skilled workers through the Labour Tribunal, (ii) maintains a list of its ex-workers, skilled and unskilled, and in the matter of employment gives them preference and (iii) occasionally recruits unskilled labour from amongst those who offer their services at the workshop gate. Only one of the twenty factories employs a Labour Officer, who not only looks after the grievances of the workers, but also recruits new labour.

II.—Wages and Earnings.

Wage rates in 1939 *and* 1944.—Wage rates obtaining in 1939 were not available, but rough estimates have been given. Wages are stated to have increased since 1939 by 2-1|2 to 3 times in U. P. and by 25 to 50 per cent. in the Punjab. The 1941 figures from one of the Madras concerns compared to the 1944 figures, show that there has been appreciable increase. The maximum rate for blacksmiths and carpenters in 1941 was 9 as. per day, while it is Re. 1 at present ; the minimum rate for an electrician stood at 11 as. and it is Re. 1 now. For fitters it has risen from 10 as. to Re. 1 and for hammermen and painters from 10 as. to 14 as. The increase in wage rates in the Bengal factories is given below :—

TABLE 174.

Increase in Wage-rates in Bengal.

Name of occupation	Rates of wages per day	
	1939	1944
	Rs. A. P.	Rs. A. P.
Mechanics	2 4 0	5 6 0
Fitters	1 12 0	4 2 0
Welders	2 1 0	4 6 0
Electrician	1 12 0	4 10 0
Coolies	3 8 0 (per week)	6 8 0 per week
Turner	..	4 8 0

In a number of factories (two in Bombay and four in Bengal) the workers are rated by the hour of work. The following table gives an increase in hourly wage-rates in Bengal.

TABLE 175.

Average Hourly Wage-Rates in Bengal.

Type of workers	Wage-rates		Wage-rates & D.A 1944	Increase since 1939
	1939	1944		
Fitters	0 2 6	0 5 0	0 6 0	140%
Electricians	0 3 0	0 5 0	0 6 0	100%
Turners	0 3 0	0 4 0	0 5 0	83%
Vicemen	0 3 0	0 5 6	0 6 6	216%
Mechanics	0 3 0	0 6 0	0 7 0	233%
Blacksmiths	..	0 3 6	0 4 6	..
Tinsmiths	..	0 3 6	0 4 6	..
Carpenters	0 2 9	0 4 6	0 6 0	100%
Coolies	0 1 6	0 2 9	0 3 9	150%
Painters	0 2 9	0 4 0	0 5 0	82%

The maximum increase in the basic wage-rates in Bengal since 1939 has been to the extent of 138 per cent. If dearness allowances were taken into account, the increase in earnings since 1939 would be greater. It is estimated that workers in the motor vehicle industry of Bengal earned on an average Rs. 1-10-0 per day during 1939 and about Rs. 4|- in 1944, thus indicating an increase of 146 per cent. ; the increase in the hourly wage-rates has been from 2 as. to 6 as.

Wage-rates vary considerably not only from factory to factory but also for different workers in the same occupation. The following table gives the maximum and minimum wage-rates for some important occupations.

TABLE 176.

Monthly Wage-rates in 1944 (in Rs.).

Name of occupation	No. of workers.	U. P.			Punjab.		Bombay		Bengal	Madras	
		Max.	Min.	Avr.	Max.	Min.	Max.	Min.	Avr.	Max.	Min.
Turners ..	4	150	50	96	182	30	115	84	52	69	16
Fitters	19	125	30	69	107	15	125	19	65	39	13
Asstt. Fitters ..	18	25	8	10	..	..	..	..	..	..	..
Electricians ..	2	100	90	95	70	40	145	18	65	..	..
Carpenters ..	3	65	40	55	98	46	189	48	59	46	20
Blacksmiths ..	2	60	45	53	156	30	114	29	46	46	23
Drivers	2	60	30	45	50	40	..	..	..	46	20
Painters ..	4	50	25	38	104	17	139	36	52	46	20
Welders.. ..	1	..	..	55	104	55	65	65	..	59	20
Hammermen ..	2	20	15	18	..	..	..	..	..	29	16
Tailors	2	80	35	58	90	15	166	32	..	..	..
Mechanics ..	..	..	..	..	..	..	166	30	78	65	20
Tinsmiths ..	2	80	8	44	..	..	115	18	46	..	..
Moulders ..	..	..	..	..	208	42	..	..	..	39	20
Cleaners ..	..	..	10	..	33	15	40	18	..	20	20
Coolies	12	24	..	15	50	29	48	28	36	20	16

As the above shows, wages and earnings vary considerably from Province to Province. The position in different areas is, therefore, described in some detail below.

Madras.—The highest wage-rates have been fixed for Motor Mechanics (12 as. to Rs. 2-8-0), Turners (10 as. to Rs. 2-8-0) and welders (As. 12 to Rs. 2-4-0). Next come Blacksmiths (14 as. to Rs. 1-12-0) and Liners (12 as. to Rs. 1-6-0). Hammerman get 10 as. to Rs. 1-2-0, while the unskilled categories, *viz.*, coolies, cleaners and sweepers get wages ranging from 10 as. to Re. 1 per day. Foremen are paid monthly, the range being Rs. 80 to Rs. 175. *Mistries* are paid from Rs 50 to Rs. 75 per mensem in one concern and Rs. 78 in another. The actual wages and earnings in January 1941 of various categories of workers in two concerns (A and B) are given below :—

TABLE 177

Wage-rates and Earnings in Madras (January 1944).

(In Rs. as. p.).

Occupation.	Average daily wage-rate		Average monthly earnings		Average daily earnings	
	A	B	A	B	A	B
Blacksmiths	1 1 6	1 1 11	35 8 0	44 0 9	1 4 4	1 14 7
Carpenters	0 13 2	1 2 7	29 12 11	43 14 5	1 2 4	1 14 6
Coolies	0 12 8	0 10 0	27 13 6	28 7 4	1 1 2	1 3 10
Fitters	0 14 1	1 0 5	30 0 10	40 10 10	1 2 6	1 12 4
Hammermen	0 12 0	0 12 1	26 11 0	35 0 2	1 0 5	1 8 2
Motor Mechanics	1 2 9	..	..	..	..	..
Painters	1 1 4	0 15 6	35 3 8	39 1 11	1 5 8	1 11 3
Tinkers	1 0 4	1 0 5	35 6 5	39 11 5	1 5 9	1 11 8
Turners and Drillers ..	1 2 10	1 3 5	40 11 1	47 0 11	1 9 1	2 0 9
Liners	0 14 10	1 1 8	31 1 8	38 2 10	1 3 2	1 10 7
Welders	1 11 0	1 0 10	46 2 3	26 4 2	1 12 5	1 9 3
Electricians	..	0 15 7	..	37 10 9	..	1 10 3
Lubricators	..	0 12 0	..	32 12 8	..	1 6 10

Note.—Concern A worked for 26 days and concern B for 23 days in January 1944.

A third concern investigated in Madras pays hourly rates and the categories employed therein are all unskilled or semi-skilled, not comparable to those elsewhere. The following tables gives the rates as well as earnings in this concern for February 1944, when it worked for 24 days.

TABLE 178.

Wages and Earnings in a Madras concern (February 1944).

Occupation	Rates of wages (per hour)		Average basic wages (monthly)	Average monthly earnings
	Max.	Min.		
Coolies	0 4 6	0 2 6	31 14 0	45 12 0
Sweepers	0 3 6	0 2 6	28 3 0	40 11 0
Pickers and Checkers	0 7 9	0 4 0	51 14 0	71 0 0
Assemblers	0 7 3	0 4 0	50 3 0	66 9 0
Casemakers	0 6 9	0 4 0	52 12 0	68 4 0
Repairmen	0 7 3	0 4 6	56 3 0	75 15 0
Miscellaneous	0 6 0	0 4 0	..	..

Bombay.—The average monthly basic wage of an unskilled worker varies from Rs. 18 to Rs. 37-7-0 while that of a skilled worker varies from Rs. 29-13-0 to Rs. 140. Similarly, the average monthly gross earnings of the former class range between Rs. 37 to Rs. 63-10-0 and of the latter class between Rs. 39-8-0 to Rs. 156. Out of the six concerns investigated, two calculate the wages of unskilled workers on hourly basis, two on daily basis and one on monthly basis. One of these concerns has a Standard Labour Classification (which has been given in Appendix IV to this Report), fixing definite scales for various classes of workers. Class E comprising cleaners, coolies, assistant greasers, sweepers, etc., has the grade of 2-1|2—1|4—3-1|2 as. per hour, while class D consisting of openers, greasers, grinders, hammermen, metal washers, stencillers, etc., gets 3-1|4—4 as. per hour. Classes A, B and C comprise skilled workers. Blacksmiths and painters usually get the highest wages, usually between Rs. 1-8-0 to Rs. 4-0-0 per day.

Bengal.—The wage-rates for some classes of workers in Bengal have been given above. The actual earnings, including allowances and payment for overtime however, are higher. The position at present as regards weekly earnings including allowances and overtime is as follows :—

TABLE 179.

Average weekly Earnings in Bengal (1944).

Name of occupation	Basic Rs.	Gross Rs.
Fitters	9 1 0	21 3 0
Vicemen	12 0 0	20 10 0
Turners	14 0 0	23 14 0
Blacksmiths	13 8 0	16 0 0
Tinsmiths	11 8 0	14 4 0
Hammermen	9 0 0	10 8 0
Welders	15 8 0	24 0 0
Carpenters	12 0 0	19 8 0
Moulders	12 8 0	17 0 0
Painters	12 0 0	15 0 0
Tailors	11 0 0	18 0 0
Platers	15 0 0	19 0 0
Coolies	10 0 0	12 0 0

Dearness Allowance.—One of the following three methods is generally followed in paying dearness allowance: (i) payment at a flat rate (daily or monthly), (ii) payment on a percentage basis, and (iii) payment according to a sliding scale based generally upon the cost of living index. The following table classifies the concerns according to these categories.

TABLE 180.

Methods of Payment of Dearness Allowance.

Province	Total No. of concerns	Dearness allowance paid			Mixed sliding scale	No dearness allowance.
		at flat rate	on percentage basis	On a sliding scale		
Madras ..	3	1	1	1	..	..
Bombay ..	6	2	2	2	..	..
Bengal ..	7	5	1	..	1	..
Punjab ..	3	..	1	..	1	1
U. P. ..	1	..	..	1	..	..

Seven out of eight concerns, which pay dearness allowance at flat rate, have got a uniform rate for all workers, which is Rs. 0-9-3 per day in Madras and 8 as. and 10 as. per day in Bombay. In Bengal, four concerns pay dearness allowance at a flat monthly rate. This varies from Rs. 14 to Rs. 25. The fifth concern pays Re. 0-11-9 per day. Dearness allowance as a percentage of the wages, is paid in five concerns, three of which are branches of one company. (The development of Dearness Allowance and Bonus system of this company is given in Appendix V). In all cases, where dearness allowance is calculated on a percentage basis, it varies inversely as the income. The following figures relate to the dearness allowance paid in two of the five concerns, as a percentage of basic wages. (The remaining three concerns follow the system given in Appendix II.)

TABLE 181.

Dearness Allowance.

Wage Class	Bombay Factory		Punjab Factory	
	Income Group	Dearness Allowance as a percentage of wages.	Income Group	Dearness Allowance as a percentage of wages.
I	Up to Rs. 100 ..	70%	Up to Rs. 25 ..	40%
II	Rs. 100 to Rs. 200	60%	Rs. 26 to Rs. 100	30%
III	Over Rs. 200 ..	50%	Rs. 101 to Rs. 297	25%

Sliding scale system, based on the cost of living index figures, has been adopted by only four concerns. Of these, the U. P. concern ascertains its Dear Food Allowance in accordance with the index calculated by the Employer's Association of Northern India, Cawnpore, and it is as follows :—

TABLE 182.

Dear Food Allowance in U. P.

Income Group.	Amount of Dearness Food Allowance when the cost of living index is	
	between 230 to 260 points	above 260 points
	Rs. A. P.	per point Rs. A. P.
Up to Rs. 25	0 3 6	0 0 1
Rs. 26 to Rs. 50	0 3 0	0 0 1½
Above Rs. 50	0 2 6	0 0 2

The two Bombay factories follow the sliding scale laid down by the Bombay Millowners' Association for their member mills. However, one of them pays the full amount, while the other pays only to the extent of 2/3rd of the amount sanctioned by the scale. The Madras factory pays at the rate of 2 as. per point above 100 according to the cost of living index. The dearness allowance in January 1944 amounted to Rs. 7 per worker per month. In two factories,

more than one method is being used. In a Bengal concern, for example, the dearness allowance is at a flat rate of Rs. 19-4-3 for workers earning up to Rs. 75 p.m., while it is at 25 per cent. of the wages for those who earn more than Rs. 75 p.m. Similarly, in a Punjab concern, dearness allowance of 3 as. to 6 as. per day is paid to the daily-rated labour whereas the monthly rated workers get 20 per cent. of their wages as dearness allowance.

The development of dearness allowance in all these concerns has been somewhat on the following lines. Usually it started as a small amount paid at flat rate to all workers without any wage groups. Thereafter, however, a complex system arose. Appendix II shows the development of dearness allowance in a company, three of whose branches (one each in Madras, Bombay and Calcutta) were investigated during this survey. Some of the concerns call the dearness allowance as Dear Food Allowance, or Emergency Allowance or even War Bonus. The dearness allowance in most cases is considered to be connected with the cost of living and hence generally in most of the concerns no specific conditions are attached to its payment. In one of the Bombay concerns, full dearness allowance is not paid until the workman has completed one year's service ; till then he is paid only to the extent of 33-1|3 per cent. Lastly, concerns which do not give a separate dearness allowance, have had to increase the basic wages of their workers.

Bonus.—Seventeen of the twenty concerns investigated pay an annual bonus to their workers which varies from half a month's to three months' wages to workers. One concern in Bengal, an exceptional case, allowed nine months' wages as bonus in 1943-44. Generally, the payment of bonus is conditional upon the fulfilment of certain conditions such as employment for a specific period before the declaration or the grant of bonus. In the U. P. factory, bonus at the rate of 2 as. per rupee of pay drawn by workers during the year is paid to the worker who fulfils the following conditions of service. He must have been (i) in service for at least 15 days before the close of the financial year ending on the 30th April ; (ii) in service on the date of the declaration of bonus ; (iii) in service on the date of payment of bonus ; and (iv) in continuous service from at least the 15th of April to the date of the payment of bonus. In a Bombay factory, bonus was paid in December 1943 at the rate of one day's wage for every ten days worked subject to a maximum of 26 days' wages. In addition, every half year, fifteen days' wages were paid to workers, who had completed one year's service, in lieu of 15 days leave. A Madras factory paid bonus amounting to half month's wages in 1944, to those who had completed six months' service and equal to one month's wages to those who had completed one year's service. The payment of bonus is generally dependdent on the accrual of profits to the factory. No allowances, other than the bonus and dearness allowance, were paid in any except a Punjab factory, which paid a " Special Allowance " to workers who had a minimum 20 days' attendance a month.

Overtime.—In eighteen concerns, overtime is normally worked, though only in about five concerns it seems to be compulsory, the latter having undertaken important and urgent work for the Defence Services. Compulsion, however, seems to be unnecessary, because the workers, who are mostly daily-rated, are willing to work overtime for extra remuneration. A scrutiny of pay rolls in Bengal showed that though the standard hours of work per week were only 45-1|2, the average weekly hours worked in the concerns investigated aggregated to 58, one of the workers working for as much as 81 hours in a week ! The workers in a Bengal concern complained that only a selected few among them were allowed to work overtime. Whenever overtime is worked, it is paid

according to the provisions of the Factories Act. Hours worked in excess of the scheduled hours of work are treated as overtime and paid for at one and a quarter or one and a half times the normal rate. In three concerns, hours worked in excess of normal time, *i.e.*, 8 hours on week days and 4-1|2 hours on Saturdays, are treated as overtime and are paid for at one and a half times the usual rate. Hours worked on all Bank Holidays are also considered as overtime. Overtime in all the factories is recorded either in registers or on Time or Clock Cards and these records are open to workers for inspection.

Deductions and Fines.—Deductions from wages (apart from fines) are made only in seven concerns for damage or loss, breach of contract, subscription towards Provident Fund, realisation of advances made against wages and cost of foodgrains supplied. Fines are imposed only in six concerns, of which four are in Bengal, for failure to observe safety instructions, unauthorised removal or damage to machinery-guards and other safety devices, conduct endangering the safety of other workers, acts and omission of an insubordinate nature, careless or bad work that lowers the quality of the goods manufactured or reduces production, bad time-keeping, quarelling, fighting or causing disturbance among the other workers, acts of extortion, etc. The amounts outstanding in the Fine Funds of the two concerns (one in Bombay and one in Madras) were Rs. 1,153-12-6 and Rs. 85-1-0 respectively on 1-10-1944. The former factory intends to utilise its Fund for purchasing equipment for supply of cool water to workmen. In all cases, the Fine Fund is in the charge of the Management and is intended to be used for the welfare of the workers.

Wage-period.—The following figures relate to wage-periods adopted in the concerns investigated.

TABLE 183.

Wage Period.

Province	Monthly	Fortnightly	Weekly	Total
Madras	3	..	..	3
Bombay	6	..	..	6
Bengal	3	2	2	7
Punjab	2	..	1	3
U. P.	1	..	..	1

The payment is generally made seven days after the end of the wage-period ; concerns employing more than 1,000 workers, however, make the payment on or before the 10th of the month following.

Holidays.—Some recommendations in this respect have been made by the Motor Traders Association (Bombay) and Motor Industries Association (Bengal). Sundays are generally regular holidays, but the workshops are closed on other public holidays, notified by each concern. The number of these additional holidays varies from factory to factory. One of the Bombay concerns, for example, grants six full additional holidays, twelve half-holidays (*i.e.*, closure at 12-30 p.m.) and eleven quarter holidays, (*i.e.*, closure at 3 p.m. or 4 p.m.). In two other Bombay concerns all the Bank holidays are granted in addition to Sundays. In one concern in Bombay, however, only one day off

is given every week to all the staff by rotation. In Bengal, one concern gives sectional holidays. A number of concerns observe Saturdays as half-holidays.

It seems, however, that except in Bengal, daily-rated workers are given holidays without pay. Paid holidays in Bengal vary from 6 to 19 days in a year, the average of seven concerns being 15 days. The companies require that to earn the right of holidays with pay, a worker must have completed service of a specified number of years (varying from 1 to 3). Leave rules in Bombay and Bengal are independent of the holidays mentioned above. In Bombay, the privilege leave and the casual leave amount generally to two weeks and one week respectively, while in Bengal the casual or sick leave extends from 7 to 14 days with or without pay.

III —Working Conditions.

Shifts and Hours of Work.—The following table gives information in regard to shift, rest-intervals, and spreadover, in the concerns visited :—

TABLE 184.

Shifts and Hours of Work.

Nature of general shift			No. of such shifts in investigated factories in				
Actual hours of work	Rest interval	Spread over	Madras	Bombay	Bengal	Punjab	U. P.
5	1	6	..	1	..	..	..
7½	½	8	..	..	..	..	1
8	½	8½	..	1	3	..	..
8	1	9	1	5	5	..	..
8½	½	9	2	..	..	..	..
8½	1	9½	1	..	..	2	..
9	1	10	..	2	..	1	..
Total	Day shifts ..		3	7	7	3	1
	Night shifts ..		1	2	1	..	..
Total all shifts			4	9	8	3	1

Besides these general shifts, a few concerns have separate shifts for some classes of workers. In a Madras factory, for example, besides the general day shift, there are two shifts for blacksmiths, two for machine shops and three for welders ; all, except one, having each a spreadover of 8 hours with half an hour's interval. The remaining one works for 9 hours and has a rest interval of half an hour. This arrangement was found necessary because of a shortage of machinery. The U. P. factory changes its hours of work in winter. Six factories (two each in Madras, Bombay and Calcutta) work Saturday as a half-day and the hours of work are 4-1|2 in four factories and 5-1|2 and 6 in the remaining two factories. As seen above, almost all these factories work overtime, which increases the number of hours actually worked. Overlapping of shifts was found only in two factories, one in Bombay and one in Calcutta. The Bombay factory has three shifts, (i) 8-30 a.m. to 5-30 p.m. ; (ii) 2-30 p.m.

to 8-30 p.m. ; and (iii) 11-30 p.m. to 8-30 a.m. ; the Calcutta factory works two shifts, (i) 6 a.m. to 2-30 p.m. and (ii) 10 a.m. to 6-30 p.m. These overlapping shifts, however, are worked by different sets of workers. Rest interval is usually of half or one hour. One Bengal concern grants 2 half-hour intervals, one in the morning and the other in the evening, and in addition, 10 minutes for tea from 4 p.m. to 4-10 p.m.

Ventilation, Lighting, Congestion, Flooring, Protection against Heat, etc.—Work in this industry is usually carried on in open or in big sheds where motor trucks or lorries are kept. The nature of work itself, therefore, guarantees ventilation, natural lighting and ample floor area per worker. Evils like overcrowding and heat are restricted to the machineshop, smithy and tinker's shop. In some cases workers have to work in the open under the Sun. No special steps seem to have been taken to protect workers against heat.

Shelters.—Only five factories (3 in Madras and 2 in Bombay) have built shelters for their workmen. One more factory in Bombay had built a large shelter, but it had to be converted into a dispensary. The Madras shelters are merely sheds with paved floors and corrugated iron roofs. One of the two Bombay shelters is about 40 ft. × 20 ft. in dimensions and has asbestos cement roofing.

IV.—Welfare Activities.

Latrines, Urinals and Water-supply.—The conditions of latrines and urinals were found to be unsatisfactory in most of the concerns. The following figures reveal the inadequacy of sanitary arrangements.

TABLE 185.

Latrines and Urinals.

Province	No. of concerns	Average No. of workers	No. of latrines	No. of urinals	No. of workers using one latrine
Bombay	4	1,705	67	8	25
Bengal	6	2,494	37	23	67
Punjab	2	161	14	..	12
U. P.	1	74	2	..	37

The number of persons using one latrine varied from 13 to 31 in Bombay factories and from 9 to 161 in Bengal factories. Besides, latrines in many of these factories were found to be unclean and generally unfit for use, service was inefficient and irregular and the employers seemed to disregard sanitation altogether.

Water supply is satisfactory. Generally taps are used and in a few cases water is stored in reservoirs. Bath rooms are rare but workers utilise the water taps either for this purpose or for washing their hands. Drinking water is generally supplied through water taps. Sometimes earthen pots or *chatties* are used for this purpose.

Medical Aid.—Arrangements about medical relief are wholly inadequate in this industry. Only one out of the twenty factories investigated maintains a dispensary ; four factories employ doctors, two of whom were part-time and

one factory has a *vaid*. The remaining fourteen factories out of which seven are in Bengal, make provision only for First Aid Boxes. The dispensary in the Bombay factory has two qualified medical officers (one is a L.C.P. and the other is D.O.M.S.) and caters for more than 6,000 workers. Serious cases are sent to public hospitals. None of the factories conducts periodical medical examination of the workers.

Canteens, Creches, and Education.—Only three concerns (all in Bombay) have made provision regarding canteens. Two of these are run by contractors, while the third is run by the Company. Only tea and light refreshments are provided. Two concerns (one in Bombay and one in Calcutta) have made arrangements with contractors for the supply of tea both in the morning and evening at the rate of 6 pies per cup. Another Calcutta factory has made arrangements to supply workers with tea, puri and vegetable curry, free of charge, the estimated cost of each tiffin being four annas. None of the factories maintains a creche, because of the absence of female labour in this industry. No facilities have been offered for the education of the workers and their children by any of the factories investigated.

Grainshops.—Eight factories (one in Madras, four in Bombay, two in Bengal and one in U.P.) maintain grain shops, most of which are ration shops, selling grains at Government controlled rates. The commodities usually supplied are wheat, rice, jowar, bajri, sugar and dal. In some of these shops non-rationed articles like soaps, vegetables, ghee, tea, match boxes, etc., are also sold at or slightly below the market rates.

V.—Housing.

None of the factories has provided any housing accommodation to workers, the reasons given being shortage of land in the urban area, where most of the factories are situated and the unusual and sudden expansion in the number of employees Workers make their own arrangements in this respect and live either in their own huts or in tenements provided by private landlords or public bodies Owing to the present shortage of accommodation in the urban localities, congestion is inevitable and the conditions under which many workers live are extremely unsatisfactory.

VI.—Trade Unions and Strikes.

Trade Unions.—Workers in this industry on the whole are not very well organised. The names of six unions, most of which are in a state of moribund inactivity, were reported. Out of these, the Madras Union which is a 'Welfare Union' for the workers of one of the factories seems to be a Company Union. Its subjects are to regulate the relations between the employer and the workers, to conduct negotiations regarding grievances of workers and to organise some welfare activities. Outsiders are excluded from the executive of the Union and a strike cannot be started without a notice of 15 days, preceded by a ballot in which at least two-thirds of the members are in favour of the strike. The membership fee of the union is an anna per month, collected by the Time Office and there are 1,520 members at present. The Bombay Labour Gazette makes mention of two Trade Unions in this industry. The General Motor Workers Union was formed in March 1939 and claimed 2,500 members in December 1941. However, most of its leaders, who belonged to the Congress Socialist Party, were arrested in 1942 and the Union was dissolved automatically due to its failure to submit annual returns. The other union, the suburban Bus Workers Union, is unregistered, and was established in November 1943. It claims about 200 members. General unions in the Bombay Engineering Industry such as the Engineering Workers' Union or the Engineering

Factory Kamgar Union, have hardly taken any interest in this branch of engineering. Bengal has three unions. Allen Berry and Co. Workers' Union, French Motor Vehicles Workers' Union and Calcutta Corporation Motor Vehicles Workers' Union. It is interesting to note that all these unions originated as strikes committees. The subscription of the last is 4 as. a month and Rs 2 a year.

Works Committees.—Only three committees, one in Bombay and two in Calcutta, were formed. In Bombay the Labour Relations Officer of the factory consults the committee and deals with all matters normally assigned to a trade union. One of the Works Committees in the Calcutta Factory has eleven members, four from management and seven from workers elected from various departments. Its constitution is attached in Appendix VI.

Strikes.— In 1942, seven strikes were waged by workers in the concerns investigated. Of these, four were conducted in Bengal involving approximately 800 workers for bonus, permanence of service, dearness allowance and Provident Fund facilities. In one case the number of mandays lost amounted to 12,000. In most of the cases the demand of workers were met. A Madras concern experienced two strikes, one in 1940 and another in 1942. The first was due to the refusal of the Management to give a holiday on 13th June 1940. The Union demanded dearness allowance at Rs. 2 p.m., one and a half times usual wages for night-shift workers and full day's wages for 13th June 1940. The strike was unsuccessful and was called off unconditionally on 18th June 1940. The second strike which began on the 14th April 1942 was in connection with an ' evacuation bonus ' and this too was unsuccessful. In Bombay, 146 workers of one of the concerns staged a walk-out refusing to work on a Saturday afternoon in May 1941. The Company declared a ' lock-out ' and discharged all the strikers. Another factory in Bombay experienced in 1942 two strikes each of three week's duration. The grievances of workers in the first case were referred to arbitration.

VII.—General.

Accidents and Occupational Diseases.—Accidents seem to be common in this industry because of the complex and technical nature of work. The following figures show the extent of accidents in 1943 in some of the concerns investigated :—

TABLE 186.

Accidents.

Province	Concern	Total No of accidents	No. of accidents for which compensation was paid	Amount of compensation
				Rs. A. P.
Madras	I	63	32	373 6 0
	II	120	13	101 10 0
Bombay	I	9	6	197 1 0
	II	223	117	2,076 12 0
Bengal	I	248	40	731 4 0
	II	108	29	732 6 0
	III	9	6	1,713 10 3
	IV	12	3	52 6 0
	V	1	1	15 0 0
	VI	3	..	..
Punjab	I	10	10	512 6 0

Barring two other Bombay factories, accidents have not taken place in other concerns. In one of these two Bombay factories, 1,710 injury cases were treated and compensation paid in 1943 amounted to Rs. 30,581-15-0. In the other factory two accidents took place in 1943. A worker who was hit on the head remained absent for 15 days while another, who was hit by a tyre falling on him, was absent for about two months. In both cases wages in full were paid for the period of absence. Generally, accidents in this industry are of the nature of bruise, sprain or strain, cut or laceration, dislocation and foreign substance in eye. Occupational diseases have not been reported by any of the concerns. The workers, however, are exposed to some diseases while engaged in nickel plating and spray pacing work. Affection of eye is also a common disease in the welding and hammering departments, but it can be prevented if goggles are used. Similarly, masks should be worn by spray-painters.

Indebtedness.—Only three concerns (two in Bombay and one in Calcutta) have got Co-operative Societies, which give loans to their members. In a few other cases, workers get loans from their employers, with or without interest and such loans are recovered by a monthly deduction in wages. The following figures give the extent of such indebtedness in 1943 in some concerns :—

TABLE 187.

Indebtedness.

Province	Concern	Loan given by	No. of workers employed	Amount of loan	Interest charged
				Rs.	
Bengal	I	Company ..	1,237	40,000	2%
	II	Co-operative Credit Society.	450	4,688	9-3/8 %
	III	Company ..	115	3,406	12%
	IV	Company ..	19	55	*Nil*
Bombay	V	Co-operative Credit Society (membership 113).	1,250	Not available.	4%

A few concerns give advances to workers against wages earned or against Provident Fund. These advances are without interest and usually do not exceed the amount of a month's wages.

Provident Fund and Gratuities.—Only five factories, three of which are branches of one concern, have maintained a Provident Fund. Rules are generally common and differ only slightly in details about the rate of subscription,

period of service to be eligible to membership and conditions to claim companies' full contribution. The following table illustrates these details :—

TABLE 188.

Provident Fund.

Province	Concern	Monthly contribution of the worker	Period of service for eligibility to membership	Conditions to get Company's *full* contribution after termination of service
Madras ..	I	Up to one anna in each rupee of wages.	*Nil*	5 years' continuous service.
	II†	Between 1% and 10% of monthly wages.	3 months continuous employment	10 years' continuous service or earlier discharge without the worker's fault
Bombay ..	I*			
Bengal ..	I*			
	II	6 pies to one anna in each rupee of wages.	1 year's continuous service.	20 years' continuous service.

* These three factories are branches of one concern.

† In this concern a worker after the termination of his service gets his Fund according to the following scale.—

If he shall serve for a period of.—

(*i*) Less than 5 years' of continuous service .. *Nil*

(*ii*) Five complete years of continuous service and for each complete further year of continuous service. ¼th of such remaining sum. a further 1/20th of such remaining sum.

(*iii*) Exceeding 20 complete years of continuous service. the whole of such remaining sum.

In all cases the employer contributes to the Fund a sum equal to the aggregate amount of the contributions of members and the whole amount is invested by the trustees of the Fund according to the rules pertaining to Provident Fund laid down by the Government of India. The net income arising out of the investment of the funds after meeting expenses, losses, etc., is to be credited to each member's account in the same proportion as the member's annual contribution to the total contribution. The member gets the total amount to his credit (including his employer's contributions) when he retires after a specified period's approved continuous service or if he is discharged earlier for reduction of staff and for such other causes on which he has no control. If he dies, his dependents are paid the amount standing to the credit of the deceased.

A system similar to Provident Fund is in force in one of the Bombay factories and is known as " Workers' Discontinuance of Employment Fund ". The entire cost of contribution and expenses of the Fund are borne by the Company. For every 2,000 hours of actual work, 90 hours are credited to the workman's account. The total of all the hours thus credited is paid to him (*a*) if after having 30,000 hours of actual work with the Company he wishes to leave, (*b*) if he is discharged by the Company without any fault on his part or, (*c*) if he leaves the Company's service because of old age or sickness contracted through no fault of his own. The payment will be calculated at the rate of pay the workman is receiving when he leaves. A worker dismissed for misconduct losses all benefits under the plan.

Only two factories have adopted the system of gratuity. One of the Bombay factories has an arrangement under which a worker gets one month's pay for each year's service after 15 years or more. A Bengal factory pays gratuity to the widow, eldest son and parents of the worker on the following basis : (i) 6 months' pay for 10 to 20 years' service, and (ii) 12 months' pay for service over 20 years. The Company is also giving pensions to 5 workers, the total amount payable per month being Rs. 140.

CHAPTER VI.—KEROSENE TINNING AND PACKING.

Kerosene tinning and packing, like other sections of the engineering industry, developed considerably during the years of war. Employment in this branch has nearly doubled compared to that in pre-war days. The following table shows the increase in employment in the tinning and packing factories since 1939 :—

TABLE 189.

Number of Factories and Number of Workers Employed.

Province	1939		1940		1941		1942		1943	
	No. of factories	No. of workers	No. of factories	No. of workers	No. of factories	No. of workers	No. of factories	No. of workers	No. of factories	No. of workers
Madras ..	7	659	7	688	..	667	9	655	10	806
Bombay ..	8	1,446	10	1,549	..	1,651	11	2,662	11	3,799
Sind ..	5	790	5	743	..	802	5	917	7	1,195
Bengal ..	12	2,778	13	2,705	..	2,638	12	2,876	15	3,906
Assam ..	1	51	1	47	..	..	..	..	..	..
Total ..	33	5,724	36	5,732	34	5,758	37	7,110	43	9,706

Factories are located in the cities of Bombay, Karachi, Calcutta and Madras and their suburbs. The Assam Oil Company has a factory at Tinsukia. The manufacturing of tins and their filling and soldering are the main types of work carried on in these factories. These call for the employment of a considerable number of skilled men such as fitters, turners, welders, etc. The enquiry was confined to Bombay where three units representing the three principal companies in India were covered. The units selected were (1) Burmah-Shell Oil Storage and Distributing Co. of India, Sewree, Bombay ; (2) Caltex (India) Ltd, Bombay, and (3) Standard Vacuum Oil Co., Bombay. As most of the Kerosene Tinning Factories in India are owned by these three Companies, the survey of labour conditions in the selected factories may be taken to be more or less representative of the conditions in the industry.

I.—Employment.

Employment in the sampled units increased by 147 per cent. during war time as will be seen from the following table :—

TABLE 190.

Number of Workers in Sampled Units.

Factory	August 1939	January 1944
Burmah-Shell	1,250	2,600
Caltex	216	337
Standard Vacuum	235	1,259
Total ..	1,701	4,196

All the workers are time-rated and are employed and paid directly. Only in the Caltex Company are a few workers (32 in January 1944) employed through contractors. Even there they are paid directly by the Company.

The Burmah-Shell and the Standard Vacuum Companies employ a few women as sweepers or coolies but children are employed nowhere.

Classification of Workers.—Workers are classified as permanent and temporary. Permanent workers form the bulk, being 90 per cent. in Burmah-Shell, 94 per cent. in Caltex and 96 per cent. in the Standard Vacuum Company. Permanent workers who have completed one year's continuous service are granted in all concerns 17 days' privilege leave which can be accumulated to a maximum of 51 days. They are also given 7 days' sick leave on full pay every year. Workers with over 10 years' service are given sick leave on full pay in excess of 7 days, if necessary. Permanent workers in Burmah-Shell are entitled to join the Company's Provident Fund while the Caltex Company has a scheme of Death and Disability Benefits for its permanent employees. Those employees who are not entitled to the Death and Disability Benefits are given Special Termination Allowance if their employment is terminated by the Company through no fault of theirs. Probationers who are put against permanent vacancies and have to serve a period of three months' probation and workers engaged on temporary jobs are treated as temporary workers. They do not enjoy any of the privileges of permanent workers except free medical treatment. In the Caltex Company temporary workers do not even get payment for work on Sundays at time and a half, which is given to permanent workers.

Length of Service.—The length of service of workers in the three sampled units is shown in the following table :—

TABLE 191.

Length of Service of Workers, 1944.

Length of Service	Burmah-Shell	Caltex	Standard Vacuum	Total No. of workers	Per cent of total
	No. of workers	No. of workers	No. of workers		
Between 0 to 1 year ..	343	69	310	722	17·1
Between 1 and 5 years ..	1,252	185	863	2,300	54·4
Between 5 and 10 years ..	591	45	39	675	15·9
Over 10 years	414	6	114	534	12·6

It may appear strange that in an industry where about 95 per cent. of the workers are considered permanent only less than 30 per cent. of them have over 5 years of service ; but then, the industry has largely expanded during the last five years.

Apprenticeship.—Both the Burmah-Shell and the Caltex Companies have the system of apprenticeship. In Burmah-Shell, the apprenticeship period is five years. After three years of apprenticeship, if the apprentices are found fit they are graded for supervisory post and finish two more years of training but if they are not found fit to be so graded, they finish another year of training and become ordinary fitters or turners. In the Caltex Company, ordinary apprentices are taken in the machine shop. They are paid Re. 1 per day of 8 hours and given an annual increment of 2 annas per day. There is, however, no fixed period of training. In both the concerns, the period of apprenticeship is counted towards service.

Graded or Time-scale Promotion.—Workers are graded only in the Caltex and the Standard Vacuum Companies. The Burmah-Shell Company grant regular increments to their employees. In accordance with the Adjudicator's Award of 6th October, 1942, the Caltex Company fixed minimum and maximum rates of pay for different types of workers with regular annual increments of 1 to 2 annas for unskilled and semi-skilled workers and 3 to 5 annas for skilled men and artisans. In the Standard Vacuum Company, the maximum rate in each grade is reached in 8 years by 8 annual increments.

Labour Turnover.—The following table shows the labour turnover in the sampled units :—

*

Labour Turnover in Sampled Units.

TABLE 192.

Factory	1939						1943						1944					
	Average No. daily employed	Retirement	Separations Discharge & dismissals	Voluntary	Total separations	Percent of turn-over	Average No. daily employed	Retirement	Discharge & Dismissals	Voluntary	Total seperation	Percent of turn-over	Average No. daily employed	Retirement	Discharge & dismissals	Voluntary	Total separations	Percent of turn-over
Burmah-Shell	1,250	14	33	84	131	10·5*	2500	11	74	75	160	6·4*	..	..	..	..	..	..
Caltex	..	..	..	..	..	..	263	..	1	33	34	12·9	290	1	..	47	48	16·5
Standard-Vacuum (Sewree)	140	Not available			..	..	..	..	..	..	..	..	546	..	30	38	68	12·4
Standard-Vacuum (Wadala)	57	..	58	..	58	101·7	408	..	101	..	101	24·8	..	..	..	..	..	..
Total ..	1,307	14	91	84	189	14·5	3,171	11	176	108	295	9·3	836	1	30	85	116	13·9

* In the Burmah-Shell factory temporary workers, 410 in 1939 and 250 in 1943, were engaged at times during the year and paid off when work slackened. They are not taken into account in working out the above figures for turnover. If, however, these are included the percentage turn-over is 43·3 for 1939 and 16·4 for 1943 in the case of Burma-Shell and 45·8 and 17·2 respectively of the total.

The main causes of labour turnover are the migration of some workers to agriculture and of some others to concerns paying better wages. Cases of dismissal of workers for misconduct are rare. Many, however, are discharged from time to time, especially the temporary workers.

Absenteeism.—Percentage of absenteeism in the selected factories in 1939 and 1943 was as follows :—

TABLE 193.

Absenteeism in Sampled Units.

Factory	Percentage of Absenteeism	
	1939	1943
Burmah-Shell	2·5	4·0
Caltex	..	3 3
Standard Vacuum	19·0	22·0

The causes of absenteeism are sickness, domestic difficulties, such as illness in the family, and the need for rest. The Caltex Company attributes absenteeism to the increased earnings during war time. Punitive measures and even discharge in the case of chronic absentees have been suggested to reduce absenteeism.

Recruitment and Labour Officers.—Unskilled workers are selected from amongst those seeking employment at the gates of factories. In the Burmah-Shell factory, selection is made by the Labour Officer and preference is given to former temporary workers in the factory. In the Caltex factory, selected workers have to undergo a medical test. The Burmah-Shell factory obtain skilled workers through the National Service Labour Tribunal. Other factories recruit their skilled men directly on the strength of testimonials, if any, or after testing suitability and fitness for the job. Standing orders relating to hours of work, privilege and sick leave to permanent and temporary workers, rates and payment of wages, suspension and dismissal of workers, etc., are maintained in all the three concerns and are displayed at conspicuous places. Only in the Burmah-Shell Company is there a labour officer to enquire into the grievances of the workers. In the other factories the Terminal or Installation Superintendent deals with complaints.

II.—Wages and Earnings.

The following are the rates of wages for different categories of workers in the three sampled units :—

TABLE 194.

Rates of Wages for Different Occupations—1944.

Name of the occupation	Burmah-Shell		Caltex		Standard Vacuum	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
	Rs. as p.	Rs. as. p.	Rs. a. p.	Rs. a. p	Rs. a p.	Rs. a p.
Coolies—Women	0 12 0	1 2 0	..	..	0 12 0	1 2 0
Coolies—Boys	0 12 0	1 0 0	..	..	0 12 0	1 0 0
Apprentices	1 0 0	2 0 0	1 0 0	2 0 0	.	..
Cleaners	1 0 0	1 8 0	1 0 0	1 8 0	1 0 0	1 8 0
Coolies—Men	1 0 0	1 8 0	1 0 0	1 8 0	1 0 0	1 8 0
Asstt Carpenters	1 0 0	1 8 0	..	..	1 0 0	1 8 0
Asstt. Fitters ..	1 0 0	1 8 0	1 0 0	1 8 0	1 0 0	1 8 0
Asstt. Turners .	1 0 0	1 8 0	..	.	1 0 0	1 8 0
Fillers or Filling Operators ..	1 2 0	1 10 0	1 2 0	1 10 0	1 2 0	1 10 0
Examiners .. .	1 2 0	1 10 0	1 2 0	1 10 0	..	..
Testers ..	1 2 0	1 10 0	..	..	1 2 0	1 10 0
Filling Machine Operators	1 2 0	1 10 0	..	..	..	..
Furnacemen (Bolt heating) ..	1 2 0	1 10 0	.	..	1 2 0	1 10 0
Machine men (others)	1 2 0	1 10 0	1 2 0	1 10 0	1 2 0	1 10 0
Solderm kers	1 2 0	1 10 0	..	..	1 2 0	1 10 0
Oilers, Beltmen	1 2 0	1 12 0	..	.	1 2 0	1 12 0
Horn press men	1 3 0	1 11 0	1 3 0	1 11 0	1 3 0	1 11 0
Stencillers	1 4 0	1 12 0	1 4 0	1 12 0	1 4 0	1 12 0
Hammermen	1 4 0	1 12 0	..	..	1 4 0	1 12 0
Holders	1 4 0	1 12 0	..	..	1 4 0	1 12 0
Coopers	1 4 0	1 12 0	1 4 0	1 12 0	1 4 0	1 12 0
Tallymen	1 4 0	1 14 0	..	..	1 4 0	1 14 0
Packers	1 4 0	1 12 0	..	..	1 4 0	1 12 0
Solderman/Solder machine operators.	1 4 6	1 13 0	1 4 6	1 13 0	1 4 6	1 13 0
Squeezers	1 4 6	1 12 6	..	..	1 4 6	1 12 9
Firemen	1 6 0	1 14 0	..	..	1 6 0	1 14 0
Tankwagon fitters ..	1 8 0	2 2 0	..	..	1 8 0	2 2 0
Tank Measurers ..	1 8 0	2 2 0	1 8 0	2 2 0	1 8 0	2 2 0
Rivetters Boilermakers	1 8 0	3 8 0	..	..	1 8 0	3 8 0
Caulkers						
Blacksmiths	1 8 0	4 0 0	1 8 0	4 0 0	1 8 0	4 0 0
Tinsmiths	1 8 0	3 8 0	1 8 0	3 8 0	1 8 0	3 8 0
Carpenters	1 8 0	4 0 0	1 8 0	4 0 0	1 8 0	4 0 0
Turners	1 8 0	4 0 0	1 8 0	4 0 0	1 8 0	4 0 0
Fitters	1 8 0	3 8 0	..	..	1 8 0	3 8 0
Engine-drivers	1 8 0	3 8 0	1 8 0	3 8 0	1 8 0	3 8 0
Painters	1 8 0	3 2 0	1 8 0	3 2 0	1 8 0	3 2 0
Muccadums/Overseers ..	1 10 0	3 0 0	1 10 0	3 0 0	1 10 0	3 0 0
Wiremen	2 0 0	4 0 0	2 0 0	4 0 0	2 0 0	4 0 0
Masons	2 0 0	3 8 0	2 0 0	3 8 0	2 0 0	3 8 0
Pump Drivers	2 8 0	5 0 0	..	..	2 8 0	5 0 0
Spray Painters	2 8 0	3 10 0	..	..	2 8 0	5 0 0
Welders	2 8 0	5 0 0	2 8 0	5 0 0	2 8 0	5 0 0
Trade Learners	1 0 0	2 0 0	..	..	..	..
A.R.P. Crew	..	..	1 0 0	1 8 0	..	..
Asstt. Painters	..	..	1 0 0	1 8 0	1 0 0	1 8 0
Boiler Attendants ..	..	..	2 0 0	3 0 0	..	..
Milling Machine Operators ..	..	..	..	..	1 8 0	5 0 0
Die engravers	..	..	..	..	1 8 0	5 0 0

The rates of wages for the same occupations are same in all the three concerns. There has been no change in the basic wages of operatives since 1939 but the schedule of Minimum|Maximum rates has been introduced from 1st January 1943.

In the Caltex factory, which alone employs contract labour, the rates for contract labour are higher than for those directly employed but do not exceed the maximum of the scale for similar occupations. They do not, however, get any dearness allowance.

The rates paid by other industries in Bombay for similar classes and types of labour were considered while determining the rates of wages to be paid in these concerns. The Adjudicator's Award of 6th October 1942 in respect of the Trade Dispute in the Caltex and Standard Vacuum Companies, recommended the adoption of graded scales of pay, the scale being fixed in such a manner as to enable the employees to reach the maximum in 8 years. This has since been done.

Dearness Allowance, Bonus and Overtime.—A dearness allowance of Rs. 3 per month was granted to the workers in the Burmah-Shell and Caltex Companies from 1st January 1940 and 1st April 1940 respectively which was raised to Rs. 5 per mensem on 1st July 1941 and 1st January 1941 respectively. Subsequently both the companies brought their dearness allowance in conformity with the Bombay Millowners' Association scales. The dearness allowance in the Standard-Vacuum Company was based on the cost of Living Index from the very start. In July 1944 the dearness allowance was Rs. 1-3-0 per day. In the Burmah-Shell Company absence of more than 4 days in a month disqualifies a worker for full rate of dearness allowance. Dearness allowance is generally not granted for periods in which the worker is on sick or privilege leave or gets compensation under the Workmen's Compensation Act and for days of absence without leave. On October 6, 1942 in respect of the Trade Dispute in the Caltex and Standard Vacuum Companies, the Adjudicator awarded a bonus of one-twelfth of the total earnings (excluding dearness allowance) received by each workman of the company during the whole of the year. Accordingly all the three concerns give a bonus of 1|12th of all earnings in a year from the 1st January 1942. Work in excess of 8-1|2 hours on weekdays and 5-1|2 hours on Saturdays is paid for at 1-1|2 times the ordinary rate of pay. Overtime work is compulsory in the Burmah-Shell and Standard-Vacuum factories, while in the Caltex Company, it is said that, so far no worker has refused to work overtime. Overtime is recorded in the muster roll or the time card of the worker and is open to inspection.

Deductions and Fines.—In the Burmah-Shell Company deductions from wages are made on account of advances, loans and grainshop and teashop bills but no fines are imposed. Fines were levied formerly and an amount of Rs. 2,000 is now outstanding in the Fine Fund and is utilised as a loan Fund advancing money without interest to workers. The Fund is administered by a Committee consisting of the Assistant Branch Manager, the Branch Accountant and the Labour Officer. In the Caltex and the Standard Vacuum factories no deductions are made from wages nor are fines imposed.

Miscellaneous.—All workers are paid on the 7th of each month. In the Burmah-Shell Company, however, monthly-rated workers are paid on the last day of the month. The factories are closed on Sundays and other recognised holidays and festivals. Only permanent workers are paid for festival holidays.

III.—Working Conditions.

Shifts and Hours of work.—In the Burmah-Shell and the Caltex Companies only one shift is now worked. From February 1942 to October 1944, however, a night shift was also worked in Burmah-Shell. The Standard-Vacuum Company works a double shift in its Sewree factory and in addition to a general shift has three shifts of 8 hours each for the drum plant in its Wadala factory. The following are the actual hours of work in the factories.

TABLE 195.

Hours of Work in Sompled Units.

Factory	Working Hours	Rest interval	Total Hours	Spreadover (Hours)
Burmah-Shell	8 a.m. to 5-30 p.m.	12-30 p.m. to 1-30 p.m.	8½	9½
Caltex	8 a.m. to 7 p.m	12-30 p.m. to 1-30 p.m.	10	11
Standard-Vacuum—				
Sewree—				
Day shift ..	8 a.m to 5-30 p.m	12 p m. to 1-20 p m.	8	9½
Night shift	8-30 p m. to 5-30 a.m.	12-30 a.m. to 1-30 a.m.	8	9
Wadala—				
1st shift ..	6 a.m. to 2 p.m.	....	8	8
2nd shift ..	2 p.m. to 10 p.m.	....	8	8
3rd shift	10 p.m. to 6 a.m.	.. .	8	8
General shift	8 a.m. to 5-30 p.m.	12 p m. to 1-30 p.m.	8	9½

Normally the shift in the Caltex Company closes at 5.30 p.m. which makes the working day of 8-1|2 hours duration with a spreadover of 9-1|2 hours. Occasionally departments which may have urgent work continue after 5.30 p.m. but close before 7. Overtime is paid for work beyond 5.30 p.m. On Saturdays only 5-1|2 hours are worked in the Burmah-Shell and Caltex factories. Shifts overlap only in the case of the Watch and Ward Staff of the Standard-Vacuum Company.

Ventilation and Lighting.—In all the factories arrangements for lighting and ventilation are quite satisfactory. In the tin factories and soldering sheds of the Burmah-Shell Company there are exhaust fans, Robertson ventilators and plenty of expanded metal windows. The floors are stone paved in all the factories and roofs are of asbestos generally. There is not much congestion anywhere.

Rest Shelters.—Rest shelters are provided only by the Burmah-Shell Company. In their Kerosene Installations a large open tiffin room, 60 ft. × 30 ft. partitioned into two for use by Hindus and Muslims is provided. The roofing is of asbestos. Steel tables and benches are also provided. In their Benzine Installation, a tea room, 30 ft. × 25 ft., with wooden benches is provided. In Wadi Bunder there are two small tea rooms. The majority of workers, however, go home for midday meals or prefer resting and eating in the open under the shades of trees. In the other factories workers rest in the vacant portions of the factory or the godown or under trees.

Sanitary arrangements, etc.—Adequate latrines of the flush type are provided in all the factories. The Burmah-Shell Company and the Standard-Vaccum Company provide separate urinals as well. Water from the Municipal mains is available in the factory compound where an adequate number of taps are provided. These taps provide drinking water and serve for washing purposes. The Standard-Vacuum Company provides earthen pots for storing cool water in summer. At the Benzene Installations of the Burmah-Shell Company cubicles with showers are provided for the workers to bathe.

IV.—Welfare Activities.

Medical facilities.—Free medical aid is available to workers in all the factories. The Burmah-Shell and the Caltex Companies extend free medical attention to the workers' families also. The Burmah-Shell Company has three dispensaries, at the three main Installations, in charge of two qualified doctors one of whom attends to the workers while the other attends to their families. The other companies have a dispensary each both under qualified doctors. About 240 cases are treated daily in the Burmah-Shell dispensaries and 20 in the Caltex dispensary. The common ailments are malaria, influenza, dysentery, bronchitis, fever, cold etc. None of the diseases of the workers can be called occupational. In the Caltex factory persons handling gasolene are examined every four months. In the Burmah-Shell and Caltex Companies the workers are medically examined before engagement.

Canteens and Grainshops.—Only the Burmah-Shell Company provides a proper canteen for the benefit of their workers. The canteen is owned and managed by the company and supplies tea, light foodstuffs, milk and aerated waters at prices below ordinary market rates. In the other two companies tea-shops or small scale restaurants are run by outsiders. All the concerns maintain grainshops where rationed articles like rice, wheat, Bajri, sugar etc. and other articles like dal, soap etc. are sold at controlled rates.

Schools and creches.—No facilities art provided in any factory for the education of workers or their children. Only a small number of women are employed and the absence of creches is not felt.

V.—Housing.

The companies provide housing accommodation only to watchmen. Such accommodation generally consists of barrack-quarters where two watchmen share a single room. These quarters are on the premises of the factories. The workers generally live in the city in chawls or in the suburbs.

VI.—Trade Unions and Strikes.

The National Oil Workers Union, Bombay, was formed in February 1940 and registered in July 1942. Nearly 40 per cent of the workers in the Burmah-Shell, 80 per cent in Caltex and some in the Standard-Vacuum Company are members of the union. The monthly subscription is 4 annas. The Union has not been recognised by any of the companies. The Burmah-Shell Company has two Works Committees to run the canteen and the grain-shop. The Committees consist of workmen appointed by the departments and meet periodically. They make suggestions and complaints to the Labour Officer in respect of the running of the Canteen and the grain-shop. There were several strikes in the concerns during war time. The main demands of the workers were for payment of bonus, 26 days' guaranteed pay per month, regular in-

crements. better working conditions, benefit of Provident Fund, increased rations etc. The details of the strikes are given in the following table :—

TABLE 196.

Strikes in Sampled units.

Factory		No. of workers involved	Period of duration	No. of mandays lost.	Cause of Strike.	Result
Burmah-Shell	1	1,000	25—12—42 to 27—12—42.	3,000	Demand for bonus and 20 days' guaranteed wages per month.	Ended in compromise
	2	2,000	16—1—43 to 19—1—43	3,500	Demand for adequate supply of grain particularly wheat.	Granted.
Caltex ..	1	140	21—1—43 to 22—1—43	140	Protest against inadequate supply of grain.	Demand granted.
Standard Vacuum	1	337	5—3—42 to 12—3—42	1,919	Demand for bonus and termination allowance	Granted.

Besides these strikes, trade disputes in Caltex and the Standard-Vacuum Companies were referred to E. M. Nanavathy, Esquire, I.C.S. (Retired), for adjudication. The following were the main demands granted by the adjudicator's award :—

1. Benefit of the pension and benefit scheme prepared by their Company.

2. Gratuity Scheme.

3. Medical aid as given by the Company.

4. Full pay for absence from work on account of an injury arising from an accident in the course of employment.

5. One-twelfth of the total earnings (excluding dearness allowance) for the year as bonus.

6. Regular classification of employees and the revision of minimum and maximum wages and the fixing of regular annual increments.

VII.—Safety Acts etc.

Provisions of the various protective labour laws are observed in these factories. Inspections are carried out by the Factory Inspector once or twice a year. In the Caltex factory, sections 36 and 42 of the Factories Act were sometimes violated. In December 1940, a few workers were employed for 10-1/2 hours per day although the total weekly hours did not exceed 54. Adverse remarks in regard to the keeping of muster roll, painting of latrines etc., were seen in the Inspection Book. No occupational diseases have been reported so far. In the Caltex factory minor accidents are common in the filling department due to constant contact with kerosene. These are considerably reduced by the application of coconut oil and use of leather or rubber gloves. The following table shows the number of accidents and compensation paid in the three concerns during 1943.

TABLE 197.

Number of Accidents and Compensation paid in 1943.

Factory	No. of accidents	Amount of compensation paid	Remarks.
		Rs. A. P.	
Burmah-Shell	220	9,822 13 8	The accidents were all mino The compensation includ Company's *ex gratia* payment
Caltex	141	1,968 7 3	All minor accidents. This in cludes full wages for the perioc of illness.
Standard-Vacuum ..			
Seyree	14		Compensation and full pay anc dearness allowance paid til the workers are fit to resum work.
Wadala	15		

VIII.—Indebtedness.

The accounts of the Burmah-Shell Company's Loan Fund and the Co-operative Savings Bank show that only about 12 per cent of the workers are indebted. The largest proportion of the loans are taken by workers, earning Rs. 1-6-0 and over. Loans are generally taken to finance the repair of houses, marriages, etc. In the Caltex and the Standard-Vacuum Companies workers have no facilities for obtaining loans and have to resort to moneylenders for short-term loans paying from 1 to 4 annas per rupee per month as interest.

IX.—Miscellaneous.

Provident Fund.—Only the Burmah-Shell Company has a provident fund which was started in 1929. All permanent employees of the company are eligible to join the fund. Every member of the fund contributes a proportion of his earnings not exceeding 10 per cent. fixed by the company from year to year. The Company contributes an equal amount.

Pension and Gratuities.—The Burmah-Shell Company pays a gratuity of 1|2 month's pay for every year of service up to 20 years before the date of the introduction of the Provident Fund. For service over 20 years it pays gratuity at 1|2 month's pay for every year up to 20 years and 1 month's pay for service beyond 20 years. The Caltex Company has a Death and Disabilities Benefits Scheme under which employees who have been one year or longer in the continuous service of the Company are paid benefits, if totally or permanently disabled. Benefits are paid to the dependents of an employee in case of his death. The amount of benefit is four months' full pay for one year of service and one month's full pay for each complete six months of additional service up to a total of five years' continuous service so that at the end of five years' service an employee or his dependent gets one year's full pay. For over five years service the amount is increased by 5 per cent for every additional year of service. In the same company a special Termination Allowance is paid to workers who are not entitled to the Deaths and Disabilities Benefit. The amount paid varies according to the age and length of service of the worker. It is two weeks' wages for those with one years' service and is graded up to 52 weeks' wages for workers 60 years old and with 20 years' service. The Standard-Vacuum Company grants pension to those workers who have completed at least 20 years' service. The amount of the pension is 1-1|4 per cent. of average annual earnings multiplied by the number of years of service.

CHAPTER VII.—METAL STAMPING.

Metal stamping industries include the manufacture of brass ware, aluminium ware, brass boilers, etc. and the making of nuts and bolts, washers, and similar odd metal works. The industry is mostly confined to the Provinces of Bombay and Bengal as the following table showing the number of metal stamping factories and the number of persons employed therein will amply illustrate :—

TABLE 198.

Number of Factories and Workers Employed.

Province	1939		1940		1941		1942		1943	
	Factories	Workers	Factories	Workers	Factories	Workers	Factories	Workers	Factories	Workers
Bombay ..	50	2,991	55	2,652	..	3,886	58	4,373	64	5,545
Sind	1	32	..	..	..	..	..	..	..	..
Bengal ..	8	1,623	8	1,684	..	2,847	9	3,216	10	2,331
U.P.	1	45	1	42	..	38	1	20	1	22
Total ..	60	4,691	64	4,378	..	6,771	68	7,609	75	8,898

On the whole, employment in the industry has increased by over 60 per cent. during war time although the number of factories has not increased appreciably. Even the increase in employment during the war has not been uniform in all the factories. Those factories that were able to secure war orders have expanded enormously while, on account of non-availability of raw materials and the restrictions and control imposed on metals during the war, many factories were forced to reduce the volume of employment.

Both as regards the number of factories and as regards the number of persons employed, Bombay is the most important Province for the metal stamping industry. Our enquiries, therefore, were confined to Bombay and covered 8 units, 5 in Bombay City, 2 in Poona and one in Sholapur.

The following are the factories included in the sample :—

1. Topiwala Metal Stamping Works, Bombay. (established 1905).
2. Metal Box Co. of India Ltd., Bombay (established 1935).
3. Oriental Metal Pressing Works, Bombay. (established 1918).
4. Messrs. A. B. Tarkar Metal Factory, Bombay. (established 1913
5. Wolverhamption Works Co. Ltd., Bombay.
6. Deccan Metal Works, Poona. (established 1937).
7. Gujrat Metal Factory, Poona. (established 1904).
8. Shivaji Works, Ltd., Sholapur. (established 1900).

I.—Employment.

The following table shows the number of workers employed in the sampled units in 1939 and 1944 :—

TABLE 199

Number of Workers in Sampled Units.

	Number of workers		
	August 1939	January 1944	October 1944
Men	1,194	2,493	..
Women	26	21	..
Total ..	1,220	2,514	1,402*

*Figures were not available for the largest factory, which employed 1,236 workers in January 1944.

Employment in five of these eight factories registered a fall in 1944 as compared to 1939. Nevertheless, total employment in these eight factories increased by 105 per cent., which shows the enormous increase in employment in a few factories engaged on war work. By October 1944, employment increased further. In the seven factories where employment figures for October 1944 were available, the increase was about 10 per cent. as from January 1944. Only three factories employ women and that too in small numbers. They are mostly engaged as sweepers or unskilled workers. Children are not employed in any of the factories. Piece-rate workers are employed only in four factories but the tendency has been lately to employ more on time-rate as will be seen from the following table :—

TABLE 200

Piece-rate and Time-rate Workers in Four Factories.

Category	1939		1944	
	No. of workers	Percent of total	No. of workers	Percent of total
Piece-rate	309	52·6	125	19·2
Time-rate	279	47·4	527	80·8
Total ..	588	100	652	100

Taking into account employment in all the factories, we find that piece-rate workers were 25.3 per cent, of the total in 1939 and only 4.9 per cent. in 1944.

Contract Labour.—Contractor's labour was employed in four factories but like piece-rate workers, contractor's labour is decreasing in the metal stamping industry. The following table shows the extent of contract labour in the four factories :—

TABLE 201

Contractor's Labour in Four Factories.

Nature of employment	1939		1944	
	No. of Workers	Percent of total	Number of workers	Percent of total
Employed and paid directly ..	370	54·9	1,016	91·6
Employed and paid through contractors	304	45·1	93	8·4
Employed through contractors but paid directly	Nil	Nil	Nil	Nil
Total ..	674	100	1,109	100

Length of Service of Operatives.—In spite of the fact that most of the factories were established before 1920, the large majority of workers have less than five year service as is seen from the following table :—

TABLE 202

Length of Service of Operatives.

Service	Per cent of total workers
Between 0 and 1 year	24·0
„ 1 and 5 years	64·2
„ 5 and 10 years	7·1
Over 10 years	4·7

Classification of Workers and Apprenticeship.—In three factories workers are classified as permanent and temporary. Permanent workers form the large majority and have distinctive privileges, such as 15 days' leave with pay and pay on festival holidays. In one of these factories, permanent workers are entitled to 14 days' notice for discharge or 12 days' pay in lieu thereof. In this factory workers have the option of getting 14 days' additional pay if they do not avail of their privilege leave. In two other factories, although there is a classification of the workers as permanent and temporary, permanent workers have no special privileges. There is no system of apprenticeship in any of th

factories except one where a few workers are taken for training for ordinary posts. The period of training is not, however, counted towards service.

Promotions.—There is no system of regular promotions, graded or incremental. Increments are sometimes given at the discretion of the manager either annually or biennially. One concern gives increments even twice in a year to deserving workers. Two concerns have recently adopted regular grades for their workers.

Labour Turnover and Absenteeism.—Figures of labour turnover were available only in five factories. These figures relate to different periods. The average turnover per month has been given in the following tables :—

TABLE 203

Labour Turnover.

Serial No. of factory	Average No. daily employed	Periods to which separations relate	Separations				Percentage of monthly turnover
			Retirement	Discharge or dismissal	Voluntary	Total	
1	92	July 1944 ..	..	..	24	24	26·0
2	147	Oct. 1944 ..	.	..	1	1	0·6
3	1,236	1-1-1944 to 31-8-1944	..	65	187	252	2·5
4	353	1943 ..	..	19	219	238	5·6
5	33	Oct. 1944 .	.	..	1	1	3·0

Except in one factory, labour turnover is not high. It is seen that dismissals and discharges are not many and that voluntary quits account for most of the turnover. Absenteeism figures were available only in five factories and are shown in the following table. Absenteeism is due mostly to sickness, domestic troubles, marriages, etc.

TABLE 204

Absenteeism.

Serial No. of factory	Period to which absenteeism relates	Total Mandays	Total days of absence	Percentage of Absenteeism
1	August 1944	1,534	206	13·4
2	September 1944	4,125	45	1·1
3	1944	..	..	10·0
4	October 1944	792	56	7·1
5	1944	..	..	20·0

Standing Orders.—Standing orders defining the relations between employers and employees have been drawn up only in two factories.

Recruitment.—Requirements of extra complement are declared by notification on the Factory Notice Boards and selection is made by the manager or labour officer from among those who present themselves at the factory gate. Sometimes, especially in factories in the moffusil, the workers are asked to bring their friends or relations. Only the largest unit which employs over 1,200 workers has a labour officer. Complaints and grievances of workers in other factories are looked into by the managers themselves.

II.—Wages and Earnings.

Rates of Wages.—The rates of wages for different occupations vary from factory to factory. Wages are higher in Bombay than in Poona or in Sholapur. Basic wages have increased slightly as compared to those paid in 1939. The following table shows the rates of wages for a few selected occupations in different units in 1939 and in 1944. The minimum and maximum do not represent regular grades but are only the lower and upper limits of wages paid in different concerns.

TABLE 205

Minimum and Maximum Rates of Wages for Selected Occupations.

Occupation.	Bombay				Poona				Sholapur			
	1939		1944		1939		1944		1939		1944	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	R A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Turners	2 0 0	2 10 0	1 4 0	4 4 0	..	..	30 0 0	..	..	..	13 0 0*	29 0 0
Fitters	0 8 0	2 12 0	1 4 0	4 8 0	..	..	..	..	..	..	15 0 0*	45 0 0*
Welders	..	..	2 4 0	4 6 0	..	..	..	..	..	..	..	..
Carpenters ..	1 0 0	1 8 0	1 12 0	3 4 0	..	..	..	..	17 0 0	..	30 0 0*	45 0 0*
Blacksmiths ..	..	..	1 2 0	2 6 0	..	..	..	..	16 0 0*	..	35 0 0*	40 0 0*
Coppersmiths ..	0 14 0	1 12 0	1 4 0	2 0 0	..	..	..	..	16 8 0*	25 8 0*	18 0 0*	24 0 0*
Tinsmiths.. ..	..	..	0 12 0	2 0 0	..	..	..	..	..	..	..	..
Moulders	..	..	1 10 0	2 0 0	Piece rates		35 0 0*	..	9 0 0*	15 0 0*	10 0 0*	29 0 0
Pressmen	0 14 0	2 0 0	1 2 0	2 8 0	..	..	30 0 0	..	..	..	..	..
Cutters	0 10 0	1 10 0	0 14 0	1 6 0	..	..	25 0 0*	..	..	..	13 0 0*	..
Coolies	0 8 0	1 4 0	0 12 0	1 4 0	12 0 0*	15 0 0*	18 0 0*	25 0 0*	0 5 0	0 12 0	0 10 0	0 15 0

* Monthly rates.

Dearness Allowance and Bonus.—Dearness allowance is given in all concerns. While in two factories dearness allowance was started in December 1939 in others it was given only from 1941 or 1942. In 1939 dearness allowance was 1 anna 3 pies in the rupee for wages up to Rs. 30 and 1 anna for wages over Rs. 30 per month. In 1941 and 1942 the allowance was paid at the rate of 2 or 3 annas in the rupee of wages or at a flat rate of 2 annas per day. The rate of allowance was increased from time to time and in 1944 the allowance was 12 annas per day, 12 annas 6 pies per day and 6 annas per day in three factories in Bombay. The two other factories in Bombay were paying dearness allowance in accordance with the Bombay Millowners' Association scale. One factory in Poona was paying Rs. 15 per month to male workers and Rs. 10 to females, while the other was paying Rs. 14 to workers earning up to Rs. 37 per month, 6 annas in the rupee to those earning between Rs. 38 and Rs. 50 and 4 annas in the rupee to those earning Rs. 50 or more. The factory in Sholapur was paying dearness allowance at 7 annas 6 pies per day to all workers. Four of the five factories in Bombay pay annual bonus to workers. The amount in 1944 was 2 months' wages in three factories and 3½ months' wages in the fourth. The factories in Poona and Sholapur paid one months' wages as bonus in 1943 and 1944. Usually no conditions are attached to the payment of bonus and all workers on the muster are eligible to receive it.

The following table shows the monthly basic wages and gross earnings of workers in a few selected occupations in three factories in Bombay and one factory each in Poona and Sholapur.

TABLE 206

Wages and Earnings in 1944.

(In rupees, to the nearest rupee).

Occupation	1 Bombay						2 Bombay				3 Bombay					
	Basic Wages			Gross Earnings			Basic Wages		Gross Earnings		Basic Wages			Gross Earnings		
	Max.	Min.	Avr.	Max.	Min.	Avr.	Max.	Min.	Max.	Min.	Max.	Min.	Avr.	Max.	Min.	Avr.
Turner ..	84	33	59	103	52	78	90	72	114	116	117	39	41	131	54	55
Fitter ..	63	33	50	82	52	69	117	47	178	92	78	32	39	87	48	55
Moulder ..	..	..		..	..	..	..	..	..	..	52	42	42	75	..	..
Carpenter ..	..	..	..	..	..	..	81	43	127	81	52	42	44	65	57	61
Blacksmith ..	..	..	..	..	..	..	59	..	101	..	45	29	36	58	50	54
Pressman ..	53	24	36	72	43	54	..	..	..	..	65	45	50	78	49	68
Cutter ..	..	..	..	..	..	..	..	..	..	..	36	..	..	50	34	37
Coolie ..	34	20	26	53	39	40	23	..	59	..	32	..	..	52	..	..

Wages and Earnings in 1944—contd.

(In rupees, to the nearest rupees).

Occupation	Poona						Sholapur					
	Basic Wages			Gross Earnings			Basic Wages			Gross Earnings		
	Max.	Min.	Avr.	Max.	Min.	Avr.	Max.	Min.	Avr.	Max.	Min.	Avr.
Turner	35	20	26	49	34	40	28	13	21	38	19	32
Fitter	..	..	55	..	..	69	45	15	23	57	27	38
Moulder	41	27	34	56	41	48	29	12	19	41	24	30
Carpenter	..	..	..	..	..	..	45	35	40	57	47	52
Blacksmith	..	..	..	..	..	..	40	35	38	52	47	49
Pressman	38	25	34	52	39	48	..	..	..	..	..	..
Cutter	28	..	..	42	..	..	..	..	13	..	..	25
Coolie	30	18	21	44	32	35	25	17	19	38	30	31

Overtime, etc.—Overtime is worked in all the factories in Bombay and in the factory in Sholapur. No overtime is worked in the Poona factories. Only in one factory in Bombay is overtime compulsory. Payment for overtime is at time and a quarter except in one factory in Bombay where overtime is paid for at 1½ times the normal rate. In all factories overtime is entered in registers kept for the purpose which are open for inspection by the workers or their representatives. Fines are not imposed in any of the factories. Only in two factories are deductions from wages made on account of recovery of advances and the price of grain supplied. The wage period is a month and payment is made before the 7th or the 10th day following the end of a wage period. In one factory advances against wages are given on the 22nd of the month, if required. All the factories are closed once a week, usually on Sundays. Festival holidays are given for Holi and Dipavali. In one factory 6 holidays with pay are given in a year and in another all holidays declared by the Bombay Millowners' Association are granted. Two factories grant 15 days leave in a year, without pay, to all workers.

III.—Working Conditions.

Shifts and Hours of work.—Two factories in Bombay and the one in Sholapur work double shifts, one by day and the other by night. The other factories work only a day shift. The hours of work are 9 in all factories with a spreadover of 10 hours except in one factory where the hours of work are 8 and the spreadover 9 hours. In one factory in Poona the machinemen work from 2 p.m. to 6 p.m. and again from 7 p.m. to 11 p.m., i.e., an 8-hour day with a spreadover of 9 hours and furnacemen work from 7 p.m. to 12 midnight and again from 2 a.m. to 6 a.m., i.e., a 9-hour shift with a spreadover of 11 hours.

Light and ventilation, etc.—Arrangements for light and ventillation are generally satisfactory. There are no rest shelters in any of the factories. In Bombay the workers go to the nearest restaurant or rest in the factory compound during rest interval while in Poona and Sholapur they generally go home. In one factory in Bombay there was a rest shelter but it has now been converted into a grainshop. Sanitary arrangements in all the factories are in accordance with the provisions of the Factories Act and the latrines and urinals are clean.

IV.—Welfare Activities.

Medical aid.—Only two factories in Bombay maintain dispensaries. A qualified doctor has been appointed for full time in one while in the other only one part-time doctor is employed. Free medical aid is available to the workers and their families. Other factories have provision only for first-aid. There is no medical examination of the workers either periodically or at the time of controlled rates.

Canteens and grainshops.—In one factory in Bombay tea is provided free to all workers twice a day. Two other factories in Bombay have canteens where tea and light refreshments are available. The canteen in one of these factories is run by the management while in the other it is run by a contractor. Four factories in Bombay have grainshops selling rationed articles to the workers at controlled rates.

V.—Housing.

Housing accommodation for workers is not provided by any of the factories in Bombay or Poona. In Sholapur the factory management has permitted the workers to erect their own houses on land owned by the employer and twelve temporary sheds each 8 ft. × 12 ft. have been erected. Three to four workers live in each shed. A ground rent of 3 annas per month is charged for each shed.

VI.—Trade Unions and Strikes.

Trade Unions.—Except in one factory at Poona, there is no trade union of workers in this industry. Some workers may, however, belong to one or other of the trade unions in the engineering industry. In Poona the Gujerat Metal Factory Workers' Union has a membership of 50 workers. In 1944 the management of the factory entered into an agreement with the union regarding scales of wages and increments, dearness allowance, provident fund for permanent workers, etc., which was to come into force from the 1st of March 1944.

Strikes.—Only three strikes have been reported in these concerns. In 1944 there was a strike in one Poona factory demanding fixation of wages. The agreement of the management with the union mentioned above was a sequel to the strike. The two other strikes occurred in Bombay, one on the 16th April 1942 in the Metal Box Company of India demanding one month's wages as bonus ; and the other in the Oriental Metal Pressing Works which lasted for 2 days, the 5th and 6th August 1943, and was for an increase in dearness allowance. The first strike ended in a compromise and the second was settled by arbitration.

VII.—Safety Acts, etc.

The provisions of the various safety acts are observed. No cases of occupational diseases have been detected so far. Men working with acids or caustic substances are usually provided with rubber gloves for protection. The following table shows the number of accidents in 1943 and compensation paid in respect of them in four factories in Bombay and one in Poona.

TABLE 207

Number of Accidents and Compensation Paid in 1943.

Place	Unit	No. of Accidents.	Amount of compensation paid.	Remarks.
			Rs. A. P.	
Bombay	1	4	47 2 0	Compensation paid in all cases.
	2	290	2,860 0 0	Compensation paid in 191 cases.
	3	34	456 0 0	Compensation paid in all cases.
	4	10	..	Compensation paid according to the Act.
Poona	1	1	4 9 0	

The accidents were all of minor nature. Only one factory has insured against accidents.

VIII.—Indebtedness.

The increased cost of living due to war has forced several workers to borrow. Five of the eight factories grant loans to their employees free of interest and recover it from their wages. The Sholapur factory has a Co-operative Credit Society which, in 1943, advanced loans to 13 workers, aggregating to Rs. 704, for marriage, repayment of debts, etc.

IX.—General.

Only in the two factories in Poona are provident fund facilities available to workers. The fund is open only to the monthly paid staff. Workers contribute 1 anna in the rupee of their wages and the employers contribute an equal amount. The factories started deducting the workers' contribution from their wages from March 1944 but as the Fund was not recognised the Factory Inspector remarked that the deductions were illegal and directed that the deductions be stopped till after the Fund was recognised.

CHAPTER VIII.—ORDNANCE DEPOTS AND FACTORIES.

As an industry intimately connected with war, ordnance depots and factories have experienced considerable expansion during war-time. The following table, compiled from the factory statistics, shows this expansion.

TABLE 208

Ordnance Factories 1939—43.

Province		1939	1940	1941	1842	1943
Bombay	Factories ..	5	5	7	10	15
	Workers ..	5,3 4	8,770	14,639	27,879	31,001
Bengal	Factories .	3	3	..	4	4
	Workers . .	9,275	18,250	23,388	29,418	33,749
U. P.	Factories ..	2	2	..	5	8
	Workers	4,691	8,323	14,778	17,672	28,380
Punjab	Factories ..	6	6	.	7	8
	Workers	6,556	6,700	12,196	19,496	17,585
C. P. & Berar ..	Factories ..	1	1	..	3	3
	Workers	2,093	3,973	5,343	6,713	10,968
Other Provinces ..	Factories ..	8	8		10	7
	Workers	2,730	3,983	6,144	11,899	9,422
Total ..	Factories ..	25	25	29	39	45
	Workers	30,709	49,999	76,488	1,13,077	1,31,073

It may be mentioned here that all the ordnance depots do not come under the Factories Act. Interpretation of the Factories Act rests with the Provincial Governments and hence a decision as to whether a particular ordnance depot is or is not a ' factory ' within the meaning of the Act lies with the Chief Inspector of Factories. Consequently there seems to be considerable disparity in the interpretation of the Act, so far as ordnance depots are concerned. For example, Ordnance Depot (Arsenal) Kirkee is in fact a Command Depot with a workshop inside its general perimeter, but even though the

workshop has been separated the Act still covers the whole area. Similarly some other depots (C.A.F. Vehicles Depot, Kirkee ; Inspectorate of Ammunition. Kirkee ; C.M.T.S. Depot, Dehu Road ; Vehicle Distribution Depot, Sewree ; etc.) come under the Factories Act ; the Ordnance Depot, Baroda, comes under the Baroda State Factories Act. In most of these concerns, a section comes under the ' workshop ' category.

While selecting samples for investigation, some depots were taken along with ordnance factories. The expansion of these depots can be seen from the fact, that in Dehu Road area, where in the pre-war days not a single depot was in existence, there are at present five depots employing over 20,000 workers. Labour conditions in 14 depots and 8 factories have been investigated and the distribution of these concerns can be seen from the following table.

TABLE 209.

Samples for Investigation.

Types of Concern	Centres, Provinces and number of concerns		Number of workers (for month in 1944)
(i) Factories under Factories Act	Kirkee (Bombay)	2	20,124
	Jubbulpore (C.P.)	2	20,067
	Calcutta (Bengal)	1	2,225
	Ishapore (Bengal)	2	21,323
	Cawnpore (U.P.)	1 (a* section)	2,421
(ii) Depots under Factories Act..	Kirkee } Bombay Province	3	10,261
	Dehu Road } Bombay Province	2	8,906
	Sewree } Bombay Province	1	5,149
(iii) Depots not under Factories Act	Dehu Road } Bombay Province	3	11,805
	Sewree } Bombay Province	1	8,339
	Kandivali } Bombay Province	1	1,200
(iv) Depots in Indian States ..	Baroda	1	129
	Bhavanagar	1	438
	Cochin	1	250
		22	1,09,637

* A part of the Ordnance Depot is devoted to Engineering Works.

I.—Employment.

Most of the depots are war time creations. As the following table shows only three of the fourteen depots surveyed had been established before 1939. On the other hand only two factories were established in war time—one in Jubbulpore and the other in Kirkee. The Kirkee factory, however, was part of another factory, which has been in existence since 1869, and was separated as an independent unit in April 1941. Many of the activities are still common between the two concerns. Among the concerns investigated, the oldest is in Calcutta and was established in 1830. Five out of the eight factories investigated were in the field before 1906. The table below gives figures for employment in 1939 for the concerns then in existence and for employment in 1944 in all the units investigated.

TABLE 210.

Employment, 1939 and 1944.

Centre	Concern*	August 1939			A month in 1944			Percentage increase	No. of concerns established after 1939
		No. of concerns	No. of workers	Workers per concern	No. of concerns	No. of workers	Workers per concern		
Kirkee	D	2	1,362	681	3	10,261	3,420	402%	1
	F	1	3,282	1,641	2	20,124	10,062	513%	1
Dehu Road	D	..	..	..	5	20,711	4,142	..	5
Jubbulpore	F	1	2,110	2,110	2	20,067	10,039	376%	1
Calcutta	F	1	341	341	1	2,225	2,225	552%	..
Ishapore	F	2	5,270	2,635	2	21,323	10,662	305%	..
Cawnpore	F	1	379	379	1	2,421	2,421	539%	..
Sewree	D	1	163	163	2	10,488	5,244	3,117%	1
Kandivali	D	..	..	..	1	1,200	1,200	..	1
Baroda	D	..	..	..	1	129	129	..	1
Bhavanagar	D	..	..	..	1	438	438	..	1
Cochin ,, ...	D	..	..	..	1	250	250	..	1
Total ..	D	3	1,525	508	14	43,477	3,106	511%	11
	F	6	11,382	1,897	8	66,160	8,270	336%	2

* D for Depot and F Factory.

Female and Child Labour.—As the following table shows, very few women and children are employed, compared to the number of adult male workers. Thirteen concerns (11 depots and 2 factories), mentioned below, employ female and child labour.

TABLE 211.

Female and Child Labour.

Centre	Depots or factory	Employment in 1939			Employment in 1944		
		Men	Women	Children	Men	Women	Children
Kirkee	Depot ..	533	..	72	3,477	771	187
	„* ..	..	..	..	2,715	195	100
	Factory* ..	..	..	..	1,310	20	..
Dehru Road	Depot* ..	..	..	..	4,788	1,345	274
	„* ..	..	..	..	2,106	378	15
	„* ..	..	..	..	2,930	1,480	190
	„* ..	..	..	..	510	100	28
	„* ..	..	..	..	4,691	1,773	103
	„* ..	..	..	..	12,383	534	238
Jubbulpore	Factory* ..	..	..	..	4,899	330	10
Sewree	Depot* ..	163	..	..	993	2	257
Kandivali	„* ..	..	..	..	122	..	7
Baroda	„* ..	..	..	..	293	145	..
Bhavanagar	„* ..	..	..	..			

*These depots and factories have been established in war time.

The above table shows, (a) that in 1939, none of the concerns employed any female labour, while only one concern employed child labour and (b) that female and child labour is more prevalent in depots than in factories. The depots, being practically go-downs, have very little skilled work to be done and hence can easily manage with female and child labour, which is always cheaper than male labour. Women are mostly employed as labourers, sweepers and female searchers. It may be mentioned here that in one of the Kirkee depots, female labourers have been divided into four classes 'A', 'B', 'C' and 'skilled'. However, from the wage rates, it appears that even the 'skilled' female labourer gets a lower wage than even 'C' class male labourers. As for the employment of children, in a number of cases they are classed as 'adolescents', while in many depots, children between the ages of 8 to 15 work as office-boys. In one of the Dehu Road depots, children work only for 5 hours and the depot supplies them free milk; they are also encouraged to study in the classes opened by the Depot inside its premises and there are a few instances where these boys have been absorbed as clerks.

Piece-rated and contract labour.—None of the depots employs piece-rated labour, while 7 of the 8 factories investigated employ such labour.

TABLE 212.

Piece-rated workers.

Centre.	Factory	No. of total workers		No. of piece-rate workers		Percentage of piece rated workers to total	
		1939	1944	1939	1944	1939	1944
Kirkee	I	3,282	19,201	3,001	16,289	91%	84%
Jubbulpore	I	2,110	6,912	911	2,343	43%	34%
	II*	..	13,155	..	1,46	..	11%
Calcutta	I	341	2,207	341	18	100%	1%
Ishapore	I	2,801	8,561	**	5,462	**	64%
	II	2,469	12,762	1,614	5,957	65%	47%
Cawnpore	I	379	2,421	282	1,944	75%	80%

*This factory was started in war time.

** Exact figures are not available, but the proportion is said to be approximately 70 per cent.

In most of the cases, the proportion of piece-rated workers has diminished since 1939, but the number is still considerable and in three factories piece-rated workers outnumber the time-rated. Individual piece-work seems to be common in tool-shop, while most of the other departments such as box-making, powder-filling, painting, etc., have what may be called 'gang' piece-work. Contract labour, however, was not found anywhere. Out of the twenty-two units investigated, only one unit employed contract labour. This was an ordnance depot in Sewree, which employed and paid through contractors 138 male adult workers in 1944.

Length of service.—As a number of concerns have been established in war time, the number of workers, with less than 5 years' service has been found to be unusually large. The old concerns also add to this number, because of their expansion. The following table gives length of service in a number of concerns.

TABLE 213.

Length of service.

Centre	Concern*	Date of establishment	Total No. of workers	No. of workers who served for			
				Less than 1 year	1 to 5 years	5 to 10 years	Over 10 years
Kirkee	F	1869	19,201	6,690	10,231	580	1,700
	F	1941**	1,330	563	726	22	19
	D	1942	2,870	2,350	520	..	..
	D	1921	2,693	815	1,279	344	255
Dehu Road	D	1942	6,015	3,507	2,508	..	..
	D	1942	2,499	1,344	1,185	..	..
	D	1940	4,600	3,000	1,600	..	..
	D	1944 (Mar)	638	638	..	..	..
	D	1941	10,324	8,708	1,616	..	..
Jubbulpore	F	1942**	13,651	10,569	3,025	29	28
Shapore	F	1904	8,431	1,251	4,958	1,179	1,043
	F	1905	12,762	3,046	8,308	964	444
Cawnpore	F	..	2,693	668	1,219	611	195
Sewree	D	..	2,540	1,302	1,210	14	14
	D	1943	1,200	700	500	..	..
Baroda	D	1943 (Sept.)	129	129	..	..	..
Bhavanagar	D	1942	450	262	188	..	..
Cochin	D	1942	315	165	150	..	..
Total ..	D(12) ..	..	34,273	22,920	10,726	358	269
	F(6) ..	..	58,068	22,787	28,467	3,385	3,429
	D & F (18)	..	92,341	45,707	39,193	3,743	3,698

*D=Depot and F=Factory.

**These concerns established in war time, have a few workers with more than 5 years' service, the reason being that these workers were transferrred to these concerns from other ordnance factories.

Permanent and temporary workers.—Except a depot in Dehu Road and a factory in Calcutta, all other concerns treat their workers as temporary. In the Dehu Road depot, 3.4 per cent. of the workers are permanent, while in the

Calcutta factory, the percentage of permanent workers is about 20. Generally in the ordnance factories workers are known as E.T.A. (Extra Temporary Artificers) and in the depots as E.T.E. (Extra Temporary Establishment). All these workers are daily-rated and temporary. The ordnance factories have got definite leave rules, whereby leave on full pay is admissible within the following limits in the financial year :

I. (a)	*Period of service*	*No. of days admissible*
	(*i*) less than 3 years	.. Nil.
	(*ii*) 3 years and over but less than 10 years ..	.. 10 days.
	(*iii*) 10 years and over but less than 20 years ..	.. 15 days.
	(*iv*) 20 years and over	.. 20 days.
(*b*)	Leave on Medical Certificate on half pay ..	.. 30 days in the financial year not more than 120 days in all (throughout service).

II. Leave in cases of Infectious Diseases—Segregation and Anti-Rabic Treatment.

(i) Leave on full pay up to 30 days is admissible, provided that—

(a) the individual has worked 90 days during the past 4 months, and

(b) that the individual has resumed duty immediately on the expiry of the leave.

(ii) Rest after inoculation : 48 hours under the orders of competent medical authority.

III. Leave with pay for part of a day or leave without pay for any number of days is granted at the discretion of the Superintendent or Foreman.

Apprentices.—The ordnance depots, as we have seen above, hardly require any skilled labour and hence have no system of training apprentices. In the ordnance factories, recruitment of Apprentices and Boy Artisans had been suspended for the duration of the war and the I.O.F. Technical Training Scheme had been introduced to meet the demand for Supervisors and Artisans. Apprentice-system is in existence in seven out of the eight factories. In one of the Kirkee factories, the system is meant only for the supervisory posts, while in all the other six factories, there are both supervisor trainees and Artisan Trainees.

(a) Supervisor Trainees, who are usually well educated men with technical knowledge. such as Engineering graduates or chemists, are paid Rs. 50 (plus dearness allowance) per month during the training period. In the Kirkee factories a cycle allowance of Rs. 10 per month is also given under certain conditions. The period of training varies from 6 to 18 months, depending on the individual's attendance, progress and conduct. Practical training in various sections of the factories is given. After satisfactory completion of training and passing the prescribed tests, supervisor trainees are promoted to Supervisors ' C ' grade usually on a pay of Rs. 70 (plus dearness allowance) per month.

(b) Artisan Trainees were found in six out of eight factories. In a Kirkee factory, they may be even non-Matriculates, while in a Jubbulpore factory the minimum educational standard is Intermediate in Science or Engineering of a University and appointments are made by the Public Service Commission. The usual pay for the trainees is Rs. 20 (Rs. 25 for Matriculates) per month. In a Jubbulpore factory, however, there is a regular scale of Rs. 40—80, with annual increments of Rs. 5, Rs. 7-8-0, or Rs. 10 depending upon the progress made. The period of training is 6 to 18 months, except in one factory (in Jubbulpore), where it is 5 years. After satisfactory completion of service, the artisan trainee usually gets Re. 1 per day, as semi-skilled Grade I technician. In a Jubbulpore factory the trainee must be between 19 and 21 years of age at the time of admission and must be unmarried and remain so during the training period.

Both the supervisory and aritsan trainees are governed by the National Service (Technical Personnel) Ordinance, 1940, and are treated as other workers (Extra Temporary Artificers). They are thus subject to leave and other rules of the ordnance factories. In a Jubbulpore factory, retention in service after completion of the training period is not guaranteed, while in a Kirkee factory, the trainees are not eligible for any overtime allowance during their training period. In all cases, however, the period of training is counted towards total service.

Labour Turnover.—The following figures are for labour turnover in some of the concerns investigated.

TABLE 214.

Labour turnover.

Centre.	Concern.*	Period	Number of workers.	Number of workers who left during the period.				Monthly percentage of labour-turnover.
				Retired.	Dismissed.	Voluntarily left.	Total.	
Kirkee	F	1939	4,316	8	250	44	302	0·6%
		1943	19,485	3	8,853	241	9,127	4·0%
	F	1943	1,591	..	177	..	177	09·%
	D	Oct. '43 to Sept. '44 ..	4,520	12	6,988	14	7,140	13·4%
	D	1944	3,233	..	4,512	444	4,956	12·9%
	D	Jan. 1939	..	..	..	..	..	..
		Jan. 1943	3,000 (approx.)	2	..	100 (approx.)	102	3·3%
Dehu Road	D	Oct. 1943	5,126	..	852	35	887	17·5%
	D		1,824	..	454	28	482	26·5%
	D	1940	860 (approx.)	..	448	..	448	4·4%
		1943	4,500 (approx.)	..	7,898	141	8,039	14·9%
		May-Sept. '44 (5 months)	539	..	379	..	379	20·0%
	D	Aug. '43	9,219	..	..	995	995	10·8%
	D	Aug. '44	8,843	..	..	825	825	9·3%
Jubbulpore	F	1939	2,590	11	..	214	225	0·7%
		1943	8,608	16	..	2,520	2,536	2·5%
	F	1943	3,233	..	113	3,005	3,118	8·0%
Calcutta	F	1939	348	..	2	1	3	..
		1943	2,101	285	285	26	311	1·2%
Lahapore	F	1939	3,463	41	88	12	141	0·3%
		1943	8,642	185	1,962**	114	2,261**	2·2%
	F	1944	12,654	1	2,791	56	2,848	1·9%
Cawnpore	F	1939	379	..	289	..	289	6·4%
		1944	2,421	..	601	..	601	2·4%
Sewree	D	1944 (Oct. Nov.) ..	2,540	..	7	121	128	5·8%
	D	1943	4,610	..	2,019	1,106	3,125	5·6%
Kandivali	D	Oct. 1944 ..	1,035	..	62	35	97	9·4%
Bhavanagar	D	1943-44 .. .. (one year).	499	..	938	49	987	16·5%

*D=Depot and F—Factory.

** 1,155 of these workers were discharged during January and Feburary 1943 for being 'deserters' as a result of enemy air raid.

Retirements are very few and occur only in concerns which are of more than 20 years' standing. The figures for 'dismissals' are high because of a rule in the ordnance concerns that if a worker remains absent for more than six days without informing the authorities, he is taken to be discharged. In most of the factories and depots there is a considerable number of workers thus 'dismissed' mainly because the workers finding better prospects elsewhere do not care to come back. Out of the total number of workers left, 95 per cent. in a Dehu Road Depot and 42 per cent. in the Bhavanagar Depot left the concerns this way. In one of the depots the reasons given for labour turnover were : (1) fluctuating work factors—51 per cent. (ii) dismissals due to long absence—42 per cent. and (iii) other causes—7 per cent.

Absenteeism.—An idea of the extent of absenteeism can be had from the following figures.

TABLE 215.

Absenteeism.

Centre.	Concern*.	Period.	Percentage of absenteeism.
Kirkee	F	1939	5·4%
		1943	14·2%
	F	1943	22·7%
	D	1943	17·1%
	D	May-Dec. '43	19·6%
		Jan.-Oct. '44	19·6%
	D	1939	5·0%
		1944	13·0%
Dehu Road	D	1943	22·5%
	D	1943	27·4%
	D	July-Dec. '43	17·8%
	D	Jan.-Oct. '44	14·0%
	D	May-Sept '44	11 to 20·6%
		1943	20%
Jubbulpore	F	1939	11·9%
		1943	19·0%
	F	1943	20·6%
Calcutta	F	1939	5·0%
		1943	17·0%
Ishapore	F	1939	8·1%
		1940	8·9%
		1941	9·8%
		1942	14·6%
		1943	11·9%
		1944	12·6%
Cawnpore	F	1939	14·3%
		1944	21·1%
	F	1939	13·0%
		1943	12·0%
Sewree	D	1943	5·0%
		1943	14·8%
Kandivali	D	1944	5·0%
Bhavanagar	D	1943	8·6%
Cochin	D	1943	32·0%

*D=Depots and F=Factory.

In most cases, absenteeism has increased since 1939. Absenteeism is generally high in February (when workers go to their native places for Holi), in July-August (harvest season) and in October-November (Diwali), as the following table shows.—

TABLE 216.

Absenteeism Month by Month.

Month.	A Kirkee Factory 1943.	A Kirkee Depot.		A Dehu Road Depot 1944.	Month.	A Kirkee Factory 1943.	A Kirkee Depot.		A Dehu Road Depot.	
		1943.	1944.				1943.	1944.	1943.	1944.
January ..	18·57%	..	21·1%	14%	July ..	27·49%	17·8%	17·8%	19%	11%
February ..	20·03%	..	24·6%	15%	August ..	32·71%	18·5%	20·9%	21%	14%
March ..	20·95%	..	21·4%	15%	September ..	19·58%	20·1%	16·3%	16%	14%
April ..	22·35%	..	18·2%	15%	October ..	23·50%	16·0%	15·8%	17%	14%
May ..	20·44%	19%	18·5%	16%	November ..	21·15 %	21·6%	..	18%	..
June ..	19·20%	20%	15·5%	12%	December ..	21·81%	24·6%	..	16%	..

Standing Orders.—One of the Kirkee factories has published its 'Rules and Regulations' in a booklet and the two Ishapore factories have attached their 'Standing Orders' to their schedules of Standard wages. Apart from these concerns, no other unit seems to have any independent 'Standing Orders'. The ordnance authorities have published the 'Standing Orders for I.A.O.C.', Sections 58 to 74, 92 and 97 to 99 of which relate to Extra temporary Establishment and Tradesmen and include such topics as discipline, transfers, trade-test, increments, apprenticeship, pay and allowances, etc. Most of the ordnance concerns take for guidance the 'Regulations for the Army Ordnance Services (India)—Part I', along with depot orders, departmental regulations and statutory rules. Minor matters, like those in regard to internal management, however, are often subject to the rules framed by the Commanding Officer or O.O. (Administration).

Recruitment.—Almost all the ordnance concerns have complained of an acute shortage of labour, caused by various factors such as considerable expansion in number of workers late establishment, high demand for labour outside, distance from inhabited areas, etc. There has been a competition among the ordnance concerns *inter se* to secure labour and workers discharged from one concern get admission easily into any other concern and in some cases even in the same concern. The method of 'black list' of discharged workers has failed, because of high demand for labour. The most common method adopted by about 50 per cent. of the ordnance concerns is to set up a Labour Bureau for recruitment. Intending workers either gather at the gate or are brought there by workers, who happen to be their friends or relatives. The Labour Bureau, which collects the demands for additional labour from various 'shops' in the Establishment, interviews the workers. In the absence of a Labour Bureau, workers are directly recruited by the Superintendent or the Administrative Officer. The workers are medically examined and tradesmen are trade-tested before their rates are fixed. In a number of cases the character and antecedents of all the workers recruited are verified by the Police. Skilled and semi-skilled workers are sometimes recruited through the National Service Labour Tribunal or the Director of Factory Recruitment. In Dehu area, Indian Superior Personnel (Extra Temporary Establishment), such as supervisors, leading hands, clerks, etc., are recruited through the I.S.P. (E.T.E.) Selection Committee. The import of labour on a large scale is effected only in a Jubbulpore factory, U. P. Labourers are recruited by an Officer on Special Duty at Gorakhpore, on the following terms and conditions (laid down in Government of India : Department of Labour : Memorandum No. L.R. 91 of 10th April 1944).

Pay (General)—Re. 1 per day (every day of the month).

Overtime Pay—Re. 0-2-6 per hour. If worked on Sundays and holidays the hours worked will be taken as overtime.

While on certified medical leave—Re. 0-8-0 per day.

Rations and housing—free.

Leave with pay on Sundays and Gazetted holidays. Labour had been brought in large numbers because of extreme shortage in the vicinity. It is curious, however, that another ordnance factory, hardly four miles from it, gets its labour from the adjacent areas. Complaints were made that officers maltreated the workers.

Labour Officer.—Every ordnance factory (except in Calcutta) and depot has a Civilian Labour Officer, usually of Gazetted rank. He serves as Liaison Officer between the Administration and the employees. He not

only enquires into the grievances of the workers but also supervises welfare-work. He has to look after canteens, rations, co-operative stores, housing accommodation, education, recreation, sports, etc. In his work, the Labour Officer is helped by the Workers' Welfare Committee. In one of the Dehu Road Depots, 'Durbars' are held by the Commanding Officer once a quarter, when all the labourers are allowed to ventilate their grievances.

II.—Wages and Earnings.

Rates of Wages in Depots.—The occupations of the ordnance depot workers fall into three categories from the point of view of the authorities sanctioning their wage-rates. (i) The rates of the first category comprising supervisors, clerks, gatekeepers and labourers of various grades are determined by the various G.H.Q. letters issued from time to time and are generally in accordance with local conditions within the Commandant's powers. (ii) The wage-rates of motor-drivers, sweepers, daftaries, malis, peons, etc., who form the second category are laid down according to local Nerrick Rates as authorised by and published in the Area and Station Orders from time to time. They are fixed by local Nerrick Rate Committees. (iii) The wage-rates of all technical trades (artificers of various kinds) are laid down in the Standing Orders for I.A.O.C. (Paras 98 and 99). The tradesmen, for the purposes of pay, are divided into three groups as follows :—

Group A—Armature Winders, Bricklayers, Coppersmiths, Electricians, Fitters, Instrument Mechanics, Machinists, Pattern makers, Turners, Welders, etc.

Group B—Blacksmiths, Carpenters Electroplaters, Moulders, Painters, Rivetters, Saddlers, Tailors, etc.

Group C—Rope workers, Sawyers, Skilled labourers, Grinders, Polishers, Tradesmen's Mates, etc.

These Groups are further divided into three classes each having two scales of pay—'A' and 'B'. Wages according to Scale 'A' are paid at Rawalpindi, Quetta, Bombay, Drigh Road, Chakala, Bannu, Delhi, Mir Ali, Deolali, Nowshera and Peshawar. Wages according to Scale 'B' are paid at Ferozepore, Lahore, Kirkee, Allahabad, Calcutta (F.W.D.), Agra, Ahmednagar, Madras, Dehu Siding, Lucknow, Bangalore and Jubbulpore. The rates for tradesmen are given in the following table.

TABLE 217.

Wage-Rates (in Rs.) for Tradesmen in Ordnance Depots.

Grading.	Group A.		Group B.		Group C.	
	Scale 'A'	Scale 'B'	Scale 'A'	Scale 'B'	Scale 'A'	Scale 'B'
Tradesmen						
Class I						
Maximum	3 8 0	3 0 0	3 0 0	2 8 0	0 0 0	0 0 0
Minimum	3 0 0	2 8 0	2 8 0	2 2 0	0 0 0	0 0 0
Class II						
Maximum	2 12 0	2 6 0	2 6 0	2 6 0	0 0 0	0 0 0
Minimum	2 4 0	1 14 0	1 14 0	1 10 0	1 6 0	1 2 0
Class III						
Maximum	2 0 0	1 12 0	1 12 0	1 8 0	1 0 0	0 14 0
Medium	1 12 0	1 8 0	1 8 0	1 4 0	0 14 0	0 12 0
Minimum	1 8 0	1 4 0	1 4 0	1 0 0	0 12 0	0 10 0

The rates of labourers vary from place to place and were as follows in the centres investigated.

TABLE. 218.

Wage-Rates (in Rs.) for labourers in Ordnance Depots.

Occupation	Kirkee.	Dehu Rd.	Sewree & Kandivali.	Baroda.	Bhavanagar.	Cochin
Male Labourers						
—Skilled	1 2 0	1 2 0	..	..	..	..
—Special	1 0 0	1 0 0	..	..	..	..
—Class A	0 14 0	0 14 0	1 4 0	1 0 0	0 14 0	..
—Class B	0 12 0	0 12 0	1 2 0	0 14 0	0 12 0	..
—Class C	0 10 0	0 10 0	1 0 0	0 12 0	0 10 0	0 10 0
Female Labourers						
—Skilled	0 9 0	..	..	..	..	..
—Class A	0 8 0	0 7 0	..	..	..	..
Class B	0 7 0	0 6 0	..	..	..	..
—Class C	0 6 0	0 5 0	..	..	..	..
Adolescents Boys	..	0 8 0				
Boys	0 5 0	0 5 0 to 0 7 0	0 6 0	0 8 0	0 6 0 to 0 8 0	0 6 0

Rates of Wages in Ordnance Factories.—All the ordnance factories have either a 'List of grades with Minimum and Special Rates' or a 'Schedule of Standard Wages', which give the wage-rates for all the categories of workers. Though a considerable uniformity in wage-rates exists in a number of trades, slight variations because of different local conditions are bound to occur. The following table shows these variations in the case of some trades in different areas.

TABLE 219.

Wage-rates (in Rs.) in Ordnance Factories.

Occupation.	Grade.	Wage-rates in a factory in—									
		Kirkee		Jubbulpore		Calcutta		Ishapore		Cawnpore	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Armature Winder	I	3 0	5 0	1 0	3 0	1 0	1 6	1 12	3 0	..	..
	II	1 8	2 14	..	..	..	..	0 12	1 8	..	..
	III	0 12	1 6	..	..	..	..	..	..	..	..
Beltman	I	0 12	1 10	0 12	2 0	1 8	1 12	1 8	1 12	0 8	1 0
	II	..	..	..	..	0 14	1 4	0 14	1 4	..	..
Blacksmith	I	1 14	2 8	2 8	3 0	..	..	1 4	3 0	1 4	2 4
	II	1 0	1 14	0 14	2 8	1 12	2 12	..	1 8	0 12	1 4
	III	..	..	..	..	..	..	..	..	0 8	0 12
Carpenter	I	2 6	3 4	2 6	3 4	1 12	2 12	1 4	2 0	1 8	2 8
	II	1 11	2 4	1 12	2 4	1 8	1 12	1 0	2 0	1 0	1 7
	III	1 0	1 10	1 0	1 10	1 0	1 6	..	..	0 10	0 15
	IV	..	..	..	..	0 11	1 0	..	..	0 6	0 10 (Boy).
Fitter	I	2 6	3 4	2 6	3 4	2 8	3 0	2 0	3 0	2 0	3 0
	II	1 11	2 4	1 12	2 4	2 0	2 6	1 4	2 0	1 8	2 0
	III	1 0	1 10	1 0	1 10	1 8	1 14	1 0	1 8	1 0	2 0
	IV	0 12	0 15	0 12	0 15	1 0	1 6	..	..	0 9	0 15
Grinder	I	1 11	2 12	1 12	3 0	1 0	3 0	1 12	3 0	1 2	1 8
	II	1 3	1 10	1 4	1 10	..	..	1 8	3 0	0 12	1 0
	III	0 12	1 2	0 12	1 2	..	..	1 0	2 0	..	..
Labourer-Male	I	0 11	0 14	0 10	0 14	0 14	1 4	0 14	1 4	0 10	0 12
	II	0 10	0 12	0 8	0 10	0 12	1 0	0 12	1 0	0 8	0 10
	III	0 7	0 9	..	..	0 6	0 14	..	..	..	..
—Female }	I	..	..	0 6	0 8	..	..	..	..	..	..
—Boy }	I	0 5	0 6	0 5	0 6	..	..	0 9½	0 12	0 5	0 7
Mason	I	2 4	2 8	1 12	2 8	..	..	..	..	1 4	2 0
	II	0 14	2 4	0 14	1 10	..	..	..	..	0 12	1 2

TABLE 219.

Wage-rates (in Rs.) in Ordnance Factories.

Occupation	Grade	Wage-rates in a factory									
		Kirkee		Jubbalpore		Calcutta		Ishapore		Cawnpore	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Packer	I	1 4	1 14	1 4	1 14	1 0	1 6	0 12	1 0	0 12	1 8
	II	..	..	..	..	0 12	1 2	..	..	..	..
Painter	I	1 11	2 8	1 10	2 4	..	..	1 8	2 0	1 2	1 8
	II	1 0	1 10	0 10	1 10	..	..	0 12	1 4	0 10	1 1
	III	0 10	1 0	..	..	..	..	..	..	..	..
Switch Board Attendant ..	I	2 6	3 4	2 2	2 8	..	..	2 8	4 0	..	..
	II	1 11	2 4	1 10	2 0	..	..	1 8	2 8	..	..
	III	1 0	1 10	1 0	1 8	..	..	..	..	..	..
Printer	I	1 6	1 14	1 6	1 14	0 11	1 2	1 8	3 0	..	..
	II	0 12	1 6	0 12	1 6	..	..	1 4	2 0	..	..
Tin-smith	I	2 12	3 0	2 8	3 0	1 12	2 12	1 12	3 0	1 10	2 4
	II	1 11	2 12	1 12	2 8	1 8	1 12	1 0	1 12	0 14	1 8
	III	..	..	1 0	1 10	1 0	1 6	..	..	..	..
	IV	..	..	..	..	0 12	1 2	..	..	..	..
	V	..	..	..	..	0 10	0 14	..	..	..	..
Turner	I	2 6	3 4	2 6	4 0	2 8	3 0	2 8	4 8	1 9	2 12
	II	1 11	2 4	1 12	2 4	2 0	2 6	1 12	3 0	1 6	2 0
	III	1 0	1 10	1 0	1 10	1 8	1 14	1 0	1 12	0 12	1 8
	IV	0 12	0 15	0 12	0 15	1 0	1 6	0 14	1 8	0 12	1 4
Welder	I	3 2	5 0	3 0	3 8	1 12	2 12	2 0	3 0	1 8	2 8
	II	2 1	3 0	2 2	3 0	..	..	1 0	1 12	0 12	1 8
	III	1 0	2 0	1 0	2 0	..	..	0 14	1 4	0 8	1 8
Wiremen	I	3 2	4 0	3 2	4 0	..	..	1 0	2 0	1 0	1 8
	II	2 10	3 0	2 10	3 0	..	..	..	..	0 10	1 0
	III	2 0	2 8	2 0	2 8	..	..	..	..	..	..
Wiremen Asstt.	I	1 9	2 0	1 9	2 0	..	..	..	..	..	..
	II	1 1	1 8	1 1	1 8	..	..	..	..	..	..
	III	0 12	1 0	0 12	1 0	..	..	..	..	..	..

The rates may be broadly stated as : Rs. 1-8-0 to Rs. 5-0-0 for skilled workers, Re. 0-10-0 to Rs. 1-6-0 for semi-skilled workers and Re. 0-6-0 to Rs. 1-2-0 for unskilled workers. Boys are employed mostly for unskilled jobs. One of the Ishapore factories, however, gives their wage-rates for skilled and unskilled work.

TABLE 220.

Wage-rates for 'Boys' in an Ishapore Factory.

Age.	Skilled.	Semi-skilled.	Unskilled.
21	1 0	0 14	0 12
20	0 14	0 12	0 11
19	0 12	0 10	0 10
18	0 10	0 9	0 9
17	0 8	0 8	0 8
16	0 6	0 7	0 7
15		0 6	0 6

Increments.—The increment within the grades is annual in Calcutta, Ishapore and Cawnpore and biennial in Kirkee and Jubbulpore. Even the ranges of incomes, for which increments change, differ as follows :—

TABLE 221.

Increments.

Increment of.	Range of daily rates in a factory in		
	Kirkee.	Jubbulpore.	Cawnpore.
One anna	Up to Re. 1-0-0	Rs. 0-8-0 to Re 1-0-0	Upto Rs. 1/8
Two annas	Re. 1-0-0 to Rs. 2-4-0	Re. 1-0-0 to Rs. 2-4-0	Rs. 1-8- to 2-7
Three annas	..	Rs. 2-4 to 3-0	Rs. 2-8 to 3-7
Four annas	Rs. 2-4-0 & up	Rs. 3- to 5	Rs. 3-8- to 5

However, for the period of war, the normal rules governing the grant of increments, as above, have been relaxed to enable special increments to be given to men who show exceptional aptitude or proficiency in their work. The period of two years in Kirkee has been reduced to six months. In a Kirkee factory, as a special war-measure, increments of a special nature have been given under special orders at shorter intervals than two years in cases where men were given additional responsibilities or had made such improvements as to justify a revised rate of pay, though not upgrading. As a result of such

concessions, mainly provided by war, we find variations in time-limits for increments in factories as well as depots. Out of the fourteen depots investigated, for example, three give promotions after every six months of approved service, while four give after a year's service. In one of these depots, though promotion is given every six months, regradation takes place after first three months' service. In the remaining five depots, there seems to be no time-limit and promotions are given as vacancies occur.

Wages of piece-rated and Contract Labour.—Piece-work rates, which are found only in factories, are generally so fixed as to give on an average a 25 per cent. bonus over the day-work rates. Contract labour is rare, but it seems that workers employed by contractors (for outside work in adjoining areas) get more than those employed in the ordnance concerns. In Jubbulpore, for example, wages of contract labour are 12 annas per day as against 8 annas per day paid to labour employed directly. In Dehu-Kirkee area, one of the complaints of the ordnance authorities was that the contractors took away a lot of labour by offering wages better than those paid by ordnance depots. To avoid competition, it seems, an agreement was reached with the contractors, fixing the maximum wages. Very few changes have been made in the basic wage-rates since 1939.

Dearness Allowance.—Since the outbreak of war, dearness allowance has been allowed to workers at different rates. With effect from 1st January 1945, they are being paid at 17½ per cent. of their pay subject to the following pay limits (as per Labour Department letter No. E-83(3)-11, dated 9th June 1945) :—

	Rs.
Rs. 40 and above	20
Below Rs. 40	19

During the period of war emergency as declared by the local Government, the workers, subject to their satisfactory attendance, were given an emergency allowance at 20 per cent. of their pay. At the time of investigation in 1944, however, dearness allowance was paid at a flat rate, but it varied according to localities. It was, for example, Rs. 16 in Bombay, Calcutta, Ishapore and Cawnpore, Rs. 14 in Poona and Rs. 11 in other areas like Dehu Road, Baroda, Jubbulpore and Bhavnagar. Even in the same area, variations in the allowance existed for different classes of workers. For example, in Kirkee the rates were.

TABLE 222.

Dearness Allowance in Kirkee in 1944.

Wage-group.	Pay limits.	Amount of Dearness Allowance (Rs.p.m.)
(a) Employees governed by Factories Act	Up to Rs. 175 p.m.	14 0 0
(b) Clerical Workers	(i) Up to Rs. 40 p.m. ..	9 0 0
	(ii) Rs. 40 to Rs. 150 p.m. ..	12 0 0
(c) Personnel on Nerrick rates of Pay	(i) Up to Rs. 40 p.m.	9 0 0
	(ii) Rs. 40 to Rs. 90 p.m.	12 0 0

In Bhavnagar again, workers getting less than Rs. 40 per month get only Rs. 9 per month, while others got Rs. 11 per month. In Jubbulpore, the maximum pay-limit was Rs. 125. The system of dearness allowance has been revised from time to time during the course of the present war. The following table gives details in regard to establishments in Kirkee.

TABLE 223.

Development of Dearness Allowance in Kirkee.

Period.	Maximum Pay-limit (Rs. p.m.)	Dearness Allowance (Rs. p.m.)
1-3-1941 to 31-12-1941	29 0 0	2 0 0
1-1-1942 to 14-6-1942	60 0 0	3 12 0
1-7-1942 to 31-1-1943	70 0 0	6 4 0
15-6-1942 to 31-1-1943	90 0 0	8 12 0
1-2-1943 to 31-12-1944	200 0 0	14 0 0

Similarly in Bombay, dearness allowance was Rs. 4-8-0 p.m. from June 1941 to July 1942 and Rs. 10-8-0 p.m. from July 1942 to February 1943. In Cawnpore, dearness allowance at the rate of Rs. 3-12-0 per month up to Rs. 60-0-0 was granted to the workers on 1st January 1942 and this was increased to Rs. 7-8-0 per month up to Rs. 10-0-0 from 1st July 1942 ; the rate was then increased to Rs. 10-8-0 up to the pay limit of Rs. 120-0-0 and eventually to Rs. 16-0-0 up to a pay-limit of Rs. 200-0-0 with effect from 1st February 1943. On 1st March 1944, the pay limit was further increased to Rs 250-0-0 per month.

Besides that for dearness, a few other allowances are also paid. In a Dehu Depot, a conveyance allowance of Rs. 15-0-0 p.m. is given to monthly paid staff. In the two Kirkee factories, a similar allowance amounting to Rs. 10 p.m. is paid to Supervisory Trainees, who reside in Poona. In an Ishapore factory, light refreshment at a cost of one and a half anna per worker per day is served free for nightshift workers only. Workers in some other factories (in Kirkee and Ishapore) are paid night-shift bonus, generally equivalent to 50 per cent. of the overtime payment. In some of the long standing ordnance concerns, ' bonus ', which is a sort of gratuity, is paid to workers who have put in satisfactory service for a certain period. For example, in a depot in Kirkee, a ' bonus ' of one day's wages for each completed month of service is credited to the workers' account since September 1939. This bonus was to be payable only after the cessation of hostilities provided the workers remained in service during the war-period. The ' bonus ' systems of some other concerns are discussed along with the gratuity scheme of the ordnance concerns at the end of this Chapter.

Earnings.—The following table gives some details about daily basic wages and monthly total earnings of workers employed in some of the concerns. In ordnance depots, which employ mostly unskilled labour, wages are lower than in factories.

TABLE 224.

Wages and Earnings.

Area.	Concern*.	Information relating to: Month (1944)	Information relating to: No. of days.	Types of* workers.	No. of workers.	Daily Basic Wages: Max.	Daily Basic Wages: Min.	Daily Basic Wages: Average.	Monthly total Earnings: Max.	Monthly total Earnings: Min.	Monthly total Earnings: Average.
						Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Kirkee	F	January ..	26	P—M	18,765	3 5	0 6	0 14	222 0	32 3	40 8
				T—M	3,620	3 7	0 6	0 14	166 13	26 15	40 8
	F	January ..	26	T—M	1,310	5 8	0 11	1 10	189 0	34 4	71 9
				T—F	20	0 7	0 7	0 7	27 4	27 4	27 4
	D	January ..	26	T—M	2,715	0 14	0 10	0 12	42 12	34 8	38 10
				T—F	195	0 8	0 5	0 7	30 6	24 3	27 5
				T—C	100	0 8	0 5	0 7	30 6	24 3	27 5
	D	August ..	24	T—M	2,760	3 10	0 8	0 14	132 0	30 0	37 8
Dehu Road ..	D	January ..	27	T—M	2,930	0 14	0 8	0 11	47 13	26 2	35 0
				T—F	1,480	0 7	0 5	0 6	24 0	20 7	22 4
				T—C	190	0 5	0 5	0 5	21 0	20 7	20 11
	D	September ..	30	T—M	305	0 10	0 8	0 9	30 11	28 5	29 15
				T—F	100	0 5	0 4	0 5	20 6	16 3	18 5
				T—C	28	0 5	0 4	0 5	21 2	15 0	19 8
Jubbulpore ..	F	July ..	26	T—M	7,697	0 10	0 8	0 9	30 13	30 9	30 11
				T—P	643	0 6	0 6	0 6	23 8	22 0	22 12
				T—C	200	0 5	0 5	0 5	19 2	19 2	19 2
				P—M	67	1 7	1 6	..	148 4	131 9	..
Calcutta	F	..	26	..	2,225	6 10	1 3	3 2	181 13	16 14	92 2
Ishapore	F	August ..	26	S—P	581	5 12	3 6	4 9	190 14	149 15	180 9
				S—T		4 3	2 6	3 4	136 6	75 1	105 11
				SS—P	4,148	2 14	2 0	2 7	92 14	62 2	77 8
				U—T	2,181	2 0	1 7	1 11	62 5	43 15	53 2
	F	July ..	26	..	643	7 6	0 13	2 4	207 0	39 4	95 2
Sewree	D	September ..	26	T—M	4,761	..	..	1 3	..	..	46 0
				T—F	330	..	..	0 7	..	..	19 1
				T—C	10	..	..	0 6	..	..	25 11
Bhavnagar ..	D	September ..	26	T—M	331	5 0	0 8	1 11	163 0	26 4	55 11
				T—F	88	2 8	0 6	1 5	76 0	20 12	45 0
				T—C	8	0 8	0 6	0 7	23 0	17 2	19 9

*F—Factory; D—Depot; P—Piece-rate; T—Time-rate; M—Males; F—Females; C—Children; S—Skilled, S. S—Semi-skilled; U—Unskilled.

Overtime.—The normal actual hours of work in an ordnance establishment are 8 on week-days and 4¾ on Saturdays. Hours of work, worked in excess of these, are considered as overtime. Usually one or two hours' overtime is worked every day and is paid according to the provisions of the Factories Act. For night-shift workers a 'bonus' is paid at the rate of half an hours' pay for every hour of overtime work during night-shift. Overtime work seems to be compulsory in the ordnance industry. Usually overtime is recorded in muster-rolls or check-rolls, which are open to workers' representatives for inspection. Generally each section or branch has a separate record of overtime work done and it is recorded on an Army Form—I.A.F.O.-1398 and on check-rolls.

Deductions and Fines.—Most of the deductions are on account of fines, as can be seen from the following figures, compiled from the Factory statistics for ordnance factories of the Bombay Province.

TABLE 225.

Deductions and Fines.

Year.	No. of factories.	No. of workers.	Deductions on account of				
			Total wages paid. Rs.	Fines. Rs.	Breach of contact.	Damage or loss.	Total.
1941 ..	7	14,643	59,10,891	524	..	2	526
1942 ..	9	27,746	1,38,73,261	1,750	236	96	2,082
1943 ..	10	30,935	1,52,87,531	4,508	..	94	4,602

All the five concerns investigated in Kirkee (2 factories and 3 depots) come under the Factories Act and the details of deductions and fines in 1943 in these concerns are given below.

TABLE 226.

*Deductions and Fines in Kirkee.**

Concern.	Deductions on account of					
	Fines.		Breach of contract.		Damage or loss.	
	Cases.	Amount.	Cases.	Amount.	Cases.	Amount.
		Rs.		Rs.		Rs.
Factory I	6,173	2,261	..	..	..	..
Factory II	512	157	..	..	22	20
Depot I	..	..	799	977	32	73
Depot II	748	623	..	..	..	..
Depot III	400	273	..	..	..	..

*Compiled from the factory statistics.

In fact all the concerns, except two, have maintained Fine Funds, and the amount outstanding in some of them is very high. The following table gives the amounts of some of these Fine Funds.

TABLE 227.

Fine Fund.

Area.	Concern*.	No. of workers employed.	Amount outstanding in Fine Fund.
			Rs. A. P.
Kirkee	F	19,201	5,910 1 2
	F	1,330	338 10 0
	D	4,435	4,847 7 2
Dehu Road	D	4,600	1,194 0 3
	D	6,567	200 0 0
Calcutta	F	2,225	362 8 9
Ishapore	F	8,561	2,023 4 4
	F	12,762	4,093 2 5
Sewree	D	5,339	3,860 2 3
Baroda	D	129	28 2 0
Bhavnagar	D	438	149 10 0
Cochin	D	250	135 3 3

*D—Depot and F—Factory.

The Director-General of the Ordnance Factories is the controlling authority for the Fine Funds in ordnance factories. However, the Superintendent or the Administrative Officer of an ordnance concern may be authorised by the Director General of Ordnance Factories to spend the moneys in the Fine Fund for providing (i) medical aid to workers—subject to cancellation by the Chief Inspector of Factories if the standard is not adequate, (ii) education facilities for workers, (iii) aid to establishment of or more successful working of co-operative societies for the benefit of employees and their dependents; (iv) sickness benefit, and (v) welfare activities including canteens, restaurants etc., for employees and their dependents.

Wage Period and Wage Payment.—The wage-period is a month in all the units investigated, except in a Sewree depot, where it is a fortnight: Following the Payment of Wages Act, payment is made within a week (in concerns employing less than 1,000 workers) or within 10 days (in concerns with more than 1,000 workers) of the month following. In a Dehu Road Depot workers have been divided into four groups and they are paid on different Saturdays in a month. One of the Kirkee depots admitted that on rare occasions and for administrative reasons payment was made on the 11th or 12th of a month

Holidays.—Ordnance factories have been exempted, for the duration of war, from Section 35 (Weekly Holiday) of the Factories Act. Most of the depots grant holidays on Sundays while the factories give holidays on Sundays and officially Gazetted holidays. In a Kirkee factory, for example, besides Sundays, there are 12 full and 2 half holidays. In two depots, a half day is normally given each Saturday for which full day's pay is allowed.

III.—Working Conditions.

The number of shifts depends upon the nature of work to be done. In all the four factories, the manufacturing process in war-time demanded the working of two normal shifts—day and night. Most of the depots, on the other hand, worked only a day-shift for the general class of workers. In addition to the general shifts, most of the concerns, especially the factories, work different shifts for the maintenance staff and in some cases for electrical, production or other sections. One of the Jubbulpore factories, for example, has three shifts for Electrical Section and eight for the Erection and Maintenance staff. In a Baroda Depot, there is an 8-hours shift for night-searchers and a 12-hour shift for fire fighting labourers ; while in a Bhavanagar Depot, there are three shifts of 8-hours each for gate-keepers, three each of 8 to 9 hours' duration for chowkidars and one eight-hour shift for drivers. The following table, however, gives only the general shifts, which are worked by a majority of workers.

TABLE 228.

Shifts and Hours of work.

Centre.	Concerns*.	Shift.	Shift. Commences at.	ends.	Rest hours.	Actual hours of work.	Total spread-over.
Kirkee ..	F	Day ..	8-30 a.m.	5-30 p.m.	1	8	9
		Night ..	8-30 p.m.	5-30 a.m.	1	8	9
	F	Day ..	7-30 a.m.	4-30 p.m.	1	8	9
	D	,, ..	8-00 a.m.	5-00 p.m.	1	8	9
		,, ..	8-30 a.m.	5-30 p.m.	1	8	9
Dehu Road	D	,, ..	8-15 a.m.	5-15 p.m.	1	8	9
	D	,, ..	8-20 a.m.	5-20 p.m.	1	8	9
	D	,, ..	8-45 a.m.	5-45 p.m.	½	8½	9
	D	,,	8-45 a.m.	4-45 p.m.	½	7½	8
Jubbulpore	F	,, ..	8-00 a.m.	5-00 p.m.	1	8	9
		Night ..	8-00 p.m.	4-00 a.m.	1	7	8
		Day ..	8-00 a.m.	5-00 p.m.	1	8	9
		Night ..	9-00 p.m.	5-00 p.m.	1	7	8
Calcutta ..	F	Day ..	8-00 a.m.	7-30 p.m.	1	10½	11½
		Night ..	8-00 p.m.	7-00 a.m.	1	10	11
Ishapore	F	Day ..	7-45 a.m.	7-15 p.m.	1	10½	11½
		Night ..	7-45 p.m.	6-45 a.m.	1	10	11
	F	Day ..	8-00 a.m.	7-00 p.m.	1	10	11
		Night ..	8-00 p.m.	7-00 a.m.	1	10	11
Cawnpore	F	Day ..	7-00 a.m.	5-00 p.m.	1	9	10
		Night ..	8-00 p.m.	6-00 p.m.	1	9	10
Sewree ..	D	Day ..	8-00 a.m.	4-00 p.m.	@	@	8
	D	,, ..	8-30 a.m.	4-30 p.m.	@	@	8
Kandivali	D	,, ..	8-00 a.m.	4-00 p.m.	½	7½	8
Baroda ..	D	,, ..	9-00 a.m.	5-00 p.m.	@	@	8
Bhavnagar	D	,, ..	8-30 a.m.	5-00 p.m.	1	7½	8
Cochin ..	D	,, ..	8-30 a.m.	4-30 p.m.	1	7½	8

*D—Depot and F—Factory.

As we have already noted, overtime is very common in this industry and it varies from one hour in most of the depots to one and a half to three hours in factories. Overtime work thus extends the number of actual hours of work and the hours of total spreadover. The hours of work on Saturdays in most of the factories are usually less than those on week-days ; they are 4¾ in Kirkee and Jubbulpore, 6½ in Ishapore and 7½ in Calcutta. In a Dehu Road Depot, the hours of work on Saturdays are 5½. However, overtime, even on Saturdays increases the hours of work to over 8.

Ventilation, Lighting, Congestion, Flooring, Protection against Heat, etc. – Almost all the ordnance establishments are situated in rural areas and have occupied extensive lands, with the result that in spite of a tremendous increase in the number of workers, there appears to be very little congestion. It seems that there exist some Ammunition Factory Regulations, which lay down certain standards in this respect for the ordnance factories. As for the depots, the work is mainly of non-industrial character such as loading and unloading and stacking in sheds, or in other words, storage, receipt and issue of ordnance stores. The labour required for such work is mostly unskilled and a large percentage (from 50 to 75 per cent.) of it works in open ground for a major part of the day. In one of the Dehu Road Depots, there are 82 sheds, while in another there are 6 sheds, the dimensions of each being 315 ft. × 185 ft. The floor area per worker is 3,417 sq. ft. in a Baroda depot and only 53 sq. ft. in an Ishapore factory.

Shelters.—Shelters have been provided only in seven concerns—four factories (one each in Kirkee, Jubbulpore, Ishapore and Cawnpore) and three depots (one each in Kandivali, Bhavnagar and Cochin). The Kirkee factory employing about 1,330 workers has 8 shelters as follows :—

*

TABLE 229.

Rest shelters in a Kirkee Factory.

Shelter.	Dimensions.	Description.	Equipment.			
			Tables.	Chairs.	Lockers.	Other amenities.
I ..	18′ × 15′ × 12′ ..	Staff meal shelter for Mechanical workshop	2	10	2	1 Cold water tap.
II ..	44′ × 40′ × 12′ ..	Workmen's meal shelter for V Section (2 rooms).	..	..	10	3 racks for clothes.
III ..	45′ × 20′ × 12′ ..	Workmen's shift room and bath room for W Section (2 rooms),	2	..	52	9 bread bins, 3 benches, 2 wash fountains, and 5 cold water showers.
IV ..	21′ × 10′ × 13′ ..	Supervisor's Shift room	1	2	8	1 wash basin and 1 cold water shower.
V	87′ × 41′ × 12′ ..	Workmen's shift room and meal room for X Section.	..	..	5	9 bread bins, 6 hangers, 1 shelf pigeon hole type, 2 racks, 2 wash fountains, 6 water showers, 2 cold water taps.
VI ..	78′ × 37′ × 12′ ..	Workmen's shift room and meal room for Y Section.	1	..	25	7 bread bins, 1 bench, 2 stands, 1 almirah, 1 shelf pigeon hole type, 16 cold water taps and 6 cold water showers.
VII ..	44′ × 41′ × 12′ ..	Workmen's shift room and meal shelter for Z Section.	1	..	..	1 shelf pigeon hole type, 2 racks, 6 stools, 1 wash fountain, 3 cold water showers and 1 tap.
VIII ..	19′ × 12′ × 13′ ..	Staff Shift room for Z Section	..	..	1	2 cupboards, 1 box, 1 cold water tap, 1 hot or cold water bath.

The dimensions of Jubbulpore shelters are 46′ 10½″ × 18′ 4½″ with 8′ verandah and the shelters are near the canteens. In the Ishapore factory, there is a shelter (140′ × 26′ 4″), a dining hall (140′ × 50′) and a tea canteen (51′ 9″ × 12′). The Cawnpore factory has built in war time three temporary sheds (55′ 6″ × 29′, 11′ × 12′ 6″ and 14′ 9″ × 21′ 9″) with wooden planks and paulin coverings. Shelters in the three depots are also of a temporary character. The dining shed (60′ × 12′) in the Kandivali depot is of wooden construction. In the Bhavnagar depot, there is a temporary shed with an area of 15,120 sq. ft. and having paved floor and iron walls. The shed houses a canteen and radio sets for the entertainment of employees. Most of the shelters are thus associated with canteens.

IV.—Welfare Activities.

Sanitary Arrangements, Water-Supply, Latrines, Urinals, Washing and Bathing facilities, etc.—As most of the ordnance depots are of a purely temporary character, sanitary arrangements in them are also of a similar type. Latrines and urinals have been built in semi-permanent brick-structures, having cement flooring. Water is supplied through taps, and in a few cases is filled in tanks. Most of the factories, however, are of long-standing and, hence, have permanent arrangements in this respect. Generally, sanitary arrangements in the factories are under the supervision of qualified sanitary staff with the necessary conservancy establishment. Latrines and urinals are permanent and have running water. The following details from a Jubbulpore factory are worth noting in this respect. " All the latrines and urinals inside the factory work by an automatic flushing system. Every latrine has been provided with two urinals with partitions at each end inside the latrine and two for the urinals. The flushing tanks of the latrines automatically flush at the interval of 20 minutes and the urinals at 10 minutes. The latrines and urinals are connected to the underground sewer lines which carry the sewage from them to the two aerobic chambers, which are situated outside the perimeter wall. The source of water supply is the Pariot Tank. This water is filtered and chlorinated in the fitter plant which is situated inside the factory and then supplied through G. I. pipes to the whole factory.... water-taps have been conveniently fixed near the sections, where the workmen are working ... where explosive work is being carried out, arrangements have been made in every change room for shower baths." Though in other factories, arrangements do not approximate to this standard, they are mostly satisfactory. As for the provision of cool water in summer, various measures are adopted. In a Jubbulpore factory, ice-water is provided while in other concerns various methods are used such as *chatties, Mudkas* or water-drums, filtered tanks, chlorinated wells, station reservoirs, water-carriers and most frequently, ordinary water-taps.

Medical Facilities—This branch of engineering has provided a large number of well-equipped dispensaries and hospitals. Details in this regard are given in the table below :—

TABLE 230.

Arrangements for Medical Aid.

Area.	Medical Institutions.	No. of cases treated daily	Medical Staff—Qualifications and Remuneration (p.m.)	Remarks.
Kirkee	I—For two factories and one depot—		Doctors are provided by Government There are 10 doctors : one I.M.S. Officer, 2 C.M.P. Graduates and the rest are Subordinate Medical Service Officers. Emoluments are fixed by the Central Government.	Range Hills Dispensary is in a Workers Colony and caters for women and children of workers residing in this colony and working in the two factories and one depot.
	(a) Inside the concerns—			
	(i) Detention Hospital—20 beds ..	..		
	(ii) Ammunition Factory Dispensary	305		
	(iii) ,, ,, First Aid Post ..	97		
	(iv) H.E. Factory Dispensary ..	85		
	(v) Scheme XII Dispensary ..	110		
	(b) Outside the concerns—			
	(i) Ordnance Factories Hospital (with 60 beds for men and 20 for women and children).	..		
	(ii) Range Hills Dispensary (for women and children).	125		
	II—Dispensary (inside another Depot in Kirkee).	100	1 Sub-Asstt. Surgeon (Rs. 150/- p.m.), 1 doctor (on Rs. 5/- p.d.), a compounder and a dresser.	A ward in the kirkee Cantonment General Hospital is also being used.
	III—Dispensary (inside a third Depot in Kirkee).	40	Captain I.A.M. Corps	Treat out-patients only.
Dehu Road*	I—For one Depot, there are 5 dispensaries (3 inside and 2 outside the depot).	250	3 L..C.P. & S. doctors—one gets Rs. 164/ p.m. and the other two get Rs. 5/- p.d. (& D.A. of Rs. 12/- p.m.) each.	The outside dispensaries are for workers' families.
	II—For another Depot, there are 3 dispensaries and one Detention Ward.	200	Sub-Asstt. Surgeon on Provincial Govt. scale + Rs. 72/- as allowances.	In addition about 100 cases of vaccination and inoculations are treated daily.
Jubbulpore	I—Dispensary (inside a factory) ..	197	5 doctors (1 L.M.P. ; 2 L.S. M.F. ; 1 L.C.P. & S. and 1 Lady S.A S.—L.M.F. ; 3 on Rs. 160/- and 2 on Rs. 225/- each).	Besides, there is a dispensary and a 24-bedded hospital (for workers and their families) at two furlongs from the factory.

Area.	dical Institutions.	No. of cases treated daily.	Medical Staff—Qualifications and Remuneration (p.m.)	Remarks.
	II—Dispensary and Hospital	430	11 doctors (1 Lt.-Col. I.M.S. as Chief Medical Officer & 1 M.B.B.S. as Asstt. Medical Officer (Rs. 704/-) ; 4 Asstt Surgeons (2 M.B.B.S ; 1 M.B.B.S. ; and 1 M.M.F.) on Rs. 330/- ; and 5 S.A.S. (1 L.S.M.F. and 4 L.M.P.) on Rs. 176/- each.	The hospital is outside the factory and caters both for factory workers and their family members.
Calcutta	I—An outdoor dispensary (inside the factory).	80	(i) Medical Officer—Capt. M.B., L.M. (Dub.), F.R.F.P.S. (Glas.), I.M.S. (Retd.) Rs. 325/. (ii) A.M.O.—L.M.F.—Rs. 160/-.	Serious cases are sent to Medical College Hospital or Indian Military Hospital, Alipore.
Ishapore	I—1 dispensary (inside one factory) ..	260	Medical Officer of I.A.M.C. (Rs. 700/-) 3 Asst. Surgeons (Rs. 330/- each).	One dispensary is inside the factory In-patients, male and female are treated in the Hospital.
	II—1 dispensary (inside another factory) In addition, there is a dispensary in the workers' colony and a hospital.	325	2 S.A.S. (Rs. 156/- each). 1 Lady S.A.S. (Rs. 220/-).	
Cawnpore ..	I—An Out door Dispensary ..	200	5 doctors (1. M.B.B. S —Rs. 300/-, 2 L.S.M.F. and 1 L.M.F., L.I.M.—Rs. 152/- each, and 1 L.C.P.S.—Rs. 160/-.)	Treats out-patients only.
Sewree	I—Dispensary (in a Depot)	205	Doctor—L.M. & S. D.P.H. (Cantab)—Rs. 350/-.	
Kandivali ..	I—Dispensary (in a Depot)	50	A.S. (in I.A.M.C.) and on I.W.O. Compounder.	
Baroda	I— Dispensary (in a Depot)	30	Doctor—L.M.P.—Rs. 200/-.	
Bhavnagar ..	I—Depot M. I. Room	..	....	Serious cases are transferred to State Hospital.

* Besides, two more depots have a dispensary run by their common Welfare Centre in their Housing Colony.

The table shows that between 17 concerns there are four hospitals, twenty two dispensaries, one First-Aid Post and one Depot M.I. Room, exclusively for the use of workers in the ordnance concern . In addition, various civil hospitals like the Sassoon Hospital in Poona and military hospitals like the Cantonment General Hospital, Kirkee, and the Military Hospital, Alipore are utilised by many ordnance concerns. In many cases, donations are given to these hospitals for services rendered. A Jubbulpore Factory, for example, annually contributes Rs. 6,000 to Victoria Hospital and Rs. 500 to Rs. 1 000 to Elgin Female Hospital. A Kirkee depot contributes from its Depot Welfare Fund to the Kirkee Cantonment Hospital. The prevalent diseases are petty indispositions, common colds and fevers, malaria, diseases of the respiratory system, gastro-intestinal diseases (in children), bronchitis, minor injuries, spiro-chalite-ulcers, thread-worn diarrhœa, etc. The common occupational disease is T.N.T. dermatitis. However, workers using lead paints or other lead compounds, creosote oil, leather, etc., are also open to the risks of industrial diseases. The following statement gives some details about occupational diseases in four factories.

TABLE 231.

Occupational Diseases.

Factory in	Unit.	Number of cases of occupational diseases.
Kirkee	1	Tetryal 36 ; Turpentine 34 ; and C. E. 154.
,,	2	C. E. Dermatitis 1 ; T. N. T. Dermatitis 15 ; Acid 3 ; T. N. T. Poisoning 1.
Jubbulpore	1	Chemical Dermatitis 1.
,,	2	T. N. T. Dermatitis 3.

Only in two concerns, both depots, there seems to be a regular periodical medical examination of all the workers. In a Dehu Road Depot, Splenic Index is taken once in six months, while in the Bhavnagar depot all employees are medically examined once a year. In some other concerns, only a few classes of workers, such as those working on lead and lead compounds, on explosives, in paints shops and in canteens, etc., are examined periodically.

Canteens.—All the ordnance concerns, with the exception of the depot in Cochin, have canteens. Some of them have more than one canteen ; for example, a factory in Jubbulpore and a depot in Dehu Road have four canteens each, while another depot in Dehu Road has five. In the case of depots, the larger number of canteens is due in some cases to the existence of sub-depots, which may be far away from the main establishment. In a depot in Kirkee, the canteen is situated outside the depot and hence four mobile tea stalls are placed inside the depot during lunch break and tea recess. In all the canteens, tea, light refreshments and cigarettes are served generally on coupon system. In five canteens, however, hot meals also are supplied. Out of the 21 concerns possessing canteens, only five have allowed their canteens to be run by military or private contractors ; the rest of the canteens are run and controlled by the Workers' Welfare Committees. Even though the articles are sold below the market rates, a large margin of profit is left. In fact, it was admitted that the Welfare Fund in some of the Dehu depots was benefitted in thousands, because of the profits from the canteens and the grain shops. A major part of the profits from the canteens, run by the Workers' Welfare Committees, goes to the Welfare Fund. In a Kirkee factory, for example, this part is 90 per cent, while in a Kirkee depot, a sum of Rs. 400 out of the profits is donated every month to the Welfare Fund.

Creches.—Female labour is far more prevalent in depots than in factories. However, only two depots, one each in Kirkee and Dehu Road, maintain Baby creches. In the Kirkee depot, babies are given free food, milk and fruits. Recreational and medical facilities are provided free of charge. In the Dehu Road depot, milk and medical attendance is given free to children. The average number of babies left at these two creches is 70 and 30 respectively. Besides these two creches, the workers' colony of two Dehu Road depots runs a creche by itself.

Education.—Twelve out of the twenty two concerns investigated have made some provision for the education of their workers' children, while only five out of them encourage the education of adult workers. The labour Welfare Department of the Ammunition Factory, Kirkee, has started a primary school in 10 tents in the Range Hills Estate (a colony of workers employed in two factories and one depot in Kirkee). Nearly 360 children are attending the school, receiving education in Marathi, Tamil, Hindi, Urdu and English. In the same school, between 3 p.m. and 5 p.m., the mothers and grown-up sisters of the school children come for their education and the subjects taught are cutting, sewing, reading and writing, balanced diet, household management, fancy needle-work and knitting. In addition to this school, an annual grant of Rs. 4,000 is paid to a private school for the education of workers' children during day and for workmen during night. The workmen of a Kirkee depot, who attend this Night School, are allowed to draw half an anna per day to meet the school fees. Another Kirkee depot bears the tuition fees of the workers, who attend the Night School. In a Jubbulpore factory, the recurring expenditure on Primary and Secondary Schools is about Rs. 40,000 a year, out of which one-third is borne by the Provincial Government and two-thirds by the Factory, *i.e.*, by the Central Government. Of the initial expenditure for the construction of buildings, etc., the proportion borne by the factory is also two-thirds. The factory has arranged a bus-service to take those children, who go to the city (about 4 miles) or other distant schools. Two of the Dehu Road depots, which employ a number of children inside the depots have made arrangements for their education in the afternoon every day. These schools are financed entirely out of Welfare Funds. The workers' colony of other two depots in Dehu Road maintains a small school, unaided by the factory, for the education of the children of workers staying there. In the workers' colony (Northland Workmen Line) of the Ishapore factories, a Primary school for the education of children up to 8 years of age is maintained ; this school is partly supported by the Government of Bengal. An English High School has also been started in the Northland Estate with effect from the 1st January 1945. The Cawnpore factory also maintains a primary school for the education of workers' children. Attempts for the education of adult workers met with failure in a number of factories. In a Kirkee factory, for example, literacy classes in English, Hindi and Marathi were conducted in different sections during recess time for nearly six months. These classes, though popular, had to be discontinued because of lack of voluntary teachers. However, arrangements are being made in the Range Hills Estate to have adult education classes in the evening between 8 p.m. and 10 p.m. In Ishapore there was a free Night School for the education of adult workers, but it had to be discontinued due to the introduction of extended hours of employment on mobilisation. In the Kandivali depot, daily literacy classes are run under the supervision of the Labour Officer. In a few concerns, facilities exist for vocational education of workers and their children.

Grain Shops.—Fifteen out of the twenty-concerns have opened grain shops for their workers. In Kirkee and Ishapore, workers have co-operative societies which supply not only rationed articles at controlled rates but also other household articles such as hosiery, cutlery, cloth, etc., below the market rates. The Co-operative Society in Kirkee sells the articles at 12 per cent above the cost price. Some concerns have more than one shop ; for example, a Jubbulpore factory has five ration shops. The articles sold in most of the shops are rationed grains, sugar and kerosene. In the Cochin depot, however, only rice is sold. The prices in most cases are identical with local rationed prices, though a few shops give some concession. The prices in the Cawnpore shop, for example, are fixed by the Employers' Association of Northern India and they are in all cases lower than the market rates. Similarly the Ishapore Co-operative Stores sells rice and atta to workers at rates which are lower by half an anna per seer than those prevailing in the market (i.e., controlled rates).

IV.—Housing Accommodation.

Most of the ordnance establishments experienced a sudden expansion in employment during war time, with the result that the problem of housing became difficult. The problem became more acute because of the fact that most of the ordnance concerns were established in rural areas. To meet this emergency, workers' colonies, generally under the management of the ordnance authorities, were set up. Such colonies at present exist in Kirkee (Range Hills Estate), Dehu Road (Labour Camp), Jubbulpore, Ishapore and other places. The following two tables give some details about housing provided by employers in the concerns investigated.

TABLE 232.

Housing Provided by Employers.

Centre	Concerns.*	Proportion of workers housed.	Types of housing provided.**	Rentals Rs.	Remarks.
Kirkee	F	4·6%	'R' type quarters	1-8-0	These are in Range Hills Estate @
	F	13·0%	'R' and 'RA' types	1-8-0 & 2-0-0.	
Dehu Rd.	D	5·0%	'R' type	1-8-0	
	D	10·0%			
	D	10·0%	Chatai walls and tiled roofs	free	Workers' colony @
	D	8·0%	Chatai walls, partitions and tiled roofs	,,	In addition workers live in Bye-pass Coolie camp Dehu @
	D	10·0%	'C' type quarters	,,	
Jubbulpore	F	13·0%	'P', 'Q' (New & Old), 'R' (New & Old) types and single-men's quarters (one room 18′×20′ for 6 persons).	0-9-0 to 5-10-0	Worker's colony.
	F	62·76%	'RA', 'R' and 'S' types and Barrack type (76′×21′ for 48 men)	1-2-0 ; 0-14-0 and 0-12-0	Worker's Colony @
Ishapore	F	24·0%	'N', 'P', 'Q' types and quarters for single and married men	0-12-0 to 11-4-0	Worker's Colony.
	F	20·0%			
Cawnpore	F	5 workers	Single tenements	0-12-0	
Kandivali	D	25·0%	Long sheds, barrack type	Free	

@ Further details of these colonies are given in the next table.
*D—Depot and F—Factory.
**The details of the various 'Types' of quarters mentioned in this column are given in the following table.

TABLE 233.

Types of Quarters.

Type	Rentals	Details.
	Rs.	
'N'	11-4-0 (Ishapore)	3 rooms } and kitchen, bath-room, verandah and compound
'P'	5-10-0	2 rooms } with independent water-taps and latrines.
'Q' Old		4 rooms }
'Q' New	2-8-0 (Jubbulpore and Ishapore).	2 rooms, bathroom, kitchen verandah and compound.
RA	2-0-0 (Kirkee)	2 rooms (12′×9′ each), kitchen (8′×6′) verandah (6′×4′) and courtyard.
	1-2-0 (Jubbulpore)	14′×12′ including bathroom 5′×4′.
R	1-8-0 (Kirkee)	1 room (12′×10′), kitchen (8′×6′), verandah (6′×4′) and court-
	0-14-0 (Jubbulpore)	yard (14′×12′ including bathroom 5′×4′).
S	0-12-0 ,,	1 room (12′×10′), kitchen (8′×6′), and verandah (6′×4′).
,,	2-4-0 (Ishapore)	Supervisors' temporary war type quarters.
,,	3-0-0 ,,	Married workmen's war type quarters (2 rooms).
,,	0-12-0 ,,	Single ,, ,,
,,	1-4-0 ,,	Married ,, Peace ,,
,,	1-0-0 ,,	Single ,, ,, ,,

Range Hills Estate is a colony set up in 1942 by the ordnance authorities for the staff and workers of two factories and a depot in Kirkee. It is about three miles from Poona and about a mile and a half from the Kirkee ordnance factories. The quarters are of several types, of which 'RA' and 'R' are meant for the workers. Towards the end of 1944, 23 RA type quarters and 1,322 R type quarters were allotted to workers. The quarters are brick-built and are barrack-type. Latrines are common, while separate water-taps are provided only for RA type quarters. For R type quarters, water-taps are common, 2,000 gallons of water are supplied free of charge to every quarter per month ; the cost of this free supply of water comes to Rs. 1-4-0 per month. The Superintendent of the Ammunition Factory is responsible for the administration of quarters and he has qualified sanitary and conservancy staff to look after the sanitation of the Estate. In April 1944, a census of the persons was taken and it was found that 23 RA type quarters were occupied by 70 persons and 5,399 persons (1,771 males, 1,705 females and 1,923 children) lived in the 1,276 R type quarters. In the R type, on an average 4.2 persons lived in a tenement. However, in some cases the proportion was very high. The following are a few examples.

TABLE 234.

Congestion in Range Hills Estate.

Tenement	Number of persons living in a 'R' type quarter.*			
	Men	Women	Children	Total
I	5	3	8	16
II	4	4	5	13
III	4	3	6	13

*For area of this quarter see the preceding table.

The Estate has a school, a grain shop and stores conducted by the Co-operative Society and a dispensary for the workers and their families.

The Labour Camp organised by the Labour Officer of the two Dehu Road depots presents a different picture. The camp consists of 400 family rooms (20 blocks with 20 rooms each) and 10 ' bachelor blocks '. Each of the family rooms has 10 ft. × 7 ft. area and the walls are made of ' chatai '. The rooms are overcrowded ; some of them house two families while a number of workers sleep outside the rooms. Each room has a small verandah, where an oven is kept. In front of each room, there is a small garden, where workers grow vegetables and flower-plants. These 400 rooms have only 4 water-taps for drinking purposes and 2 cement water tanks (each 8 ft. × 4 ft.) for bathing and washing purposes. The ten ' bachelor blocks ' are practically medium-size halls, intended mainly for sleeping, though the workers cook their food also there. At present, the best features of the Camp are a School (with separate classes for boys and girls), a sort of nursery or creche and a small dispensary with three beds—all run by the Welfare Committee of the two depots. The School and the Nursery are in one building. About 60 children are on the rolls of the school but no benches have been provided. Wooden slates are supplied free. In the Nursery, a female nurse looks after the babies, brought there by their elder brothers or sisters, who are students of the school. The parents leave their homes before 7.30 a.m. for the depots, leaving the infants to the care either of their grown-up children or their neighbours. The complaint of the School authorities was that soon after the boys learn to read and write, they try to be office-boys in the adjoining depots. The dispensary contains a small maternity ward with one bed. About 50 to 55 out-patients are treated every day. The Depots bore the cost of building and furniture, and medicines worth about Rs 600 were bought out of the Welfare Fund. Sanitation and arrangements for water-supply are far from satisfactory. Latrines have walls of torn gunny bags, and are uncovered. The walls of family rooms are built of combustible *chatais*. In fact, in October 1944, two blocks of rooms were burnt.

The workers' colony of a Jubbulpore factory where more than 8,000 workers reside, is about 2 furlongs from the factory and extends to a mile and a half. Communal latrines and urinals on water-carriage system have been provided and they flush intermittently. Water is stored in a reservoir known as Pariot Tank. Water fetched through a canal, receives chemical treatment and the filtered water is supplied through G.I. pipes to all residential quarters. Workmen's quarters are served water from public stand pipes, where washing and bathing is allowed to a limited extent. One water tap with ½ in. or 3|4 in. bibcock is provided at common stand post for each block of 6 ' RA ' or 12 ' R ' or ' S ' quarters ; 4 communal flush latrines have been provided for each colony of 26 blocks. On an average five persons live in each quarter.

With the exception of workers in a Jubbulpore factory, more than 75 per cent of workers in the ordnance concerns are not provided with any housing by the employers. Many of these workers come from the adjoining towns such as Poona, Jubbulpore, Bombay and Baroda or from the villages nearby. A survey of ' where and how the workers come to the factory ' was carried out by a Kirkee factory and the following results were obtained.

TABLE 235.

Where and How the Workers Come to a Kirkee Factory.

Distance from factory.	Within a mile.	1 to 5 miles.		6 to 10 miles.		11 to 15 miles.		16 to 20 miles.		Total over 1 mile.		Total.
Conveyance	..	Cycle	Foot and train	Cycle	Foot and train	Cycle	Foot and train	Cycle	Foot and train	Cycle	Foot and train	
Number of workers.	9,322	2,688	5,340	2,137	1,007	384	39	29	1	5,328	6,387	21,037

Note: There are about 1000 Persons going out every Month and coming in, but while the man will not be the same, the proportion remains somewhat the same.

A local train service (with five locals in the morning and five in the evening) runs between Poona and Dehu Road (a distance of 16 miles), while a bus service caters for Jubbulpore and Khamaria (a distance of 8 miles). However, the workers have to make their own arrangements in this respect.

In most of the cities the question of housing accommodation has become acute, because of the enormous influx of population in war time. The conditions of workers, who live in the slums of these cities, are very unsatisfactory. Sanitary arrangements are inadequate and epidemics like plague and small-pox are common. A certain percentage of labour, which comes from villages, also lives in similar conditions. The Bye-pass Coolie Camp of Dehu Road provides a vivid illustration. The establishment of a number of depots in Dehu attracted a lot of labour from far-off Provinces, and because of the lack of housing provided by the employers, they erected *ad hoc* huts in the open areas near the railway station. In course of time it became an overcrowded and insanitary colony. After some time the military authorities took interest in the colony as most of the workers were their employees. The huts were arranged in regular lines; roads were chalked out and open drainage arrangements were made. The place was made a protected area by driving out undesirable characters, such as money-lenders. Shops were allowed to be set up and a dispensary and a school were also established. At present the colony accommodates nearly 7,000 labourers of all depots. These workers get the land free and they erect their own huts of 'chatai'. Even now conditions are far from satisfactory. The dispensary with its limited hours does not cater adequately for the needs of the workers. Arrangements for the supply of water are unsatisfactory; drinking water for 7,000 people is available from only one well, which also is not kept in good condition. There is another well of saltish water. As for congestion, the average number of persons per hut is 5 to 6. In many cases, the number is even larger as can be seen from the following figures:

TABLE 236

Congestion in Bye-pass Coolie Camp of Dehu Road.

Huts	Number of persons living in a hut*.				
	Men	Women	Boys	Girls	Total
A	7	3	4	..	14
B	7	4	2	1	14
C	10	1	..	..	11
D	9	1	1	1	12
E	6	5	..	..	11
F	4	4	..	..	8
G	4	4	1	..	9
H	3	7	1	..	11
I	..	7	..	..	7
J	..	6	..	..	6
K	..	6	2	1	9
L	..	8	1	..	9
M	4	5	4	..	13

* The area of the hut is usually 7'×4'.

V.—Trade Unions and Strikes.

Trade Unions.—The very nature of the ordnance concerns discourages the formation of trade unions in this industry by 'outsiders'. Of the concerns investigated, only two factories (one each in Jubbulpore and Calcutta) mention the existence of trade unions among their workers. The Jubbulpore Union, though registered and recognised by employers, has been inactive in war time. The union in Calcutta was awaiting the recognition of the Government of India. Old issues of the Labour Gazette, Bombay, make references to the 'High Explosive Factory Workers' Union, Poona, established at the end of the year 1941, with a membership of about 100. This union, it appears, came into existence after a minor strike. After a short existence of about eight months, the union, still unregistered and unrecognised, fell into a state of moribund inactivity, when some of its leaders were arrested during the 1942 disturbances.

Workers' Welfare Committee.—The Labour Department of the Government of India advised the ordnance establishments to set up a Labour Welfare Committee in each concern to enable the workers to represent their difficulties. A 'Model Constitution' put forward by the Labour Department and the A.D.G. (Ord. Fy.) letter No. Z-00587|TE|OF-12A of 12th July 1944 are given in Appendix VII. This Model Constitution was adopted by most of the ordnance concerns, though they made a number of important changes, suitable to the particular conditions. Out of the 22 concerns investigated, 16 have set up Workers' Welfare Committees. In a Dehu Road Committee all the members were nominated, provisionally. In a Kirkee depot, the Committee is known as the E.T.E. Employees' Welfare Fund and the rates of subscription for the E.T.E. are :

Monthly earnings.	Rate of subscription (annas p.m.).
Up to and including Rs. 50	1
Over Rs. 51 but under Rs. 101	2
Over Rs. 101 but under Rs. 151	3
Over Rs. 151 but under Rs. 201	4
Rs. 201 and over	6

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In a few cases, Voluntary subscriptions are also collected. For example, in a Kirkee factory, boxes are sent round on pay-days. Voluntary donations in these boxes amount to Rs. 200 per month and are utilised for cash and medical benefits to the sick and injured, funeral aid, teachers' pay in primary schools, aid to schools, recreation, entertainment, cycle insurance, etc.

Strikes.—The fact that most of the concerns have been started only recently and that the nature of the industry precludes the formation of effective unions, account for fewer strikes here than in many other industries. Moreover, most of the strikes have been summarily dealt with by the authorities and hence they have been usually of not more than a few days' duration. A Kirkee factory and a Sewree depot report the occurrence of 2 or 3 minor disorganised strikes in each. A Jubbulpore factory, established only in February 1942, experienced 9 strikes in two years. Details of strikes in other concerns are given below. It may be seen that no strike has lasted for more than a week, while a majority of strikes were settled in a day's time.

TABLE 237.

*Strikes**.

Centre	Concern	Date when strike		Cause	How settled
		Commenced	Ended		
Calcutta	Factory	16-5-1944	20-5-1944	..	..
Cawnpore	Factory	4-10-1940	9-10-1940	(i) Misunderstanding due to wrong translation of word prosecution as 'conviction'. (ii) Demand for bonus.	Negotiation and explanation.
		11-7-1941	12-7-1941	A workman was arrested on account of an assault on the Foreman.	Negotiation.
		5-8-1941		Protest against disciplinary action.	No negotiation.
		11-5-1943	17-5-1943	Demand for bonus increase.	
Bhavnagar	Depot	14-10-1943	16-10-1943	Demand for wage increase.	On explaining to workers that the rates compare favourably with local rates, they returned to work.
		26-4-1943	2-5-1943	,,	Demand not granted. Workers resumed work. Instigators were discharged.

* Details of strikes (1942-44) in a Jubbulpore factory are given in Appendix VIII.

Sixteen out of the twenty-two concerns replied that there were no strikes by their workers.

VI.—General.

Accidents.—The following table gives details about accidents which occurred in some of the concerns investigated, during 1943.

TABLE 238.

Accidents in 1943.

Centre.	Concern.	No. of accidents.	Accidents for which compensation was paid.	Amount of compensation.	Remarks.
Kirkee	F	1915	1915	10,000-5-1	The cases include 1 of death, 6 of permanent disablement and 1908 of temporary disablement and the amounts of compensation paid were Rs. 1,050, Rs. 3,243-6-3 and Rs. 5,706-14-10 respectively.
	F	1056	8	4439-0-0	
	D	175	..	..	The cases are for 8 months (May-December 1943) only. In all cases injury pay (Rs. 629-1-0) was paid.
	D	61	1	1350-0-0	
	D	68	..	..	Injury pay (Rs. 1,112-13-0) was granted in all cases.
Dehu Road	D	95	..	..	Injury pay was granted.
	D	65		..	
	D	17	2	1800-0-0	The two were fatal cases. In other cases, injury pay was granted.
	D	3	3	2208-0-0	All three were serious cases.
Jubbulpore	F	1299	17	102,889-2-11	
	F	268	2	798-0-0	In other cases, injury pay (Rs. 1,560-3-3) was paid.
Calcutta	F	37	1	210-0-0	
Ishapore	F	786	6	2493-1-0	In 780 cases, injury pay (Rs. 5,645-3-9) was paid.
	F	31	31	16,357-11-10	
Cawnpore	F	1163	6	2017-0-0	
Sewree	D	288	19	8189-0-0	
Bhavnagar	D	37	..	..	Injury pay was paid in all cases.
Cochin	D	1	..	..	Case had been referred to W.C. Commissioner, Madras.

Indebtedness.—Workers usually take loans from the Pathan or Bania money-lenders at exorbitant rates of interest, varying from 2 as. to 4 as. per rupee per month i.e., between 150 and 300 per cent per annum ! It was estimated at one depot that most of the labourers were involved up to at least half of their monthly emoluments. The Labour Officer of a Kirkee depot conducted an enquiry into indebtedness among the workers of the depot. Some of his observations are worth noting : "During the year 1944, 75 cases of indebtedness were officially reported. Many more remain unreported for one reason or the other. Majority of these had dealings with the Pathans who are charging interest at 4 as. per rupee. The cases involved extended from a paltry sum of Rs. 5 to Rs. 200.....Among labourers, who comprise more than 60 per cent. of the Depot staff, indebtedness is general..... It is considered that the dearness allowance granted is in no way adequate to gap the hiatus between the cost of living figures taking 1939 as the base and the prevailing inflated costs. The common fallacy that the general indebtedness of the worker is due to extravagance on ceremonies connected with marriages, funerals and festivals is not supported by the results of the investigations.

To discourage workers from taking loans from outsiders, the best method is to grant loans through a Co-operative Society. The investigation, however, only showed the existence of only 6 such societies, one each in Kirkee, Jubbulpore, Calcutta and Cawnpore and two in Ishapore. The interest charged by three of these societies (one each in Kirkee, Ishapore and Cawnpore) is at the rate of 9$\frac{3}{8}$ per cent. per annum or Re. 0-12-6 per month for a loan of Rs. 100. The rate of interest of the other society in Ishapore was 6$\frac{1}{4}$ per cent per annum ; the total amount of loans due from members of this Society on 1st April 1944 was Rs. 4,72,728. The lowest rate of interest is charged by the Society in Jubbulpore ; it is 4 per cent. per annum. The Co-operative Society in Kirkee caters for two factories and one depot. It also runs a Thrift Fund which helps members to save a little monthly. In all Societies, loans are advanced subject to the usual conditions of length of service, limit of loan and available sureties. The loans are recovered from one's pay in small monthly instalments. In the absence of a Co-operative Society, two depots, one each in Kirkee and Dehu, give to their workers interest-free advances against the wages earned. A Co-operative Credit Society was considered impracticable, as most of the workers were extra-temporary. In the Bhavnagar depot, a Welfare Fund has been set up to provide interest-free loans in case of emergent needs.

Provident Fund.—For the workers in the ordnance factories, the Provident Fund Rules have been published under 'Indian Ordnance Factories Workmen's Provident Fund Rules' (Code No. MO-J 22. Manager of Publications, Lelhi). Subscription to the Fund is compulsory after 3 years' continuous service. The subscription is at a uniform monthly rate of one-twelfth of the emoluments of the subscriber. On the 1st October and 1st April of each year, the deposit account of each subscriber is provisionally credited with a Government contribution which is 75 per cent. of the amount of the contribution of the subscriber during the preceding half year. The rate of interest allowed is determined from time to time by the Government of India ; for the present, however, it is 5 per cent per annum. The full amount of Government contribution and interest thereon is conditional on a subscriber completing 15 years' continuous service or on his discharge or resignation for causes beyond his control and without his fault. None of the depots, except one in Kirkee has Provident Fund system, because all the workers are extra-temporary and hence are not entitled to any such Fund as per its rules. For the same reason, no pensions or gratuities are granted. It has been criticised that to prevent the extra-temporary workers from establishing any such claim a special provision has been made under Rule 25(iii) of Financial Regulations, Part I, that all those who have put in more than six months' service on 31st March of each year will be considered as technically discharged on that date and re-entertained with effect from 1st April succeeding.

Gratuities and Pensions.—Gratuities are paid where Government 'bonus', i.e., contribution to Provident Fund, with interest on the I.O.F.W.P. Fund falls short of the amount of gratuity admissible to workers. Pensions up to a maximum of Rs. 25 per month are admissible under exceptional circumstances only to those who retire after at least 35 years' exemplary services. Relevant rules regarding gratuities and pensions are given below : [from Government of India, Defence Department (Army Branch) letter No. 19912|X|MG.I. of 30th December 1936 to the Master General of Ordnance in India] :—

Para. 3 Gratuities will be granted according to the scale laid down in Para. 4 below and will be admissible in the following cases :

(i) Workmen on discharge owing to sickness outside their control, or old age, after long and approved service.

(ii) Workmen of long service discharged on account of shortage of work ;

(iii) Workmen with qualifying service who leave or are discharged from the service for reasons other than those above ;

(iv) The family of a diseased workman coming under one or other of the above three categories ;

Note.—In the case of those who are or were members of the I.O.F.W. Provident Fund, however, they or if they die while serving, their families, as the case may be will only be granted gratuities if their accumulations (Government Bonus and Interest) in the Fund at the time of their retirement or death are less than the gratuity admissible and amount of Government Bonus with interest to their credit in the Provident Fund.

Para. 4. Gratuities will be admitted on the following scale :

(i) After a service of less than 5 years	Nil.
(ii) After a service of not less than 5 but less than 10 years	1 month's pay
(iii) After a service of not less than 10 but less than 15 years	2 months' pay
(iv) After a service of not less than 15 but less than 20 years	3 months' pay.
(v) After a service of not less than 20 but less than 25 years	4 months' pay.
(vi) After a service of not less than 25 but less than 30 years	5 months' pay.
(vii) After a service of not less than 30 years	6 months' pay.

In the case of daily paid men 24 days' wages will be considered as equivalent to one month's pay.

After 35 years' service the grant of pension to these men can be considered under the rules in the Adjutant General's Branch memorandum No. B.11927/1/A.G. 14, dated 12th October 1932.

CHAPTER IX.—MISCELLANEOUS.

Miscellaneous concerns form a large part of the engineering industry. They comprise factories engaged in the manufacture or repair of various iron or brass goods, miscellaneous iron and steel works, iron and brass foundries, the manufacture of bicycles, the assembling and repair of aircraft, the manufacture of surgical instruments and hospital furniture, etc. This section of the industry, like all other sections, has expanded enormously during war time as will be borne out by the following table showing the number of factories and the number of persons engaged therein from 1939 to 1943 :

TABLE 239.

Number of Concerns and Workers Employed.

Province	1939		1940		1941		1942		1943	
	No. of factories.	No. of Workers.	No. of factories.	No. of Workers.	No. of factories.	No. of Workers.	No. of factories.	No. of Workers.	No. of factories.	No. of Workers.
Madras	3	240	4	461	..	745	13	1,088	19	1,474
Bombay	94	3,351	101	3,431	..	5,740	127	7,056	139	7,542
Sind	6	206	5	183	..	257	5	185	4	143
Bengal	10	1,410	12	1,800	..	3,207	15	3,416	20	4,605
U. P.	9	224	14	351*	..	714	16	829	19	1,155
Punjab	21	992	22	1,181	..	2,291	61	3,360	46	2,856
Bihar	..	..	..	..	..	254	2	519	3	716
C. P. & Berar.	..	..	..	..	..	..	..	..	1	..
Assam	2	132	2	124	..	36	1	35	1	220
N. W. F. P.	..	..	..	..	..	..	..	..	1	21
Baluchistan	3	136	3	160	..	171	2	54	2	63
Delhi	1	45	1	24	..	..	..	..	..	..
Bangalore & Coorg	1	33	1	26	..	29	1	46	1	45
Total	150	6,769	165	7,741	223	13,444	243	16,588	256	18,840

* Particulars of one factory were not available.

It is seen that more than half the number of factories and over 40 per cent. of the total number of workers employed in this group of concerns are in the Bombay Province. The selection of units for survey was, therefore, mostly confined to that area. Fourteen factories, 12 from Bombay, 1 from Bihar and 1 from Aundh State were surveyed. These factories are representative of the whole miscellaneous group of the engineering industry as will be seen from the following list of the factories selected and the nature of work each is engaged in:—

TABLE 240.

The Nature of Work.

erial No.	Name of Factory.	Location.	Year of establishment.	Nature of Work.
1	Indian Hume Pipe Co.	Bombay	1931	Manufacture of cement and iron pipes.
2	Mukund Iron & Steel Works	,,	..	Iron and Brass foundry and general machineshop.
3	Swadeshi Electric Clock Manufacturing Co.	,,	1929	Assembling and manufacture of electric clocks.
4	Hind Cycle Ltd.	,,	1939	Manufacture of bicycles.
5	W. & T. Avery Ltd.	,,	1921	Repair of weighing machines.
6	E. Eyres & Co.	,,	1880	Manufacture of surgical instruments and hospital furniture.
7	United Engineering Corporation	,,	1928	Manufacture of miscellaneous iron goods.
8	Captain Ltd.	,,	1941	Manufacture of fountain pens.
9	Tata Aircraft Ltd.	Bombay-Santa-Cruz.	1942	Assembling of aircraft.
10	Tata Air Lines	,,	1932	Repair of aircraft.
11	Asbestos Cement Ltd.	Mulund	1937	Manufacture of asbestos sheets.
12	Tata Aircraft Ltd.	Poona	1943	Assembling of aircraft.
13	Indian Hume Pipe Co.	Jamshedpur	1923	Manufacture of cement and iron pipes.
14	Kirloskar Brothers, Ltd.	Kirloskarwadi (Aundh State).	1920	Iron and steel works.

I.—Employment.

That employment in the industry has increased enormously during war time is further borne out by the figures of employment in the sampled units which show an increase of 175.8 per cent and 185.9 per cent. in January 1944 and October 1944 respectively, over figures for employment in August 1939, as will be seen from the following table:—

TABLE 241.

Employment in Sampled Units.

Centre.	No. of units.	Number of workers employed.		
		August 1939	January 1944.	October 1944.
Bombay	8	995*	3,447	2,955
Bombay-Santa Cruz	2	69	712	733
Bombay-Mulund	1	514	881	965
Poona	1	..	677	1,284
Jamshedpur	1	183**	97†	97†
Kirloskarwadi	1	860	1,415	1,460
Total ..	14	2,621	7,229	7,494

* Figures for 3 factories were not available.

** Figure relates to August 1938.

† Figures relate to January 1945.

Note.—Three concerns, one each in Poona, Bombay and Santa Cruz, were established after 1939.

The workers are employed mostly on time rates. In fact only in two concerns, the Mukund Iron and Steel Works, Bombay, and the Asbestos Cement Co., Mulund, were workers engaged on a piece basis. In Mukund Iron and Steel Works, their number was 157 out of 402 in 1939 and 228 out of 819 in 1944; in the Asbestos Cement Company, they were 135 out of 514 in 1939 and 204 out of 881 in 1944. The percentage of piece workers to the total number of persons employed was 6.4 in 1939 and 3.1 in 1944.

Employment of Women and Children.—Women are employed only in three units, two in Bombay and one at Jamshedpur. They are engaged as sweepers or coolies. Total number of women employed was 9 in 1939 and 44 in 1944. Children are employed nowhere.

Contract Labour.—Contract labour was employed only in the Mukund Iron and Steel Works in pre-war time. The number of persons employed through contractors in this concern was 22 in 1939 and 120 in 1944. In 1944, the Indian Hume Pipe Company, Bombay also employed 75 men and 21 women through contractors.

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Bihar	..	..	..	..	..	254	2	519	3	716
C. P. & Berar.	..	..	..	..	..	..	..	..	1	..
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Baluchistan	3	136	3	160	..	171	2	54	2	63
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6	E. Eyres & Co.	,,	1880	Manufacture of surgical instruments and hospital furniture.
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8	Captain Ltd.	,,	1941	Manufacture of fountain pens.
9	Tata Aircraft Ltd.	Bombay-Santa-Cruz.	1942	Assembling of aircraft.
10	Tata Air Lines	,,	1932	Repair of aircraft.
11	Asbestos Cement Ltd.	Mulund	1937	Manufacture of asbestos sheets.
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14	Kirloskar Brothers, Ltd.	Kirloskarwadi (Aundh State).	1920	Iron and steel works.

1.—Employment.

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Note.—Three concerns, one each in Poona, Bombay and Santa Cruz, were established after 1939.

The workers are employed mostly on time rates. In fact only in two concerns, the Mukund Iron and Steel Works, Bombay, and the Asbestos Cement Co., Mulund, were workers engaged on a piece basis. In Mukund Iron and Steel Works, their number was 157 out of 402 in 1939 and 228 out of 819 in 1944; in the Asbestos Cement Company, they were 135 out of 514 in 1939 and 204 out of 881 in 1944. The percentage of piece workers to the total number of persons employed was 6.4 in 1939 and 3.1 in 1944.

Employment of Women and Children.—Women are employed only in three units, two in Bombay and one at Jamshedpur. They are engaged as sweepers or coolies. Total number of women employed was 9 in 1939 and 44 in 1944. Children are employed nowhere.

Contract Labour.—Contract labour was employed only in the Mukund Iron and Steel Works in pre-war time. The number of persons employed through contractors in this concern was 22 in 1939 and 120 in 1944. In 1944, the Indian Hume Pipe Company, Bombay also employed 75 men and 21 women through contractors.

Length of Service.—The length of service of the workers in 11 of the sampled units is given in the following table:—

TABLE 242.

Length of Service.

Centre.	No. of Units.	Workers whose length of service lies between							
		0 and 1 year		1 & 5 years.		5 &10 years.		10 years & more.	
		No.	Per-centage.	No.	Per-centage.	No.	Per-centage.	No.	Per-centage.
Bombay	5	529	31·9	1,014	61·2	88	5·3	26	1·6
Bombay-Santa Cruz	2	402	49·9	395	49·0	9	1·1	..	0·0
Bombay-Mulund	1	452	46·8	376	39·0	137	14·2	..	0·0
Poona	1	850	66·2	434	33·8	..	0·0	..	0·0
Jamshedpur	1	18	18·5	59	60·9	2	2·1	18	18·5
Kirloskarwadi	1	46	3·2	560	38·4	389	26·6	465	31·8
Total ..	11	2,297	36·6	2,838	45·4	625	10·0	509	8·0

It is seen that the large majority of workers in Bombay Province have less than 5 years' service only while hardly any have service of over 10 years. This is due, partly, to the fact that some of the units have been started only during the last five years and partly to the increase in employment during war time.

Classification of workers.—In two factories in Bombay and the one in Bihar there is no classification of workers as permanent and temporary. In several other factories all the workers are classified either as permanent or as temporary but with no special privileges except in one factory in Bombay, the United Engineering Corporation, where all the workers are considered as temporary but are entitled to 14 days notice on discharge or dismissal. In five factories only, are workers classified as permanent and temporary. The percentage of permanent and temporary workers in these factories is given in the following table :—

TABLE 243.

Temporary and Permanent Workers.

Factory.	Temporary workers. (Per cent.)	Permanent workers. (Per cent.)
Tata Air Lines, Bombay-Santa Cruz	27·4	72·6
Indian Hume Pipe Co., Bombay	20·0	80·0
Mukund Iron and Steel Works, Bombay	19·0	81·0
Hind Cycles Ltd., Bombay	35·0	65·0
Kirloskar Bros., Kirloskarwadi	21·0	79·0

In the Tata Air Lines, Bombay, permanent workers are entitled to 15 days notice, if they are drawing below Rs. 100 p.m., and one month's notice, if they are drawing over Rs. 100 p.m. or 15 days or one month's pay respectively in lieu of notice. Only permanent workers who have completed one year of service are entitled to privilege leave. The leave is for 15 days for every completed year of service in the case of daily-rated and monthly-rated workers and 30 days a year for salaried staff. Again, only permanent workers are entitled to contribute to the provident fund or receive any bonus, if it is declared. In the Kirloskar Company there are no special privileges for the permanent workers except that they alone are admitted to the membership of the Provident Fund. In the other concerns permanent workers are given 14 days notice on termination of service. A fortnight's leave with pay in several units and 5 to 7 days casual leave with full pay in most of the concerns are given to all workers whether permanent or temporary.

Apprenticeship.—There is a well-defined apprenticeship scheme only in the Tata Air Lines where about 50 apprentices at a time are trained as aeronautical engineers. The apprenticeship period is 3 years. Apprentices should have passed the matriculation or any equivalent examination and be between 18 and 21 years of age. Apprentices are to pay a premimum of Rs. 1,000 before joining. They are paid a stipend of Rs. 14 per mensem in the first year, Rs. 30 in the second year and Rs. 40 in the third year. Apprentices are on probation for the first 6 months. They get 8 sectional holidays and 7 days' casual leave. They also get 4 weeks non-cumulative leave after the first and second year of apprenticeship. Apprentices can take the Government of India's Ground Engineers' Licences during the course of apprenticeship. The Company does not accept any responsibility for employing an apprentice as permanent member of the staff The Tata Aircraft, both in Poona and Bombay, had a training scheme under which they trained young men for a period of 6 months paying them a stipend of Rs. 25 per month during the first three months and Rs. 35 during the remaining period of training. They were then engaged on a commencing pay of Rs. 1-8-0 to Rs. 2 per day. The period of training was counted towards service. The training scheme was discontinued in May 1943 at Poona and in May 1944 at Bombay. In Mukund Iron and Steel works and W & T Avery Ltd. a few men are engaged as apprentices at the age of 16 or so on a basic rate of 12 annas per day. Increments up to Rs. 1-4-0 per day are given to those who show improvement. The period of apprenticeship is counted towards service.

Promotions.—In both the Tata Aircraft concerns there are regular grades as well as regular increments of 4 annas every year or every six months for ordinary posts and Rs. 5 to Rs. 30 per year for supervisory posts. Workers as well as supervisors, are upgraded to higher posts if vacancies exist or occur in higher grades. In the Santa Cruz factory, however, coolies are not graded. In the Tata Air Lines there are three grades—mechanics ' grade, improvers' grade and cleaners' and coolies' grade—having annual increments of As. 6 As. 3 and 8 pies respectively. In Mukund Iron and Steel Works and in W. & T. Avery, Ltd., workers are graded and given increments. In the Indian Hume Pipe Co. workers are given a general increment of 2 annas after two years, if their work is satisfactory. Increments and promotion in all other factories depend on the discretion of the managers who generally consider ability, regularity of attendance, etc., in giving increments.

Labour Turnover.—Labour turnover in 10 factories in the sample in pre-war and war time is shown in the following table:—

TABLE 244

Labour Turnover.

Name of concern.	Period.	No. of workers.	1939 Separations				Percent of monthly turnover.
			Retirement.	Dismissal.	Voluntary.	Total.	
Mukund Iron & Steel Works, Bombay ..	1939	286	..	..	77	77	2·2
Swadeshi Electric Clock Manufacturing Co., Bombay ..	August 1939	37	..	..	1	1	2·7
W. & T. Avery, Ltd., Bombay ..	1939	36	..	2	..	2	0·5
Captain, Ltd. Bombay	..	..	..	..	..	..	..
Tata Aircraft Ltd., Santa Cruz ..	..	..	..	..	..	..	..
Tata Airlines Ltd., Santa Cruz ..	..	..	..	..	..	..	..
Asbestos Cement, Ltd., Mulund ..	Sept. 1939	558	..	18	3	21	3·7
Tata Aircraft Ltd., Poona	..	..	..	..	..	..	..
Indian Hume Pipe Co., Jamshedpur ..	1938	183	..	41	..	41	1·9
Kirloskar Bros., Kirloskarwadi ..	1939	818	..	..	8	8	0·1

TABLE 244 (*contd.*)

Name of Concern.	Period.	No. of workers.	1943 Separations.				Percent of monthly turnover.
			Retirement.	Dismissal.	Voluntary.	Total.	
Mukund Iron & Steel Works, Bombay ..	1943	661	..	..	132	132	1·7
Swadeshi Electric Clock Manufacturing Co., Bombay ..	August 1943	77	..	..	9	9	11·6
W. & T. Avery, Ltd., Bombay ..	1943	75	..	..	3	3	0·3
Captain, Ltd. Bombay	..	..	..	..	..	..	..
Tata Aircraft Ltd., Santa Cruz ..	..	..	..	..	..	..	..
Tata Airlines Ltd., Santa Cruz ..	1943	193	..	70	35	105	4·5
Asbestos Cement, Ltd., Mulund ..	Sept. 1943	883	..	21	6	27	3·1
Tata Aircraft Ltd., Poona	..	..	..	..	..	..	..
Indian Hume Pipe Co., Jamshedpur	..	..	..	..	..	..	..
Kirloskar Bros., Kirloskarwadi ..	1943	1,231	..	..	30	30	0·2

TABLE 244 (*contd.*)

Name of Concern.	Period.	No. of workers.	1944 Separations				Percent of monthly turnover.
			Retirement.	Dismissal.	Voluntary.	Total	
Mukund Iron & Steel Works, Bombay ..	..	..	..	..	..	..	..
Swadeshi Electric Clock Manufacturing Co., Bombay..	..	..	..	..	..	..	..
W. & T. Avery, Ltd. Bombay ..	..	..	..	..	..	..	..
Captain, Ltd. Bombay ..	1944	24	..	..	20	20	7·0
Tata Aircraft Ltd., Santa Cruz ..	1944	538	..	168	92	260	4·0
Tata Airlines Ltd., Santa Cruz ..	..	..	..	..	..	..	..
Asbestos Cement, Ltd., Mulund* ..	Sep. 1944	945	..	66	21	87	9·2
Tata Aircraft Ltd., Poona	1-1-1944 to 31-10-1944	990	..	247	74	321	3·2
Indian Hume Pipe Co., Jamshedpur..	1944	97	..	48	7	55	4·7
Kirloskar Bros., Kirloskarwadi. ..	..	..	..	..	..	..	..

The separations are in all cases due to dismissal or discharge or voluntary resignations. The causes of labour turnover are the migratory habits of the labourers, especially of unskilled workers who are mostly agriculturists. In Tata Air Lines, for example, high turnover is due to a large number of workers being dispensed with before the expiry of the service period which would make them permanent. This measure is deemed necessary in view of the poor quality of the available labour. In several factories workers are also discharged as a measure of disciplinary action for irregular attendance, etc. Distance of the factories from the city and want of satisfactory public conveyance cause a considerable number of voluntary quits.

Absenteeism.—Absenteeism figures were available only in a few factories. The percentage of absenteeism in these factories for 1939 and 1943 is given in the following table:—

TABLE 245.

Percentage Absenteeism.

Factory	Percentage of Absenteeism.	
	1939	1943
Mukund Iron & Steel Works, Bombay	..	9·0*
Swadeshi Electric Clock Manufacturing Co., Bombay	..	1·0
Hind Cycles Ltd., Bombay	..	8·0
Tata Aircraft Ltd., Santa Cruz	..	10·0
Tata Air Lines, ...	5·6	6·2
Asbestos Cement Ltd., Mulund	5·0	20·0
Tata Aircraft Ltd., Poona	..	12·0
Indian Hume pipe Co., Jamshedpur	..	5·0
Kirloskar Bros, Kirloskarwadi	6·0	10·0

* Figure is for 1944.

It is seen that absenteeism has increased during war time. The causes of absenteeism are illness arising from unsatisfactory living conditions, want of education and civic sense, migration to villages during agricultural season and the rains, increased demand for labour outside the factory, domestic affairs like marriages and funerals, etc. Several employers cite the increassed earnings during war time as a cause of increased absenteeism. Several disciplinary measures were taken to reduce absenteeism but with no great success. The Tata Aircraft in Santa Cruz—Bombay has exhibited posters in conspicuous places announcing that absence without permission restricts various privileges of the workers, affects their leave and is a bar to increment and promotion. By these and other measures they have been able to reduce absenteeism from 10 per cent. in 1943 to 5 per cent. in 1944 and to 2.5 per cent. during the last quarter of 1944.

Standing Orders.—The larger factories like Tata Aircraft, Indian Hume Pipe Co., Kirloskar Brothers etc., have works Service Rules embodying the terms and conditions of an employee's service. Hours of work, holidays, rates of overtime payment etc. are governed by Administrative Orders issued by the Managers from time to time. The smaller factories generally have no standing orders or service rules.

Recruitment.—In small factories the requirements for skilled and unskilled workers are met by asking those who are already employed to bring their friends or relations and selecting suitable men from among them. In the large factories unskilled workers are recruited locally, generally at the factory gate. Skilled workers such as turners, fitters, tool makers, pattern makers, etc. are recruited through the National Service Labour Tribunals or selected from among those applying through the post. Special classes of workers like firemen and wardens are sometimes selected on the recommendation of the Fire Services Department. General qualifications, previous experience and testimonials are considered in making the selection to skilled jobs. Sometimes candidates are asked to undergo trade tests and medical examination.

Labour Officers.—In the large factories there are Labour Officers or Personnel Officers or Staff Superintendents who enquire into the complaints and grievances of the workers and refer them to the Works Managers for final decision. In smaller factories there are no labour officers. The foreman, works manager or the manager looks into the grievances of the workers. In some concerns, Works Committees have been set up to deal with grievances of a general or collective nature.

II.—Wages and Earnings.

The rates of wages for a few select occupations in the sampled units in 1944 are given in the following table :—

TABLE 246.

Rates of Wages for Selected Occupations—1944.

Factory.	Turners.		Fitters.		Electricians.		Mechanists.		Moulders.	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Indian Hume Pipe Co., Bombay	Rs. 1 8 0	Rs. 3 10 0	Rs. 1 8 0	Rs. 3 10 0	Rs. .	Rs. ..	Rs. ..	Rs. ..	Rs. 1 6 0	Rs. 3 8 0
Mukund Iron & Steel Works, Bombay ..	1 12 0	4 4 0	1 12 0	4 4 0	.	..	..		1 14 0	4 4 0
Swadeshi Electric Clock Mfg. Co., Bombay ..	1 4 0	2 0 0	.	.	.	..	..	.	..	..
Hind Cycles Ltd., Bombay	3 0 0	3 0 0	1 8 0	5 0 0	.	..	1 12 0	1 12 0	.	..
W. & T. Avery Ltd., Bombay	..	..	1 8 0	4 4 0	..	..	..	..	..	..
Tata Aircraft Ltd., Santa Cruz	..	..	1 8 0	5 0 0	1 8 0	5 0 0	..	.	..	..
Tata Air Lines Ltd., Santa Cruz ..	..	..	..		..	..	..	..	..	..
Asbestos Cement Ltd., Mulund	1 8 0	3 4 0	1 8 0	3 4 0	..	..	1 0 0	1 0 0	..	..
Tata Aircraft Ltd., Poona	1 8 0	5 0 0	2 0 0	5 0 0	1 8 0	5 0 0	..		1 8 0	5 0 0
Indian Hume Pipe Co., Jamshedpur ..	1 4 0	2 8 0	1 4 0	2 8 0	..	..	..	..	..	..
Kirloskar Bros., Kirloskarwadi ..	..	..	31 8 0*	31 8 0*	..	..	30 0 0*	30 8 0*	*29 0 0	*29 0 0

*Per month.

TABLE 246—*contd.*

Factory.	Welders		Carpenters		Blacksmiths		Apprentices		Coolies	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Indian Hume Pipe Co., Bombay	..	..	..	..	..	..	..	..	0 12 0	1 4 0
Mukund Iron & Steel Works, Bombay ..	..	..	..	..	1 12 0	2 8 0	0 10 0	1 0 0	0 12 0	0 15 0
Swadeshi Electric Clock Mfg. Co., Bombay ..	..	..	2 6 0	2 6 0	..	..	..	..	0 9 0	0 9 0
Hind Cycles Ltd. Bombay	2 0 0	2 12 0	3 0 0	3 0 0	3 0 0	3 3 0	..	..	1 2 0	1 4 0
W. & T. Avery Ltd., Bombay	..	..	..	..	..	..	0 12 0	1 4 0	1 2 0	1 6 0
Tata Air Ltd., Santa Cruz	..	..	1 8 0	4 0 0	..	..	1 3 0	1 3 0	1 0 0	1 8 0
Tata Air Lines Ltd., Santa Cruz ..	..	..	..	..	..	..	1 10 0	2 10 0	1 0 0	1 2 8
Asbestos Cement Ltd., Mulund	..	..	1 4 0	3 0 0	2 6 0	2 6 0	..	..	0 12 0	0 12 0
Tata Aircraft Ltd., Poona	1 8 0	6 0 0	1 8 0	4 0 0	..	..	25 0 0*	35 0 0*	..	..
Indian Hume Pipe Co., Jamshedpur ..	..	..	..	..	..	..	..	..	0 6 0	0 6 0
Kirloskar Bros. Kirloskarwadi ..	..	..	38 0 0*	38 0 0*	..	..	..	..	22 0 0*	22 0 0*

* Per month

Wages have increased by about 20 per cent. since 1939.

Dearness Allowance.—Dearness allowance is paid in all factories except the Swadeshi Electric Clock Manufacturing Company where basic wages have been increased in lieu of dearness allowance. Both the Tata Aircraft factories pay dearness allowance, at a flat rate of Rs. 0-12-6 per day for all daily-rated workers and at 10 per cent. of pay plus Rs. 11 with a minimum of Rs. 23-7-0 per month for salaried workers. The Tata Air Lines pay Rs. 19 per mensem for those whose monthly wages are Rs. 50 or less, 10 per cent. of wages plus Rs. 14 per month to those whose wages are between Rs. 50 and Rs. 100, Rs. 24 per month for wages between Rs. 100 and Rs. 120 and 20 and 25 per cent. of wages for mechanics and improvers respectively. One factory in Bombay pays dearness allowance according to the Bombay Millowners' Association rate, one at three-fourths of the Millowners' Association rate, and two at two-thirds the rate. One gives allowance according to the Cost of Living Index declared by the Commissioner of Labour. One factory gives dearness allowance at 6 annas per day to all workers and one at 12½ per cent. of wages. The factory in Mulund gives dearness allowance at a flat rate of 10 annas per day. The Indian Hume Pipe Company, Jemshedpur, gives dearness allowance at a flat rate of 10 annas per day and the Kirloskar Works in Aundh pays dearness allowances based on the Sholapur Cost of Living Index. In 1944 the dearness allowance in this factory was Rs. 18 per month for those getting below Rs. 25, Rs. 22-8-0 for those getting between Rs. 25 and Rs. 50 and 45 per cent. of wages for those getting over Rs. 50. The Absestos Cement Company, Mulund, was the first to start paying dearness allowance from December 1939. In most other factories, dearness allowance was started in 1941 and was increased from time to time.

Bonus.—The following seven factories paid bonus to the workers as shown in the following table:—

TABLE 247.

Payment of Bonus in 1941-1944.

Factory.	Number of Months' Wages paid as Bonus			
	1941.	1942.	1943.	1944.
Indian Hume Pipe Co., Bombay	..	1	1½	..
Mukund Iron & Steel Works, Bombay	..	4	2	2
Hind Cycles, Bombay	..	..	1	..
W. & T. Avery, Ltd. Bombay	½	½	½	½
United Engineering Corporation	..	..	1	2
Asbestos Cement, Mulund	..	½	½ to 1	½ to 1
Indian Hume Pipe Co., Jamshedpur	..	..	½	½

Generally bonus is paid to those workers who have worked a prescribed number of days in a year or to those who have put in service continuously for one year. In some factories like Indian Hume Pipe Company, bonus is paid to all workers on the rolls. The Tata Air Lines were paying bonus equal to half to three months during pre-war time but they have stopped bonus since the beginning of the war.

Other Allowances.—The Tata Aircraft factory at Santa Cruz grants a 'Tarmac' allowance to those working on Tarmac, that is, preparation of aircraft for flight. The allowance is a compensation for work in the open and in the Sun and was started on 1st January 1945. Coolies, improvers and trainees are paid Rs. 0-2-6 per day, skilled workers Rs. 0-4-0 and salaried workers are paid 10 per cent. of salary subject to a maximum of Rs. 25 per month. The Indian Hume Pipe Company of Bombay pays Rs. 3 per month as heat allowance and shoe allowance for workers in the Steel Furnace Department and the Rolling Department. A production bonus of 4 annas per day is given to foremen and workers in the Process Department in the Asbestos Cement.

Earnings.—The average monthly wages and gross earnings for a few select occupations in seven factories are given in the following table:—

TABLE 248.

Basic Monthly Wages and Gross Earnings, 1944.
(To the nearest rupee).

Factory.	Turners						Fitters.						Moulders					
	Basic Wages			Gross Earnings			Basic Wages			Gross Earnings			Basic Wages			Gross Earnings		
	Max.	Min.	Avr.	Max.	Min.	Avr.	Max.	Min.	Avr.	Max.	Min.	Avr.	Max.	Min.	Avr.	Max.	Min.	Avr.
Mukund Iron & Steel Works, Bombay ..	91	36	61	116	61	86	78	36	55	103	61	80	72	35	51	97	60	76
E. Eyres & Co.	76	36	55	97	57	76	150	22	57	171	43	77	..	..	..	..	..	..
Tata Aircraft, Santa Cruz	..	..	..	..	..	..	102	38	63	122	58	83	..	..	..	..	..	..
Asbestos Cement, Mulund	..	..	..	61	..	77	..	..	..	50	..	63	..	..	..	..	..	..
Tata Aircraft, Poona	91	52	57	115	73	82	91	52	..	21	79	..	96	92	94	116	110	113
Indian Hume Pipe Co., Jamshedpur ..	..	..	..	..	..	..	44	121	33	59	36	48	33	21	27	48	36	42
Kirloskar Bros., Kirloskarwadi	..	..	..	..	..	..	61	18	32	106	41	57	73	18	29	125	41	52

TABLE 248 (*contd.*)

Factory.	Carpenters						Blacksmiths						Coolies					
	Basic Wages			Gross Earnings			Basic Wages.			Gross Earnings			Basic Earnings			Gross Earnings		
	Max.	Min.	Avr.	Max.	Min.	Avr.	Max.	Min.	Avr.	Max.	Min.	Avr.	Max	Min.	Avr.	Max.	Min.	Avr.
Mukund Iron & Steel Works, Bombay ..	..	..	..	..	..	..	65	36	55	90	61	74	..	..	..	..	..	..
E. Eyres & Co.	68	32	50	91	53	71	105	52	..	26	73	..	41	29	36	61	50	57
Tata Aircraft, Santa Cruz	110	38	68	30	58	82	..	..	..	..	..	..	41	25	27	63	45	48
Asbestos Cement, Mulund	..	..	49	..	..	64	..	..	..	..	..	..	..	..	24	..	..	40
Tata Aircraft Poona	84	65	..	120	95	97	50	23	33	70	43	50	33	20	23	58	43	..
Indian Hume Pipe Co., Jamshedpur ..	..	..	..	..	..	..	45	24	35	60	39	50	15	12	12	30	27	27
Kirloskar Bros., Kirloskarwadi	73	18	38	126	44	65	..	..	..	..	..	..	32	16	22	62	39	

It is seen that wages and earnings in the Bombay factories are generally the highest, while in Poona wages are higher than those paid in Kirloskarwadi or in Jamshedpur. Wages and earnings are the lowest in Jamshedpur.

Overtime.—Overtime work is compulsory in the three factories owned by the Tatas and in the Kirloskar Brothers. Generally overtime is paid for according to provision in the Factories Act. The Kirloskar Brothers pay for overtime at time and a half. In the Tata Aircraft factories and the Tata Air Lines, overtime in excess of 5 hours on Saturday up to 8 hours is paid at normal rate, overtime on week days in excess of 8 hours at 1-1|4 times normal rate and time in excess of 10 hours a day, time in excess of 60 hours a week and all work on Sundays is paid for at 1-1|2 times the normal rate. The Administrative staff, clerks drawing over Rs. 150 per month and works staff getting over Rs. 350 are not entitled to overtime payment. Overtime is recorded in registers or on time-cards in all factories except in the Tata Aircraft factory at Santa Cruz and the Indian Hume Pipe at Jamshedpur. The registers and time-cards are open to inspection, if required. The Tata Aircraft factory at Santa Cruz has obtained exemption from the Factory Inspector from maintaining separate overtime register as it keeps a separate pay roll.

Fines and Deductions.—Only two factories, the Indian Hume Pipe Company, Bombay, and the Kirloskar Brothers, factory, impose fines. In six factories no deductions at all are made from wages. In others, deductions are made on account of income-tax, contribution to the Provident Fund, rental of quarters, loss of tools, grain supplied etc. In the Kirloskar Brothers factory fines are credited to the Company's account. The amount of fines does not exceed Rs. 10 a year. In the Indian Hume Pipe Company, Bombay, the amount outstanding in the Fine Fund on 31st October 1944 was Rs. 64-5-3. The fund is in charge of the manager and is utilised for *pooja* ceremonies by workers at Dassera etc.

Wage Period.—The wage period is one month except in two factories, Captain Ltd., at Bombay and the Asbestos Cement Company at Mulund, where it is a fortnight. In the Mukund Iron and Steel Works, permanent workers are paid monthly and temporary workers fortnightly. Payments in all cases are made within 10 days of the end of the wage period.

Closed days and Holidays.—Generally Sundays are closed days. If, however, there is another holiday during a week, Sunday is considered as a working day. Workers who are required to work on Sundays are generally given a day off during the week. The Asbestos Cement Company has obtained exemption from the Chief Inspector of Factories, Bombay, from Section 31 of the Factories Act in respect of one department working on a continuous process. In the Tata Aircraft factories, Tata Air Lines and in W. & T. Avery Ltd., paid holidays, 6 to 8 in a year, are also given.

III.—Working Conditions.

Shifts and Hours of Work.—Only a single day shift is worked in six factories (the Tata Air Lines, United Engineering Corporation, Captain Ltd., W. & T. Avery, E. Eyres & Co., and the Indian Hume Pipe Co., Jamshedpur). The hours of work are 8 to 9 with a spreadover of 9 to 10 hours. Generally only 5 hours are worked in Saturdays. In other factories, there may be as many as 7 shifts but for the majority of workers there is one general day shift. Different departments work different shifts. The hours of work in these shifts are 7-1|2 to 9, the majority of shifts working only 7-1|2 or 8 hours. The spreadover is 8 to 9-1|2 hours.

In the Mukund Iron and Steel Works, the Rolling Mill Section works for 12 hours both in the day and in the night shifts, resting alternate hours. In the Swadeshi Electric Clock Manufacturing Company, both the day and night shifts work 11 hours with a spreadover of 12 hours. Shifts overlap in two factories, the Tata Aircraft, Santa Cruz, and the Kirloskar Brothers' factory at Kirloskarwadi, in order to take over.

Ventilation, etc.—The conditions of ventilation, lighting, protection against heat, etc. are satisfactory in most of the factories. Rest shelters are provided only in two factories, the Kirloskar Brothers and the Mukund Iron and Steel Works. In the former there are three rest hours with bath rooms and in the latter there is a rest shed of about 1,000 square feet area. The premises of most of the factories are kept clean. Latrines and urinals are provided in adequate numbers. Washing and bathing facilities are, however, provided only in three factories. Most of the factories make arrangements for cool water in summer.

IV.—Welfare Activities.

Medical Aid.—There is no provision whatsoever for medical aid in any of the small factories in Bombay. The Indian Hume Pipe Company at Jamshedpur has an arrangement with the Tata Company whereby medical help is obtained for their workers. Dispensaries, mostly in charge of part-time doctors, are maintained in other factories. Treatment is free in all cases except when costly injections, patent medicines etc. are required. Only in two factories, the Asbestos Cement Company, Mulund and the Kirloskar Brothers factory, is free medical attention extended to the workers' families as well. In the Kirloskar Brothers factory dispensary a nominal charge of 2 annas per day is levied on workers or their dependents getting treatment. In this dispensary two small in-patient wards with two beds each are also maintained. Workers are medically examined at the time of appointment only in the three Tata concerns, the Indian Hume Pipe Company, Bombay, and the Asbestos Cement Company. Only in the Tata Aircraft factory, Santa Cruz, are workers periodically examined. No occupational diseases have been reported except for a case of lead poisoning in the composing department of the Kirloskar Printing press.

Canteens.—Canteens are provided in all except five small factories in Bombay. The canteens sell meals, light refreshments, tea, cool drinks etc. and are generally run by contractors, but prices are controlled by the management. In the Asbestos Cement Company, the canteen is run by a Consumers' Co-operative Society, formed by the workers themselves.

Schools.—Only two factories provide facilities for the education of the workers' children. In the Kirloskar Brothers factory, a primary school and a High School are maintained and financed by the management. The Asbestos Cement Company maintains only a primary school. In the Tata Aircraft factory, Poona, an attempt was made to educate the adult employees by paying for the education of 40 of them at the Algaonker Night School, Poona, but the attendance of these persons at school, was so discouraging that the attempt was given up.

Grainshop.—Grainshops are maintained in all factories except in five small factories in Bombay. The Indian Hume Pipe Company, Jamshedpur, had a grainshop but it had to be closed when rationing was introduced in Jamshedpur. In the Asbestos Cement Company, the grainshop, like the canteen, is run by the Consumers' Co-operative Society. In the grainshops of Kirloskar Brothers and the Hind Cycles, only rationed articles are sold while

in others rationed articles as well as non-rationed articles are sold at controlled prices. In the grainshops of Tata concerns TOMCO products are sold at cost price which is considerably less than market rates.

V.—Housing.

Housing accommodation for workers is provided only by the Tata Aircraft, Poona, the Kirloskar Brothers and the Asbestos Cement Company. The Tata Aircraft, Poona, provides about 20 to 25 per cent. of their workers with quarters. The accommodation provided consist of 30 rooms, each 24 ft.×20 ft. and 12 rooms each 20 ft.×12ft. for the benefit of single persons. The bigger rooms accommodate four persons each and the smaller ones three persons each. In addition there are 132 rooms each measuring 12 ft.×10 ft. for family people. Two bungalows in the City have also been rented by the Company for housing workers. Furnished quarters are provided for the senior staff. Five to 7-1/2 per cent. of pay is the rental charged which is much below the economic rent for these quarters. Four types of quarters are provided in the Kirloskar Brothers factory and are allotted according to pay and status. The workers are given single and double room tenements and the senior staff are allotted separate blocks. About 10 per cent. of the workers are housed in the colony and 5 per cent. of the investment cost is charged as rent. Nearly 50 per cent. of the workers in the Asbestos Cement Company are housed in the Company's chawls. The chawls are in blocks of 12 apartments each and each apartment consists of a room 10 ft.×8 ft. and a verandah 10 ft.×6 ft. The rent charged is Re. 1 per month from those getting less than Rs. 1-8-0 per day and Rs. 2 from those getting Rs. 1-8-0 or more. In the Indian Hume Pipe Company, Jamshedpur, skilled workmen who form about 15 per cent of the total are supplied quarters rent free. The quarters consist of a room and a kitchen with brick walls and tiled roof. Sanitary arrangements etc. are satisfactory in all cases and there is no congestion as sub-letting is prohibited.

The workers who are not provided with Companies' quarters in these three factories and the employees of other concerns have to go long distances to attend the factories, most of which are situated in city suburbs. Only in the Tata Aircraft factory at Santa Cruz is any conveyance provided for the workers. A special bus service is run and Rs. 2-4-0 per month is deducted from the workers' salary towards conveyance charge.

VI—Trade Unions and Strikes.

Only the workers in the two Aircraft factories, the Indian Hume Pipe Company, Bombay, and the Kirloskar, factory have organised trade unions. The union in the Tata Aircraft, Poona, has been formed only recently. The Tata Aircraft Workers' Union, Santa Cruz, has a membership of 200 and the monthly subscription is 4 annas. The Hume Pipe Company Workers' Union, Bombay, was registered in May 1942 and was responsible for several strikes which ultimately forced the management to enter into an agreement with the Union in December 1942 and to concede a bonus and annual leave to the workers. The trade union in the Kirloskar factory has a membership of about 1,000 and the members pay an annual subscription of Re. 1.

Workers' Councils.—Workers' Councils are functioning in two factories, viz., the Tata Aircraft factory, Santa Cruz, and the Asbestos Cement Company, Mulund. Representatives of the workers are elected from different departments to the Council which looks into the grievances of workers. In the

Aircraft factory at Poona, the formation of such a council is under consideration. In the Kirloskar factory, a workers' council consisting of 20 members was set up in April 1942, but has now been disbanded after working for two years.

Strikes.—Strikes have occurred from time to time in several factories for various reasons such as demand for increased wages, dearness allowance or bonus, protest against overtime, compulsory work on sacred days etc. The following table briefly summarises the cause and the results of the strikes in different establishments :—

TABLE 249.

Strikes.

Factory.	Serial Number and date of strike.	Cause/Demands.	Result.	Remarks.
Indian Hume Pipe Co., Bombay	1 March-April 1942	Demand for dearness allowance according to Bombay Mill Owners Association scale; bonus ; increase in wages; recognition of union.	Compromise.	
	2 December 1942	Bonus ; annual leave with pay ; regular increment ; improvement in working conditions.	Compromise.	
	3 August 1943-March 1944–	Leave ; Bonus ; standardization of wages etc.	Compromise.	
Mukund Iron and Steel Works, Bombay	1. January 1941 2. April 1942 3. March 1944	For Bonus	Not given.	
Hind Cycles Ltd., Bombay	1.	War Allowance	Compromise	Sanctioned 75% of the Bombay Millowners Association rate.
E. Eyre and Co.	1. November 1943	Dearness allowance, bonus etc.	Compromise.	
United Engineering Corporation	1.	Increase in wages.	Granted	
Captain Ltd.,	1. 2.	Increase in wages Dearness allowance, etc.	Compromise	
Tata Aircraft, Santa Cruz	1.	Protest against overtime.	In favour of employers.	Disciplinary action was taken.
	2.	For half-day holiday on Eclipse day.	In favour of employers.	A few workers were suspended for 2 days.
Asbestos Cement Co., Mulund	1. 30-11-39 to 5-12-39.	Higher wages	Granted	Besides this, on one or two occasions for minor disputes workers suspended work for a few hours.
Tata Aircraft, Poona	1.	Half holiday on account of Eclipse.	Not granted.	
	2.	Demand for wages for 3 days when workers were laid off for failure of electric supply.	Compromise 2 days' wages granted.	
Kirloskar Brothers, Kirloskarwadi	1.	Increase in wages.	Granted.	

VII.—Safety Acts, etc.

The provisions of the Factories Act, Electricity Act, Payment of Wages Act, Workmen's Compensation Act, etc. are generally observed in all the factories. Occasionally, Sections 35 and 36 of the Factories Act are contravened and this is borne out by the inspection remarks of the Factory Inspectors. The Kirloskar Brothers factory is under the Factories Act of the Aundh State. So far, the State has not enforced the Workmen's Compensation Act but a Workmen's Compensation Scheme is under consideration in the State.

Occupational Diseases.—As alreary pointed out, only one case of lead poisoning has occurred so far and the worker concerned was transferred to another department. Chrome sores may be the only probable occupational diseases in Electro-plating Departments. Preventive ointments are given to workers in these departments. In several factories protective equipments such as goggles for workers on grinding machines, respirators for spray-painters, canvas gloves for those handling chains or wire-rope slings etc. are provided to workers.

Accidents.—The table below gives the number of accidents and compensation paid in respect of them in the specified factories during 1943.—

TABLE 250.

Accidents and Compensation Paid, 1943.

Factory	No. of accidents	No. of accidents for which compensation was paid.	Amount paid as compensation Rs. A. P.	Remarks.
Indian Hume Pipe Co. Bombay ..	31	18	1,239 14 6	Amount includes compensation for 2 cases in previous years.
Mukund Iron & Steel Works, Bombay	30	30	1,780 15 6	
Hind Cycles, Bombay	27	27	747 7 3	
E. Eyres & Co. Bombay	1	1	1,000 0 0	Loss of an eye.
Tata Aircraft, Santa Cruz	12	4	798 13 4	
Tata Air Lines, Bombay	11	11		Amount of Compensation not available.
Asbestos Cement Co., Mulund ..	24	22	239 8 9	
Tata Aircraft, Poona	7	1	473 3 0	
Indian Hume Pipe Co., Jamshedpur ..	1	1	120 0 0	
Kirloskar Bros., Kirloskarwadi ..	9	..		Free medical aid and leave with pay given.

In other factories there were no accident cases in 1943. In a few factories like those of Tata's compensation paid is usually more than that required under the Act.

VIII.—General.

Indebtedness.—It appears that in these concerns only a few workers are indebted. In the Tata Air Lines, permanent employees who contribute to the Provident Fund take loans from the Fund to the extent of 3 to 6 months' pay. Loans are advanced at 4 per cent. interest and only for *bona fide* requirements. The Swadeshi Electric Clock Manufacturing Company and the Hind Cycles give short loans to the workers free of interest. In the former 5 workers are indebted to the Company, the amount of debt varying from Rs. 80 to Rs. 350. In the Kirloskar factory about Rs. 27,200 are owed to the Company by about 400 workers who have taken loans for the purchase of additional land etc. The loans bear interest at 6 per cent.

Provident Fund, etc.—Provident Fund schemes exist only in four factories, viz., Tata Air Lines, Asbestos Cement Company, W. & T. Avery Ltd., and the Kirloskar Brothers factory. In the Tata Air Lines, membership of the Fund is compulsory for permanent employees getting Rs. 25 or more and optional for those getting less than Rs. 25 per month. The workers contribute 1|12th of the monthly salary or wages towards the Fund and the employers contribute an equal amount. In Kirloskar Brothers the Fund is optional and open only to permanent workers, contributions are 1|12th of wages by employees as well as employers. In W. & T. Avery Ltd., all employees drawing Rs. 20 or more who have had continuous service for 12 consecutive months otherwise than as probationers, are eligible to contribute to the Fund at the rate of one anna in the rupee of their wages, the company also contributing an equal amount. In this Company the workers become eligible to the benefit of the Company's contribution only after 30 years' service ! There is no pension or gratuity scheme in any of the factories.

CHAPTER X.—SUMMARY AND CONCLUSIONS.

I.—Employment.

Most of the branches of Engineering have made a considerable progress. The employment figures compiled from the *Factory Statistics* show that in 1939, 1,299 engineering factories, employing 274,576 workers, came under the Factories Act, these rose to 2.129 factories and 551,352 workers respectively in 1943. As can be seen from the following figures, our investigation showed a similar increase.

TABLE 251.

Employment in Engineering 1939 *and* 1944.

Industry.	No. of factories for which information was available.		Total No. of workers employed		Average No. of workers per factory		Percentage Increase (workers)
	1939	1944	1939	1944	1939	1944	
General Engineering ..	49	65	58,924	95,898	1,203	1,475	+ 23%
Electrical Engineering ..	34	43	12,427	16,354	366	380	+ 4%
Railway Workshops ..	41	45	41,688	55,836	1,017	1,241	+ 22%
Coach Building etc. ..	19	20	3,303	13,296	174	665	+282%
Kerosene Tinning etc. ..	3	3	1,701	4,196	567	1,399	+147%
Metal Stamping	8	8	1,220	2,514	153	314	+105%
Ordnance	9	22	12,907	109,637	1,434	4,984	+248%
Miscellaneous ..	11	14	2,621	7,494	238	535	+125%
Total ..	174	220	134,791	305,225	775	1,387	+79%

The industries which have expanded most are Coach Building and Motor Repairing and Ordnance, mainly because both were directly concerned with war-time requirements. Electrical Engineering shows the least expansion and one of its branches, the electrical generating and transforming stations, shows a decline in employment. Sometimes in the same industry, a few factories may show an increase, and others a decline. For example, out of the 8 metal stamping factories investigated, 5 registered a fall ; but still we find an expansion by 105 per cent. in the total employment because of expansion in others.

Female and Child Labour.—In 1939, only 4,947 female workers, i.e., about 3.7 ped cent. of the total labour force, were employed. This number increased to 13,036 (i.e., 4.3 per cent) in 1944. Only 30 factories in 1939 and 45 in 1944, employed female labour. Most of the female labour was employed in General Engineering (Bihar factories) and in Ordnance Depots (Kirkee and Dehu Road). The relevant details are given below :—

TABLE 252.

Female Labour (1939 and 1944).

Industry.	No. of factories employing female labour.		No. of female workers employed in these factories.	
	1939	1944	1939	1944
General Engineering	12	15	4,402	5,244
Electrical Engineering	6	6	128	147
Railway Workshops	4	4	365	432
Kerosene Tinning	2	2	17	75
Metal Stamping	3	3	26	21
Ordnance	Nil	12	Nil	7,073
Miscellaneous	3	3	9	44
Total ..	30	45	4,947	13,036
Province				
Bombay	17	28	129	6,917
Bengal	7	7	679	629
Bihar (Jamshedpur)	6	6	4,139	4,704
C.P. (Jubbulpore)	Nil	1	Nil	534
Punjab (Lahore)	Nil	1	Nil	4
Mysore (Bhadravati)	Nil	1	Nil	103
Bhavnagar	Nil	1	Nil	145
Total ..	30	45	4,947	13,036

Almost all the female labour is utilised as sweepers and coolies; only a few are employed as skilled labourers, female searchers, etc. The employment of women in Bengal and Bihar factories is due to the fact that these factories are located near the mining areas, where women workers are available in large numbers. The large number of women workers in Bombay Province is due to their employment in ordnance depots. ten of which employed 6,394 female workers in 1944. The Jubbulpore and Bhavnagar factories in the above table are also ordnance concerns and those in Lahore and Bhadravati belong to General Engineering.

Except in General Engineering (1 factory) and Ordnance (11 concerns), child labour was absent, barring perhaps the employment of "office boys". The details of child labour are as follows :

TABLE 253.

Child Labour.

Industry	Province or State	Number of concerns employing children.		Number of children employed.	
		1939	1944	1939	1944
General Engineering ..	Bihar (Jamshedpur)	1	1	163	374
Ordnance	Bombay	1	9	72	932
	C. P. (Jubbulpore)	..	1*	..	238
	Baroda	..	1	..	7

* This concern is an ordnance factory; the other 10 concerns are ordnance depots.

Piece-rated Labour.—As many as 10,544 workers (i.e., 7.8 per cent of the total labour force) in 1939 and 42,952 workers (i.e., 14.1 per cent) in 1944 were paid at piece rates. Payment at piece rates is most common in ordnance factories, as the following table suggests.

TABLE 254.

Piece-rated Labour.

Industry	Factories paying Piece rates.		No. of piece-rated workers.		Main centres of piece-rate payments.
	1939	1944	1939	1944	
General Engineering	9	13	1,753	3,869	Calcutta, Jamshedpur Bombay, Baroda.
Electrical Engineering	2	3	348	596	Calcutta Jamshedpur.
Railway Workshops	2	2	1,693	4,471	Kharagpur, Makafda.
Metal Stamping	4	4	309	125	Bombay.
Ordnance	5	7	6,149	33,459	Kirkee, Calcutta, Ishapore, Jubbulpore, Cawnpore.)
Miscellaneous	2	2	292	432	Bombay.
Total ..	24	31	10,544	42,544	

Piece-rated labour is mainly used in moulding and smithy shops. In the ordnance factories, it is used in a number of other shops.

Contract Labour.—Contract labour is more common in General Engineering and Metal Stamping than in other branches of engineering. In 1939, only 1,551 workers (i.e., 1.2 per cent) constituted contract labour in the concerns investigated. The number increased to 7,855 (i.e., 2.6 per cent.) in 1944. The relevant figures are given below :—

TABLE 255.

Contract Labour.

Industry	Factories having Contract Labour.		Number of labourers employed through contractors.	
	1939	1944	1939	1944
General Engineering	8	16	875	4,185
Electrical Engineering	1	2	164	697
Railway Workshops	2	2	52	2,442
Coach Building etc.	1	1	134	52
Kerosene Tinning etc.	..	1	..	32
Metal Stamping	4	4	304	93
Ordnance (Depot)	..	1	..	138
Miscellaneous	1	2	22	216
Total	17	29	1,551	7,855

Note : Figures of contract labour in a few concerns were not available.

Only a few workers (in General Engineering—189 in 1939 and 942 in 1944) are employed through contractors but paid directly; all other workers in the above table are employed and paid through contractors. Contract labour seems to be common in Bengal, Bombay and Bihar.

Length of Service.—Because of war-time expansion, a majority of workers have less than 5 years' service to their credit. As the following table shows stability of service is seen more in the Railway Workshops and in General Engineering than in other branches of engineering :

TABLE 256.

Length of Service.

Industry.		Number of Factories.	Workers employed	No. of workers who have served for			
				Less than one year.	1 to 5 years.	5 to 10 years.	Over 10 years.
General Engineering		41	88,461	17,557	34,445	15,578	20,881
Electrical Engineering		38	10,161	3,538	3,224	1,601	1,798
Railway Workshops		36	35,611	3,901	12,331	4,126	15,253
Coach Building etc.		15	12,921	3,343	8,502	601	475
Kerosene Tinning etc.		3	4,231	722	2,300	675	534
Metal Stamping		8	2,342	561	1,504	166	111
Ordnance		18	92,341	45,707	39,193	3,743	3,698
Miscellaneous		11	6,269	2,297	2,838	625	509
Total	Workers	170	252,337	77,626	104,337	27,115	43,259
	Percentage	..	100%	30.08%	41·3%	10·8%	17·1%

Temporary and Permanent Classification.—About one-third of the concerns investigated, have no classificaion at all; while an equal number treat all the workers as temporary.

TABLE 257.

Permanent and Temporary Classification.

Industry	No. of concerns investigated	No. of concerns where workers are			
		All temporary	All permanent	Classified.	Not classified.
General Engineering	65	15	10	22	18
Electrical Engineering	43	1	11	18	13
Coach Building etc.	20	7	5	3	5
Kerosene Tinning etc.	3	..	..	3	..
Metal Stamping	8	..	..	3	5
Ordnance	22	20	..	2	..
Miscellaneous	14	1	5	5	3
Total ..	175	44	31	56	43

NOTE : Railway workshops (numbering 45) have not been taken into consideration.

The rights and privileges of permanent workers differ not only from industry to industry, but also from factory to factory.

Apprenticeship System.—Altogether 82 factories in the investigated units (except railway workshops) have apprenticeship schemes.

TABLE 258.

Apprenticeship Schemes.

Industry.	Total No. of Concerns.	No. of concerns having apprenticeship system in								
		Madras	Bombay.	Bengal.	U.P.	Punjab.	Bihar.	C.P.	Mysore.	Total.
General Engineering ..	65	5	11	15	1	3	3	..	1	39
Electrical Engineering ..	43	2	9	11	1	2	1	..	..	26
Coach Building etc. ..	20	2	..	1	..	1	..	..	..	4
Kerosene Tinning etc. ..	3	..	2	..	..	..	..	..	..	2
Metal Stamping ..	8	..	1	..	..	..	..	..	..	1
Ordnance (factories)	22	..	2	3	..	..	..	2	..	7
Miscellaneous ..	14	..	3	..	..	..	..	..	..	3
Total	175	9	28	30	2	6	4	2	1	82

Labour Turnover and Absenteeism.—The rates of labour turnover and absenteeism vary considerably from industry to industry. In most of the industries (with some exceptions, such as railway workshops) these percentages have increased in war time. In the Ordnance industry, the absenteeism percentage, which was from 5—15 per cent. in 1939, increased in war time and was perhaps the highest in all the branches of Engineering. The average labour turnover varies between a very wide range, from 0.1 per cent. to 26.5 per cent. The least turnover is perhaps in Coach Building and Motor Repairing—between 2 and 3 per cent. The percentage of absenteeism also covers a wide range—from 0.5 to 19.0 per cent. in 1939 and 0.02 to 32.0 per cent. in war time.

Standing Orders.—Employees in Railway Workshops are generally subject to rules of the State Railway Establishment Code. Similarly, Ordnance workers are governed mainly by the Standing Orders of the I.A.O.C. In both cases the standing orders are supplemented by rules framed by the Superintendent or Works Manager. Out of 153 concerns investigated in other branches of engineering, only 55 had Standing Orders or Service Rules or some conditions of employment. These concerns were distributed as follows :

TABLE 259.

Standing Orders in Concerns.

Industry.	No. of concerns investigated.	No. of concerns having Standing Orders in							
		Madras.	Bombay.	Bengal.	U.P.	Punjab.	Bihar.	Mysore.	Total.
General Engineering ..	65	4	8	1	3	1	2	1	20
Electrical Engineering ..	43	2	9	5	..	1	1	..	18
Coach Building etc. ..	20	1	2	2	1	..	..	..	6
Kerosene Tinning etc. ..	3	..	3	..	..	..	..	..	3
Metal Stamping ..	8	..	2	..	..	..	..	..	2
Miscellaneous	14	..	5	..	..	..	1	..	6
Total ..	153	7	29	8	4	2	4	1	55

Recruitment.—Most of the branches of Engineering felt in war time an acute shortage of labour, because of a sudden demand on labour. Unskilled labour is usually selected from amongst persons gathering at the gate or from amongst relatives or friends of existing workers. Skilled workers are recruited after interview and trade tests. Labour Bureaux, Selection Boards and Employment Exchanges form some of the machinery in the recruitment of skilled labour. One of the ordnance factories had an Officer on Special duty,

(an I.C.S. officer) for recruitment of labour. We have already noted that as many as 29 factories employed a part of their labour through contractors.

Labour Officers.—Labour Officers seemed to be very common only in the Ordnance industry, where 21 out of the 22 concerns investigated had labour officers. In all 56 out of the 220 concerns under survey had labour officers distributed as follows :—

TABLE 260.

Labour Officers.

	Total No. of concerns investigated.	Number and location of concerns having labour officers.
General Engineering	65	13 Bombay, 2; Bengal, 6; U.P., 1; Bihar, 3; and Baroda, 1
Electrical Engineering	43	12 Madras, 1; Bombay, 9; U.P. 1; and Punjab, 1
Railway Workshops	45	1 Bengal, 1
Coach Building ..	20	1 Bombay, 1
Kerosene	3	1 Bombay, 1
Metal Stamping ..	8	1 Bombay, 1
Ordnance ..	22	21 Bombay, 13; Bengal, 2; U. P. 1; C. P., 2; Baroda, 1 Bhavnagar, 1; and Cochin, 1.
Miscellaneous ..	14	6 Bombay, 5; and Bihar, 1
Total ..	220	56 Madras, 1; Bombay, 32; Bengal, 9; U.P., 3; Punjab, 1; Bihar, 4; C. P., 2, Baroda, 2; Bhavnagar, 1; and Cochin, 1.

II.—Wages and Earnings.

Both wage rates and earnings differ not only from industry to industry but also from Province to Province. In addition, factors like the location of factory, allowances, supply of labour, lack of any standardisation of occupational terms, *ad hoc* increases in rates, etc. make it almost impossible to tabulate the wage rates and earnings of different groups of workers on a uniform basis. Earnings have increased since 1939 in almost all the industries and this increase is seen either in the form of wage increases or in the form of bonuses and allowances, or in the form of both. In the previous Chapters, wages and earnings in different industries were analysed generally according to the centres investigated, as there appeared to be more uniformity centre-wise.

Dearness Allowance.—Most of the Railway Workshops follow the scale of dearness allowance, prescribed by the Railway Board. Similar uniformity is also found in the Ordnance concerns, which are all owned by Government.

In the other branches of Engineering, various methods are used which can broadly be classified as follows :—

TABLE 261.

Methods of Dearness Allowance.

Industry.	No. of concerns investigated.	Methods of payment of dearness allowance.					No. dearness Allowance
		Flat rate for all	Different flat rates for different groups.	Sliding scale based on cost of Living Index.	Based on per cent. age basis	Mixed (more than one method)	
General Engineering	65	9	17	9	9	12	9
Electrical Engineering	42	7	11	10	5	6	3
Coach Building ..	20	8	..	4	5	2	1
Kerosene tinning etc	3	..	..	3	..	..	..
Metal Stamping ..	8	4	1	2	2	1	..
Miscellaneous ..	14	3	..	4	..	4	1
Total ..	152	31	29	32	21	25	14
Province or State							
Madras	16	4	7	3	1	1	..
Bombay	68	14	11	27	5	5	6
Bengal	43	11	8	..	12	10	2
U.P.	5	..	..	2	..	1	2
Punjab	10	1	..	..	2	3	4
Bihar	6	1	1	..	..	4	..
Baroda	3	..	1	..	..	..	2
Mysore	1	..	1	..	..	..	..
Total ..	152	31	29	32	20	26	16

Bonus and Other Allowances.—No war bonus is paid in the Railway Workshops and the Ordnance concerns. Out of the 153 concerns in other branches of engineering, 91 concerns, *i.e.*, about 60 per cent. pay what may be called the "prosperity" bonus. These 91 factories are distributed as follows : General Engineering, 34; Electrical Engineering, 27; Coach Building and Motor Repairing, 17 ; Kerosene Tinning and Packing, 3 ; Metal Stamping, 3 ; and Miscellaneous, 7. The amount of bonus varies from half a month's to four months' wages a year. Besides bonus, a number of other allowances are granted. These allowances are more common in Railway Workshops, General Engineering and Ordnance and in centres like Jamshedpur, Bombay and Calcutta.

Overtime.—Because of war-time pressure of work, overtime has been prevalent in a majority of engineering factories. Almost all the Railway workshops and Ordnance concerns work overtime, usually for two hours. Overtime is also common in other branches of engineering. For example, 51 out of the 65 General Engineering factories, 41 out of 43 electrical engineering factories, 18 out of 20 coach building and motor repairing factories, 6 out of 8 metal stamping factories and all the Kerosene tinning and packing factories work overtime. In some of the concerns (especially ordnance, railway workshops and miscellaneous), overtime is compulsory. However, the extra payment for overtime induces a worker to work it without any compulsion.

Deductions and Fines.—The usual deductions made are subject to the Payment of Wages Act (Section 7). In Railways, the amount of fines goes to the Staff Benefit Fund, maintained for the Railway as a whole. In the G.I.P. Railway alone, the amount outstanding in this Fund at the end of the year 1943-44 was Rs. 3,67,145. In other branches of engineering, out of 175 concerns investigated as many as 64 concerns had fine funds. The funds were distributed as follows : General Engineering, 18 ; Electrical Engineering, 17 ; Coach Building and Motor Repairing,6 ; Kerosene tinning and packing, 1; metal stamping, nil; Ordnance, 20; and Miscellaneous, 2. Fines seem to be common in ordnance, general engineering and electrical engineering. The amounts outstanding in 12 ordnance concerns and 14 general engineering factories were Rs. 23,043 and Rs. 6,591 respectively. In kerosene tinning and packing, only Burmah Shell had a fine fund and the amount outstanding in it was about Rs. 2,000. In most cases, the amount is at the disposal of the management of the concern.

Wage Period.—In as many as 175 factories, payments are monthly. Fortnightly payments are found in about 15 factories located in U.P., Bengal and Bombay, while weekly payments are prevalent in 17 factories, mainly in Bengal and Bihar. In 12 factories, different wage periods are in existence for different sets of workers. The distribution of wage periods is as follows.

TABLE 262.

Wage Periods.

Industry.	Monthly.	Fortnightly.	Weekly.	Miscellaneous (various periods).	Total.
General Engineering ..	40	8	8	9	65
Electrical Engineering ..	31	2	6	3	42*
Railway Workshops ..	45	..	..	..	45
Coach Building etc. ..	15	2	3	..	20
Kerosene Tinning etc. ..	3	..	..	..	3
Metal Stamping	8	..	..	..	8
Ordnance	21	1	..	..	22
Miscellaneous	12	2	..	..	14
Total	175	15	17	12	219*

* Information of one concern (a power station) is not available.

The waiting period varies between 7 and 10 days and is generally dependent on the size of the factory (*vide* Section 5 of the Payment of Wages Act).

Holidays.—Following the Factories Act, a weekly holiday, usually Sunday, is granted by most of the factories. Except this, hardly any uniformity exists as regards closed holidays in the units investigated. The number of additional holidays (for festivals, etc.) varies between *nil* and 25 and these are with or without pay.

III.—Working Conditions.

Shifts and Hours of Work.—The number of shifts vary considerably in a number of concerns investigated. In a general engineering factory in U.P., there were 41 shifts, which included general day and night shifts for various categories of workers. Similarly, in another U.P. factory (a power station), the workers had been divided into seven main groups, with as many as 57 shifts. One of the railway workshops had 54 relays for 19 groups of its employees. Normally, however, the number of shifts in a concern was less than four; the actual hours worked in each shift were between 7 and 10, with a rest interval varying between ½ and 2 hours. Night shifts were fairly common, because of the war-time pressure of work. Overtime, usually 2 to 4 hours, extended the length of the shifts worked, and in a few cases (railway workshops), the spreadover was found to be of 13 hours in a day, with only an hour's interval. Overlapping shifts were usually worked by different sets of workers.

Conditions of Work in Factories.—Too much reliance is placed on natural ventilation and lighting. Congestion has become inevitable on account of sudden expansion in employment. Rural concerns, like ordnance depots, have, however, not felt the congestion. Flooring is *kutcha* in a majority of small factories. No special protection against heat has been provided.

Shelters.—Rest-shelters, ranging from ordinary tin or wooden sheds to well-furnished rooms, have been provided by 47 factories, as follows :—

TABLE 263.

Shelters for Rest

Industry*	Number of factories providing rest-shelters in—									
	Madras	Bombay.	Bengal.	U.P.	C.P.	Punjab.	Bihar	Cochin.	Bhavnagar	Total.
General Engineering ..	4	3	5	2	..	2	1			17
Electrical Engineering ..	1	3	1	1	.	1	1			8
Railway Workshops ..	1	4	2	..	.	..	..	.		7
Coach Building ..	3	2	..	..	..	..	.			5
Kerosene etc.	..	1	..	..	.	..	.			1
Ordnance	..	2	1	1	1	..	..	1	1	7
Miscellaneous	..	2	..	..	..	..			..	2
Total ..	9	17	9	4	1	3	2	1	1	47

* There are no shelters in the Metal Stamping Industry.

IV.—Welfare Activities.

Sanitary Arrangements.—The conditions of latrines and urinals were found to be rather unsatisfactory in some Provinces, especially in Bengal. In the Bengal coach building industry, for example, the number of persons using one latrine varied between 9 and 161. On an average, a latrine or urinal is built for the use of 50 persons. The general position, however, appeared to be better, and the investigation showed a satisfactory average as can be seen from the figures of some of the industries.

TABLE 264.

Latrines and Urinals.

Industry.	No. of concerns.	No. of workers.	No. of latrines and urinals	No. of workers using one latrine or urinal.
General Engineering	39	29,449	672	44
Coach Building etc.	13	4,434	151	29
Kerosene Tinning etc.	3	4,196	104	40
Miscellaneous	4	4,138	135	31
Total ..	59	42,217	1,062	40

Water supply is adequate and is mainly through water-taps; in Bengal, tube-wells are common Workers, however, rarely take bath in the factory premises. Cool water is supplied in very few factories and where it is supplied it is mainly by means of earthern jars.

Medical Aid.—As many as 88 factories maintain either dispensaries or hospitals. Some of the factories have more than one dispensary. Most of the important railway centres have got well-equipped railway dispensaries or hospitals. The details about other branches of engineering are given below :—

TABLE 265.

Medical Arrangements.

Industry.	Number of factories having				Total No. of concerns.
	Hospitals.	Dispensaries	Mere first aid boxes.	Other arrangements.*	
General Engineering ..	7	17	29	12	65
Electrical Engineering ..	..	21	14	8	43
Coach Building	..	1	19	..	20
Kerosene Tinning ..	..	3	..	..	3
Metal Stamping	..	2	6	..	8
Ordnance	4	13	5	..	22
Miscellaneous	..	10	4	..	14
Total ..	11	67	77	20	175

* Other arrangements include (i) engaging a private practitioner.

(ii) utilising an adjacent or public dispensary, (iii) contributing to a hospital or dispensary.

Medical facilities ranged from medical posts staffed by compounders to well-equipped hospitals staffed by qualified doctors. The medical arrangements in the ordnance concerns and in Jamshedpur appeared to be the best. Very few occupational diseases were reported. Periodical medical examination seemed to be practically absent.

Canteens.—As many as 93 concerns provided canteens, which ranged from ordinary tea-stalls to restaurants serving meals and refreshments. The distribution and management of canteens in the 93 concerns were as follows :—

TABLE 266.

Canteens in Engineering.

Industry.	No. of concerns investigated.	Number of factories having canteens, run by			
		Company.	Private contractors.	Workers' Co-operative Societies.	Total.
General Engineering ..	65	5	16	3	24
Electrical Engineering ..	43	5	7	2	41
Railway Workshops ..	45	2	13	2	17
Coach Building etc. ..	20	1	2	..	3
Kerosene etc.	3	1	2	..	3
Metal Stamping	8	1	1	..	2
Ordnance	22	..	5	16	21
Miscellaneous	14	..	8	1	9
Total ..	220	15	54	24	93

Canteens were common in Bombay, Calcutta and Jamshedpur. In Bombay, however, they served mainly tea and light refreshments, while in the other two centres and in most of the ordnance concerns, they served cheap meals. In the ordnance concerns, canteens were run by the Workers' Welfare Committees.

Creches and Education.—Only 5 out of the 220 factories investigated maintained creches as follows : (i) General Engineering, 2 factories (both in Bihar); (ii) Electrical Engineering, 1 factory (in Bihar); and (iii) ordnance depots, 2 (both in Bombay Province). No facilities for education are provided in any of the concerns investigated in Coach Building and Motor Repairing, Kerosene tinning and packing, and Metal stamping mainly because most of these factories have been located in urban localities. The Railways have their own schools in many centres and in addition they also subscribe to many public and private schools. The position in other branches of engineering was as follows :—

TABLE 267.

Educational Facilities.

Industry.	No. of factories having educational facilities for				Main Centres.
	Workers' Children.	Adult workers.	Both	Total.	
General Engineering ..	3	..	5	8	Calcutta, Jamshedpur, Cawnpore, Bhadravati,
Electrical Engineering ..	3	10	1	14	Bombay, Madras Calcutta Cawnpore
Ordnance	4	5	3	12	Kirkee, Dehu Ishapore,
Miscellaneous	2	..	..	2	Bombay.
Total ..	12	15	9	36	

Grainshops.—Because of war-time necessities, as many as 156 out of the 220 concerns investigated had maintained grain shops for their workers. The railway workers got cheap grains and other provisions, at rates far lower than those prevalent in the market, from the shops maintained by the railway authorities. In other branches of engineering also, a majority of factories maintained ration grain shops, which sold articles at controlled rates, and in some cases even cheaper. These shops were distributed as follows : General engineering 38; electrical engineering, 34; coach building and motor repairing, 8 ; kerosene tinning and packing, 3 ; metal stamping, 4 ; ordnance, 15 ; and miscellaneous, 9. The shops were more common in Bombay, Bengal and Bihar than in other Provinces.

V.—Housing Accommodation.

As many as 67 concerns have provided housing for their workers. This provision is common in ordnance industry, railway workshops and power stations. No housing accommodation has been provided by any of the factories in coach building and motor repairing, kerosene tinning and packing, and metal stamping, mainly because of their urban location. The distribution of housing provided by some of the factories was as follows :—

TABLE 268.

Housing Accommodation.

Industry.	Number of factories providing housing accommodation in									
	Madras.	Bombay.	Bengal.	U.P.	Punjab.	Bihar.	C.P.	Ajmer.	Mysore.	Total.
General Engineering ..	.	1	4	..	2	3	..	..	1	11
Electrical Engineering ..	1	5	7	..	1	1	..	..	..	15
Railway Workshops ..	1	20	2	..	1	..	..	1	..	25
Ordnance	..	8	2	1	..	..	2	..	..	13
Miscellaneous ..	..	3	..	..	..	..	..	..	..	3
Total ..	2	37	15	1	4	4	2	1	1	67

Though we find some factories in big cities, such as Bombay, Madras, Calcutta, Lahore, Cawnpore, Poona, Sholapur and Ahmedabad, providing housing for their workers, it is mostly in mofussil industrial centres like Hirapur, Kulti, Bhira, Bhivapuri, Khopoli, Hubli, Kurduwadi, Burdwan, Naihati, Darjeeling and Tindharia, that a necessity for housing the workers arises. Well-organised workers' colonies have been set up in Bhadravati, Jamshedpur, Kirkee, Dehu, Jubbulpore and Ishapore. The details of these colonies are given in their respective places. No adequate material has been available about the housing provided by private landlords or public bodies, but from the information available it appears that the conditions are far from satisfactory

VI.—Trade Unions and Strikes.

Trade Unions.—The Annual "Notes" on the working of the Trade Union Act (1926) give the number of registered trade unions and their membership. The following table is compiled from these "Notes".

TABLE 269.

Registered Trade Unions and Their Membership.

Year.	Railways (including workshops and other transport excluding tramways).		Tramways.		Engineering.	
	Unions.	Membership.	Unions.	Membership.	Unions.	Membership.
1929-30 ..	28	1,59,444	3	4,074	1	445
1934-35 ..	46	1,56,103	3	3,519	8	1,018
1939-40 ..	86	1,79,381	7	6,080	20	6,768
1940-41 ..	99	1,71,572	5	5,669	28	9,547
1941-42 ..	92	2,19,086	5	5,458	26	9,292
1942-43 ..	80	2,54,510	6	7,400	40	17,754

Unions in the railways and tramways have generally far more members in the traffic section than in the workshops.

In the main body of this Report, details about 53 unions are given; 8 of these unions are "general" unions, *i.e.*, their membership is open to all engineering unions and is not restricted to a particular branch of engineering or to a particular concern in that branch. The 8 general unions are located as follows: Madras, 1; Bombay, 5; Bengal, 1 and Bihar, 1. The distribution of other 45 unions is as follows :—

TABLE 270.

Trade Unions in Investigated Factories.

Industry.	Total No. of concerns.	No. of unions.	Location of the unions.
General Engineering	65	18	Madras, 4; Bombay, 4; Bengal, 6; Bihar, 3 and Mysore, 1.
Electrical Engineering	43	13	Madras, 2; Bombay, 6; Bengal, 2; Punjab, 2 and U.P., 1.
Coach Building ..	20	6	Madras, 1; Bombay, 2 and Bengal, 3.
Kerosene	3	1	Bombay, 1.
Metal Stamping ..	8	1	Bombay, 1.
Ordnance	22	2	Bengal, 1 and C.P. 1.
Miscellaneous ..	14	4	Bombay, 4.
Total ..	175	45	Madras, 7; Bombay, 18; Bengal, 12; U.P., 1; Punjab 2; Bihar, 3, C. P., 1; and Mysore, 1

Engineering workers are thus fairly organised, mainly because a large number of them are skilled, educated, well-paid and advanced. The industry also is well organised and is concentrated in a few industrial centres. A large number of trade unions is unregistered, as can be proved from the list of unions in the Bombay Province. The rate of subscription varies from one

anna to four annas per month. Many unions, though registered under the Act, have not been recognised by the employers.

Works Committees.—Works Committees are very common in railways. In other branches of engineering, out of 175 concerns investigated, only 29 had Works Committees, known variously as Workers' Councils, Workers' Welfare Committees or Workers' Committees. In ordnance 16 out of the 22 concerns investigated had Workers' Welfare Committees, with a well-defined constitution. The remaining factories having Works Committees were as follows : general engineering, 5 (2 in Bihar and 1 each in Bombay, U.P., and Baroda); electrical engineering 2, (1 each in Bengal and Bihar); coach building and motor repairing, 3 (Bombay, 1 and Bengal, 2); Kerosene tinning and packing, 1 (Bombay); and Miscellaneous, 2 (in Bombay). Both workers and managements are represented on these Committees, which discuss the day-to-day grievances of workers.

Strikes.—A complete record of all strikes is not available. However, some details about strikes are given earlier. Many of the factories experienced more than one strike, specially during war time. Many other investigated factories have not supplied correct and adequate information about strikes. The 65 concerns; which have supplied adequate information, are distributed as follows : general engineering, 22 (Madras, 4; Bombay, 4; Bengal, 10; U.P. 1 ; Bihar, 2 ; and Mysore, 1) ; electrical engineering, 14 (Bombay, 7 ; Bengal, 5; Bihar, 1; and Punjab, 1); coach building and motor repairing, 7 (Madras, 1; Bombay, 2; and Bengal, 4); kerosene tinning and packing, 3 (Bombay); metal stamping, 3 (Bombay); ordnance, 6 (Bombay, 2; and 1 each in Bengal, U.P., C.P. and Bhavnagar); and Miscellaneous, 10 (Bombay). The majority of strikes took place in war time mainly for wage increases, either in the form of more wages or of more allowances.

VII.—General.

Accidents.—Complete details about accidents and compensation are not available. However, details are available about accidents in 144 concerns in the year 1943 and in 1944 in a few cases.) These accidents, with the amount of compensation paid, have been summarised below according to industries and areas :

TABLE 271.

Accidents in 1943.

Industry.	Total No. of concerns investigated	No. of concerns having accidents.	Total No. of accidents.	No. of accidents for which compensation was paid.	Amount of compensation paid. Rs.
General Engineering	65	37	12,016	2,321	1,47,106
Electrical Engineering	43	23	850	347	9,880
Railway Workshops	45	37	3,744	1,546	50,272
Coach Building	20	11	806	257	6,506
Kerosene	3	3	390	361	11,791
Metal Stamping	8	5	339	230	3,368
Ordnance	22	18	7,365	2,011	60,751
Miscellaneous	14	10	153	115	6,400
Total ..	220	144	25,663	7,188	2,96,074

Province or State.	Total No. of concerns investigated	No. of concerns having accidents	Total No. of accidents	No. of accidents for which compensation was paid	Amount of compensation paid.
Madras	19	10	702	96	8,381
Bombay	117	83	8,569	4,206	98,660
Bengal	51	29	4,158	1,667	91,104
U. P.	6	3	1,413	73	3,141
Punjab	12	9	1,516	573	10,268
Bihar	6	5	7,520	369	64,614
C. P.	2	2	1,567	19	11,687
Mysore	1	1	180	180	8,219
Baroda	4	..	..	..	
Bhavnagar	1	1	37	..	..
Cochin	1	1	1	..	..
Total ..	220	144	25,663	7,188	2,96,074

A number of accidents go uncompensated. These accidents are generally of less than seven days' duration and in many cases injury leave and pay for the period of absence is granted. The grant of injury pay is very common in the ordnance industry.

Indebtedness.—A very large number of industrial worker is indebted, though exact data are not available. The most common method adopted by concerns to help the workers is to grant advances and short-term loans to workers against wages earned. These are mostly interest-free loans. Loans are also given by a few concerns from Welfare Funds and from Provident Fund accumulations. About 35 factories had co-operative societies, distributed as follows : general engineering, 11; electrical engineering, 13; coach building and motor repairing, 3; kerosene tinning and packing, 1; metal stamping, 1; and ordnance, 6. In addition, the co-operative societies managed by the various railways cater for workers employed in railway workshops. The usual interest charged by the societies is either 6-1|4 per cent. or 9-3|8 per cent. per annum. However, the Societies have not proved very successful as can be seen from the fact that outside moneylenders are still largely in the field.

Provident Fund.—Most of the railways have Provident Funds and an employee in a workshop can join it under certain conditions. The workers in ordnance factories (but not depots) are also governed by the Indian Factory

Provident Fund Rules. Out of the 153 concerns in other branches of Engineering, only 55 concerns have Provident Funds distributed as follows :—

TABLE 272.

Provident Funds.

Industry.	Number of factories having Provident Fund system in								
	Madras	Bombay.	Bengal.	UP.	Bihar	Punjab.	Baroda.	Mysore.	Total
General Engineering	1	4	2	1	3	..	2	1	14
Electrical Engineering	2	17	6	1	1	2	..	...	29
Coach Building etc.	2	1	2	..	..	..	..	..	5
Kerosene Tinning etc.	..	1	..	..	..	..	..	..	1
Metal Stamping	..	2	..	..	..	..	..	..	2
Miscellaneous	..	4	..		..	..	..	..	4
Total ..	5	29	10	2	4	2	2	1	55

The rules are mostly similar barring some slight variation in the conditions for eligibility for membership, rates of contributions and conditions of claims on employer's contributions.

Gratuities.—The railways and the ordnance industry have their own rules regarding gratuities and pensions. In other branches of engineering, 30 factories (only in 3 industries) were found to have gratuity systems. These factories were : general engineering, 13; electrical engineering, 15; and coach building and motor repairing, 2. Pensions are given only in 3 factories: general engineering, 2 and kerosene tinning and packing, 1. The rules regarding gratuities and pensions vary considerably from factory to factory.

B. P. ADARKAR,

Member, Labour Investigation Committee.

SIMLA,

10th December, 1948.

APPENDIX I.

Views of Employers' Associations.

The Indian Engineering Association and the Engineering Association of India, which between them represent a considerably large section of the engineering industry having a membership of 166 engineering concerns that employ nearly 300,000 workers, submitted two valuable memoranda setting out their views regarding conditions of labour in the engineering industry. These memoranda represent a cross-section study, of the labour problems from the employers' point of view. Considerable factual and statistical data given in them are of interest, and are, therefore, summarised in this Appendix, together with certain views expressed by the Associations.

Employment.

The Indian Engineering Association has at present 95 members employing a total of about 150,000 workers. The Engineering Association of India has 71 members who employ on an average between 125,000 and 150,000 workers.

Length of Service.—Information regarding length of service was available only from 8 firms which were members of the Indian Engineering Association. This is given in the following table :

TABLE 1.

Length of Service.

Service.	No. of workers.	Percentage of Total.
Between 0 and 1 year	3,898	20·9
,, 1 and 5 years	9,168	49·1
,, 5 and 10 years	2,674	14·3
Over 10 years	2,942	15·7
Total ..	18,682	100

Classification of Workers.—The workers are classified not on the basis of the posts held by them but on the basis of the period of service and frequently from the point of view of their participation in various benefits such as provident fund. For this reason there has not been the same need for a recognition of a class of *badli* or temporary workers as in other industries and in normal times the majority of firms do not have their workers' so classified.

Apprenticeship.—From the earliest days there was a class of skilled *mistry*, in which the skill was passed on from father to son. The initial development of the skilled engineering workers arose entirely as a result of the practical experience of men who entered the factories when they were comparatively young and gained their knowledge of the processes of industry over many years of practical experience. To a very large extent, this system

of informal training still continues. The limitations of this system are that the time taken for training is long, the experience of the worker is limited to the machine to which he has been trained and, more than all, the worker obtains no scientific or theoretical technical background. The older engineering firms, therefore, for many years, and an increasing number of concerns recently, have developed apprentice training courses with the object of producing skilled workers suitable for senior executive posts.

Graded or Timescale Promotions.—There are generally graded posts for the supervisory staff. Increments in pay are given to workers in most of the engineering firms on the recommendation of the foreman. The amount of increment usually depends on their length of service and ability.

Labour Turnover and Absenteeism.—Figures given by the Indian Engineering Association indicate that labour turnover in 1944-45 was about 2 to 3 per cent. per month as against a pre-war figure of 1 per cent. Skilled labour is more permanently settled than unskilled and is more intelligent and appreciates the advantages which follow on long service in the way of provident fund, pensions, increments, etc. In their case, the problem of labour turnover does not arise to any large extent. During war time, however, considerable numbers of skilled workers left civil factories for employment in Ordnance factories. Absenteeism figures were not available.

Recruitment.—Since in the engineering industry skilled workers are employed to a large extent the question of recruiting from long distances does not arise. The recruitment of labour is invariably done directly from amongst applicants for jobs.

Wages and Earnings.

Maximum and minimum hourly rates of wages for select occupations in the industry in three important centres, Bombay, Calcutta and Howrah and average daily rates for the industry as a whole are given in the next two tables.

TABLE 2.

Basic Hourly Wages for Select Occupations in the Engineering Industry in Calcutta, Howrah and Bombay, 1938 and 1944.

(From figures supplied by the Indian Engineering Association).

Occupation	1938						1944					
	Calcutta.		Howrah		Bombay		Calcutta		Howrah		Bombay	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Blacksmith	0 2 3	0 3 3	0 2 0	0 2 11	0 2 7	0 5 8	0 2 8	0 4 8	0 2 8	0 3 8	0 3 3	0 5 8
Boilermaker	0 1 11	0 3 4	0 1 3	0 2 0	0 2 10	0 5 0	..	..	0 2 7	0 3 3	0 3 4	0 5 0
Carpenter	0 2 4	0 3 11	0 2 2	0 3 1	0 2 6	0 4 4	0 2 3	0 3 6	0 1 11	0 3 8	0 2 6	0 4 4
Cooly	0 1 2	0 1 8	0 1 1	0 1 4	0 1 8	0 2 2	0 1 8	0 2 1	0 1 7	0 1 11	0 1 8	0 2 3
Coppersmith	0 1 7	0 3 5	0 1 4	0 3 4	0 2 4	0 4 9	.	..	0 1 9	0 3 9	0 3 0	0 4 9
Driller	0 1 10	0 3 2	0 1 6	0 2 4	0 2 2	0 3 3	0 2 3	0 3 2	0 1 10	0 3 0	0 2 2	0 3 3
Electrician	0 2 2	0 3 11	0 2 0	0 3 7	0 2 11	0 5 5	0 2 6	0 3 10	0 1 10	0 4 3	0 2 11	0 5 5
Fitter	0 1 11	0 4 10	0 1 4	0 4 3	0 2 7	0 5 3	0 2 3	0 4 9	0 2 4	0 4 4	0 3 4	0 6 0
Hammerman	0 1 8	0 1 11	0 1 5	0 1 10	0 2 0	0 3 8	0 1 10	0 2 4	0 1 9	0 2 1	0 2 5	0 3 8
Khalasi	0 1 11	0 2 4	0 1 6	0 2 2	0 1 7	0 1 7	0 1 6	0 2 4	0 1 7	0 2 4	0 1 10	0 2 8
Machinist	0 2 9	0 4 5	0 1 10	0 3 0	0 2 7	0 5 0	0 2 5	0 3 9	0 2 1	0 3 9	0 3 0	0 5 0
Moulder	0 1 6	0 3 4	0 1 4	0 3 8	0 2 8	0 5 6	0 2 1	0 3 6	0 2 1	0 4 1	0 2 10	0 5 6
Oilman	0 1 5	0 1 9	0 1 3	0 1 7	0 2 0	0 2 6	0 2 2	0 2 5	0 1 9	0 1 11	0 2 2	0 3 9
Patternmaker	0 2 5	0 3 9	0 2 2	0 3 8	0 2 11	0 5 8	0 2 9	0 4 1	0 2 3	0 4 4	0 2 11	0 6 0
Painter	0 1 4	0 2 3	0 1 2	0 1 9	0 1 11	0 2 10	0 2 0	0 2 10	0 1 5	0 2 2	0 2 0	0 4 1
Plater	0 1 10	0 3 0	0 2 6	0 3 6	0 3 5	0 5 8	..	..	0 3 3	0 4 1	0 3 5	0 5 10
Rivetter	0 2 0	0 3 0	0 2 8	0 3 6	0 2 8	0 3 11	0 2 1	0 3 2	0 2 2	0 3 8	0 2 8	0 3 11
Tinsmith	0 1 7	0 3 2	0 2 0	0 2 6	0 2 4	0 4 9	0 2 6	0 3 6	0 1 10	0 3 4	0 3 3	0 4 8
Turner	0 2 2	0 4 0	0 1 11	0 3 7	0 2 7	0 6 0	0 2 6	0 4 2	0 2 3	0 4 0	0 3 9	0 6 8
Welder (Electric)	0 3 1	0 5 0	0 2 8	0 5 1	0 3 4	0 6 0	0 3 5	0 4 11	0 2 11	0 4 3	0 3 4	0 6 9
Welder (Gas)	0 2 1	0 4 0	0 3 1	0 3 3	0 4 0	0 5 5	0 3 8	0 4 3	0 2 4	0 3 1	0 4 0	0 6 0

TABLE 8.

Average Wage Rates for Select Occupations (1944).

(From figures supplied by the Engineering Association of India).

Occupation.	Rates per day.	
	Skilled workers.	Unskilled workers.
Blacksmiths	1 11 3	0 12 9
Boilermaker	1 14 0	..
Carpenter—Manual	1 10 0	0 14 0
Carpenter—Mechanical	1 4 0	..
Cooly—General	1 0 6	0 12 0
Cooly—Packing	0 11 0	..
Coppersmith	1 15 0	..
Driller	1 9 9	0 11 3
Fitter—Machine shop	1 10 9	0 12 3
Fitter Electrical	1 9 3	..
Fitter Tool Shop	2 0 3	0 11 9
Fitter Structural	2 2 0	0 15 0
Hammerman—Small Forging	0 15 6	0 11 0
Hammerman—Heavy Forging	1 0 3	0 10 6
Khalasi	1 3 0	..
Machinemen	2 0 0	0 13 0
Moulder	1 12 6	1 0 0
Pattern Maker	2 1 9	0 10 6
Painter	1 8 0	..
Plater	1 0 0	0 12 0
Rivetter	1 10 0	..
Tin Smith	1 15 0	..
Turner	2 0 0	0 13 0
Welder (Electric)	2 4 9	0 15 0
Welder (Gas)	2 0 0	0 10 0
Wiremen	1 11 9	..

Dearness Allowance.—Special payments to meet the increased cost of living during war were made by engineering concerns comparatively early in the war. In the Bombay area, engineering employers in general followed the action taken by the textile industry, in which the rate of allowance up to January 1941 was 2 as. per working day. Thereafter some engineering firms followed the revised rate of the textile industry of 33¼ pies per worker for a cost of living index figure of 124 increasing by 1½ pies for each point in the index above this. Other engineering firms adopted an alternative percentage scale, rising by 1 per cent, on basic wages for every 2 points increase in the Bombay cost of living index. In the Madras area, in some cases engineering firms have granted a cash allowance combined with the supply of food at concession rates, while in others dearness allowance is paid entirely in cash and calculated at 2 annas per point increase in the cost of living index in excess of 100. In the Calcutta area, in 1940 a temporary allowance of about 7½ per cent. of basic wages was granted which in January 1942 was increased to Rs. 5 per month to workers drawing Rs. 20 per month and in August 1942 to Rs. 7. From August 1942 a general policy of " freezing " the cost of living by supplying rations to the labour at fixed concession rates was adopted and continued ever since. From December 1942 the dearness allowance was Rs. 9 per month for workers drawing Rs. 20, apart from the food concessions.

Working Conditions.

In pence-time conditions it is customary over the greater part of the engineering industry to work one shift a day with overtime up to the limits permitted by the Factories Act when need arises. In war conditions, however, it has become necessary to work two shifts, a day shift and a night shift, in several factories. Three shifts are worked only in continuous process production such as rolling mills, bolt and nut production, etc. Where only single shifts are worked the hours of work are generally 8½ per day with a spreadover of 9 or 9½ hours. Where three shifts are worked the usual arrangement is from 6 a.m. to 2 p.m., from 2 p.m. to 10 p.m. and from 10 p.m. to 6 a.m. with half an hour's break in the middle of each shift. The usual number of days worked a week is 5½ or 6. Since the beginning of the war, overtime working has also been general in the engineering industry. In 1942, the average overtime payment in the Calcutta firms was about 20 per cent. of the basic earnings.

Welfare Activities.

As the workers in the engineering industry do not live in compact areas contiguous to the factory but are dispersed over wide areas, it is difficult to introduce organised welfare activities outside working hours. Welfare activities in engineering factories have, therefore, a more limited scope than is possible in some other industries. It is customary in the majority of firms to provide medical facilities, free treatment and often free medicines to workers who are injured in the course of their work, and this is frequently extended to all cases of sickness. A large majority of firms also provide canteens where the workers can obtain light refreshments at reasonable rates. The grainshops that are maintained in several engineering concerns has been necessitated by war-time scarcity of food-stuffs and the introduction of rationing in several industrial centres. It is unlikely that these will continue when normal times return. In several factories, the radio is used as a source of entertainment during the rest interval at midday. Before the war, many firms encouraged sports and athletic activities, but pressure of work has made it necessary in many cases to abandon these during war time. There is no doubt they will be resumed in the post-war years.

Housing.

In the main urban areas, the employers do not provide any housing facilities to their workers ; nor should they be expected to do so as action by the employers cannot touch even the fringe of the problem of housing. In up-country factories, in which the industry has been started in newly developed industrial areas, the employers have either provided housing accommodation or have granted facilities in the way of land at cheap rentals, housing materials, etc.

General.

In an investigation made by the Indian Engineering Association in the Calcutta industrial area in August 1942, it was ascertained that the position as regards pension and gratuity schemes and provident funds was as follows :—

TABLE 4.

Position as regards Provident Funds, Pensions, etc.

	Number	Per cent.
Workers affected by pension or gratuity schemes	19,861	40·8%
Workers not affected by pension or gratuity schemes	28,615	59·2%
	48,296	100%
Workers affected by provident fund schemes	15,126	31·3%
Workers not affected by provident fund schemes	33,179	68·7%
	48,305	100%
Workers covered by any regular system of pensions, gratuity or provident fund	29,832	62·0%
Workers not covered by any regular system of pensions, gratuity or provident fund	18,464	38·0%
	48,296	100%

APPENDIX II.

Provincial distribution of Employment in the Engineering Industry, 1939 and 1943.

(Number of Workers).

Industry.	Year	Madras	Bombay	Sind	Bengal	U. P.	Punjab	Bihar	Orissa	C. P. & Berar	Assam	N.W. F. P.	Baluchistan	Ajmer-Merwara	Delhi	Bangalore and Coorg	Total
General Engineering ..	1939	4,103	9,151	1,399	44,306	3,430	3,729	30,830	364	420	824	.	48	..	269	223	99,096
	1943	8,753	21,953	5,728	83,248	10,699	13,313	43,424	1,035	1,140	1,585	1,949	231	.	2,569	952	1,95,679
Electrical Engineering ..	1939	718	2,335	461	6,693	1,372	1,596	2,252	19	469	52	242	129	..	367		16,705
	1943	1,291	3,909	654	9,654	1,508*	2,408	3,860	49	731*	154	295	135	..	527	.	25,175
Railway Workshops ..	1939	12,313	18,015	1,736	26,772	13,024	11,452	12,576	328	848	534	135	..	6,360			1,04,058
	1943	16 622	27,389	2,010	33.836	13,241	19,905	16,057	380	904	1,398		819	8,791			1,41,352
Coach Building and Motor Repairing	1939	1,582	2,414	28	1,550	262	232	96	..	164	299		.	..	233	24	6,824
	1943	4,397	3,620	272	3,370	658	1,652	199	.	110	407	266	.	..	487	188	20,626
Kerosene Tinning and Packing	1939	659	1,446	790	2,778					..	51	.	..			.	5,724
	1943	806	3,799	1,195	3,906	.		.	..	..	..	.	..	..	.	.	9.706
Metal Stamping	1939	.	2,991	32	1,623	45		..	..	..	..	.	..	..	..	..	4,691
	1943	.	5,545	..	3,331	22	.	..	..	..	..	..	..	..	.	.	8.898
Ordnance Factories ..	1939	850	5,364	535	9,275	4,691	6,556	..	..	2,093	..	270	1,075	..	.	.	30,709
	1943	5,375	31,121	..	33,740	28,389	17,565	..	..	10,968	.	558	2,239	..	1,130		1,31,076
Miscellaneous	1939	240	3,351	206	1,410	224	992	..	..	..	132	..	136	..	45	33	6,769
	1943	1,474	7,542	143	4,605	1,155	2,856	716	..	*	220	21	63	..	..	45	18,840
Total ..	**1939**	**20,465**	**45,067**	**5,187**	**94,407**	**23,048**	**24,557**	**45,854**	**711**	**3,934**	**1,892**	**512**	**1,388**	**6,360**	**914**	**280**	**2,74,576**
	1943	**38,718**	**109,878**	**10,002**	**175,690**	**55,663**	**57,699**	**64,256**	**1,464**	**13,853**	**3,764**	**2,189**	**3,487**	**8,791**	**4,713**	**1,185**	**5,51,352**

* Figures for 1 factory not available.

APPENDIX III.

Provincial distribution of Engineering factories, 1939 and 1943.

(Number of Workers).

Industry.	Year.	Madras	Bombay	Sind.	Bengal	U.P.	Punjab.	Behar	Orissa	C.P. and Berar	Assam	N.W.F.P.	Baluchistan	Ajmer Merwara	Delhi	Bangalore.	Total
General Engineering	1939	42	188	17	178	41	71	29	3	10	10	..	1	..	11	1	602
	1943	85	276	55	305	83	217	41	3	26	11	8	1	.	41	2	1,54
Electrical Engineering	1939	8	31	5	36	13	16	15	1	18	1	7	1	.	2		154
	1943	14	24	13	40	16	19	21	3	23	8	4	1	..	2	.	206
Railway Workshops	1939	23	36	5	28	23	8	25	2	6	3	..	..	4			163
	1943	23	39	6	27	23	19	23	2	8	4	..	5	5	..		184
Coach Building and Motor Repairing ..	1939	18	41	1	16	6	6	4	..	4	8	..	..	..	7	1	112
	1943	60	31	5	18	16	6	5	..	4	8	3	..	..	6	4	166
Kerosene Tinning and Packing ..	1939	7	8	5	12	..	..	..	..	..	1	..	..	..	..	.	33
	1943	10	11	7	15	..	..	..	..	..	..	..	..	..	..	.	43
Metal Stamping	1939	..	50	1	8	1	..	..	..	..	..	..	..	..	..	.	60
	1943	..	64	..	10	1	..	..	..	..	..	..	.	..	.	.	75
Ordnance Factories	1939	1	5	1	3	2	6	..	..	1	..	5	1	..	..	.	25
	1943	4	15	..	4	8	8	..	..	3	..	1	1	..	1	..	45
Miscellaneous	1939	3	94	6	10	9	21	..	..		2	..	3	..	1	1	150
	1943	19	139	4	20	19	46	3	..	1	1	1	2	..	..	1	256
Total ..	1939	102	453	41	291	95	128	73	6	39	25	12	6	4	21	3	1,299
	1943	215	617	90	439	166	315	93	8	65	33	17	10	5	50	7	2,129

APPENDIX IV.

Standard Labour Classification in a Coach Building factory (annas per hr.).

Class E.	Class D.	Class C.	Class B.	Class A.
As. 2½—¼—3½	As. 3½—¼—4	As. 3½—¼—4½	As. 4—¼—5	As. 5—¼—6
Cleaners	Car Cleaners	Acid cleaners	Assemblers	Arc Welders.
,, Car	Case Openers	Angle Bender	Assembly Line	Battery Charge.
Coolies— Box Lumber ..	Dip Primers	,, Copper	Chasers	Blacksmiths.
Delivery	Greasers	Assistant Tool Makers.	Band Saws	Compressor Attendants.
General	Grinders	Borers	Bench Fitters	Ant
Maintenance.. ..	Hammer Men	Brush Painters	(Maintenance).	Clerks, Receivng
Material	Mechanics	Circular Saw	Brake	Crane.
Handling	Helpers, Metal Washers.	Men, Clerks-Car Order.	Testers, Brick Layers.	Driver Electricians.
Open Plot	Oven Loaders	"Car Tag"	Buffers	Electro Platers.
Paint	"Unloaders"	"Disbursement"	Carpenters	Engine Testers.
Receiving	Sand Blasters	"Transport"	Clerks Office	Gas Welders.
Timber	Stencillers	Commercial Body	"Salvage"	Heater Attendants.
Tire	Stock Pickers-Apprentices.	Bench Fitters	Compounders	Lathe Operators
Transport		Cross Cut Saw Men.	Cushion Assembaly.	Machine Repairmen.
Gardeners		Drillers	Cutters	Machinists.
Greasers : Assistant ..		Drivers-Sales	Door Hangers.	Mechanic-Electricians.
Lavatory Attendants ..		Storage	Fitters & Checkers.	Metal Finishers
Office Peons		Dry Sanders	Outside Body	Munitions Delivery.
Sweepers		Folders	Builders' Units	Men.
Tool Box Men		Fuse Assemblers	Frame Drillers	Sample Body Builders.
		"Buffers	"Rivetters	Solderers.
		Gillotine	Letter	Spray.
		Shear	Painters	Painters.
		Hand Brake	Light Focussers	Stripers.
		"Planers	Mechanics Second Class.	Tinsmiths.
		"Swagers		Tool Makers.
		Hydraulic Press	Moulders	Touch up. Men.

Class E.	Class D.	Class C.	Class B.	Class A.
As. 2½—½—3½	As. 3½—½—4	As. 3½—½—4½	As. 4—½—5	As. 5—½—6
		Moeticers Petrol Control Men Power Bumper Power Press Power Punch Rotary Shear Shell Vanishers Stock Checkers Stock Pickers Tennoners Thicknesser Thread Miller Timber Pickers Wet Sanders	Oil Sanders. Paint Mixers Parts Packers Casemakers Parts Location Clerks. Parts Pickers & Receivers. Plumbers. Polishers Ramp Men Sewing Machines Men. Spindle Shapers Spot Welders. Stopkeepers. Tarpaulin Tailors Test Drivers. Trimmers. Wheel Alingers. Assembly. Windshield Wiring Harness.	
As. 2½—½—3½	Rs. 3—½—4	As. 3—½—½—4½	As. 4½—½—5	As. 5—½—5

Group Leaders of Jobs listed Under the Above classifications.

As. 3½—½—4½	As. 3½—½—4½	As. 4½—½—5½	As. 5½—½—6½	As. 6½—½—7½

Inspectors.

Shell Division	All Other Inspectors.
As. 4—½—5	As. 5—½—6

Assistant Foremen and Specialists As. 7—½—8 as per hour.

APPENDIX V.

Development of Dearness Allowance and Bonus Systems in a Coach building and Motor Repairing Factory.

From January 1, 1940 to March 31, 1941—

Under Rs. 100	10 %.
Rs. 100 and over	5%

April 1941—

Under Rs. 100	14%
Rs. 100 and over	7½%

May 1941—

Under Rs. 100	16%
Rs. 100 and over	7½%

June 1941—

Under Rs. 100	17%
Rs. 100 and over	7½%

July 1941—

Under Rs. 100	20%
Rs. 100 and over	7½%

August 1941—

Under Rs. 100	20%
Rs. 100 and over	8%

From September 1, 1941 to May 31, 1942—

Under Rs. 50	25%
Rs. 50 to Rs. 99-15-0	20%
Rs. 100 and over	8%

From June 1, 1942 to July 31, 1942—

Under Rs. 60	60%
Rs. 60 to Rs. 79-15-0	25%
Rs. 80 to Rs. 99-15-0	20%
Rs. 100 and over	15%

From August 1, 1942 to December 31, 1942—

Under Rs. 60	30%
Rs. 60 to Rs. 79-15-0	25%
Rs. 80 and over	20%

From January 1, 1943 to August 31, 1943—

Under Rs. 40	40%
Rs. 40 to Rs. 59-15-0	35%
Rs. 60 to Rs. 79-15-0	30%
Rs. 80 and over	25%

From September 1, 1943 to July 31, 1944—

Under Rs. 45	55%
Rs. 45 to Rs. 59-15-0	50%
Rs. 60 to Rs. 74-15-0	45%
Rs. 75 to Rs. 89-15-0	40%
Rs. 90 to Rs. 119-15-0	35%
Rs. 120 and over	30%

Effective August 1, 1944—

Under Rs. 45	60%
Rs. 45 to Rs. 59-15-0	55%
Rs. 60 to Rs. 74-15-0	50%
Rs. 75 to Rs. 89-15-0	45%
Rs. 90 to Rs. 119-15-0	40%
Rs. 120 and over	35%

This emergency allowance is temporary

Bonuses paid to workmen since the outbreak of the war are listed hereunder:

In 1942	1/12th of 1941 wages.
In 1943	1/6th of 1942 wages.
In 1944	1/6th of 1943 wages.

The bonuses are temporary.

May 1941—

Under Rs. 100	16%
Rs. 100 and over	7½%

June 1941—

Under Rs. 100	17%
Rs. 100 and over	7½%

July 1941—

Under Rs. 100	20%
Rs. 100 and over	7½%

August 1941—

Under Rs. 100	20%
Rs. 100 and over	8%

From September 1, 1941 to May 31, 1942—

Under Rs. 50	25%
Rs. 50 to Rs. 99-15-0	20%
Rs. 100 and over	8%

From June 1, 1942 to July 31, 1942—

Under Rs. 60	60%
Rs. 60 to Rs. 79-15-0	25%
Rs. 80 to Rs. 99-15-0	20%
Rs. 100 and over	15%

From August 1, 1942 to December 31, 1942—

Under Rs. 60	30%
Rs. 60 to Rs. 79-15-0	25%
Rs. 80 and over	20%

From January 1, 1943 to August 31, 1943—

Under Rs. 40	40%
Rs. 40 to Rs. 59-15-0	35%
Rs. 60 to Rs. 79-15-0	30%
Rs. 80 and over	25%

From September 1, 1943 to July 31, 1944—

Under Rs. 45	55%
Rs. 45 to Rs. 59-15-0	50%
Rs. 60 to Rs. 74-15-0	45%
Rs. 75 to Rs. 89-15-0	40%
Rs. 90 to Rs. 119-15-0	35%
Rs. 120 and over	30%

Effective August 1, 1944—

Under Rs. 45	60%
Rs. 45 to Rs. 59-15-0	55%
Rs. 60 to Rs. 74-15-0	50%
Rs. 75 to Rs. 89-15-0	45%
Rs. 90 to Rs. 119-15-0	40%
Rs. 120 and over	35%

This emergency allowance is temporary

Bonuses paid to workmen since the outbreak of the war are listed hereunder:

In 1942	1/12th of 1941 wages.
In 1943	1/6th of 1942 wages.
In 1944	1/6th of 1943 wages.

The bonuses are temporary.

Whoever gets the majority of the votes in each department will be declared elected.

To ensure inclusion of only the responsible workers in the Committee, an age and a service qualification may be prescribed. No one will be qualified to represent the workers on the Committee unless he has attained 25 years, and has a service qualification of at least one year.

A list of all workmen in each department who are on the payroll of the Company on the day before the election will be prepared and only those workmen on this list will be entitled to vote.

Each man must vote personally and not by proxy.

The President of the Works Committee will be the Manager of the Company, or his nominee, and the workmen elected to the Committee will nominate amongst themselves a representative who will be their spokesman and who can see or write to the Manager on behalf of the workmen.

The Committee should meet approximately once a month.

A Special Meeting may be called by the President at the request of not less than 3 members of the Committee.

The Committee will meet on a working day.

The President will prepare the Agenda for the meeting and will circulate it to the members at least 24 hours before the day fixed for the meeting. A copy of the notice can also be posted up in a prominent place in the workshop.

After the meeting, the President will prepare the Minutes of the Meeting, and will distribute one copy to each of the members of the Works Committee.

APPENDIX VII.

Workers' Welfare Committees in Ordnance Concerns.

Copy of Additional Director General, Calcutta, letter No. Z-00587|TE|O.F. 12-A, dated 12th July 1944 to All Ordnance Factories.

SUBJECT :—*Labour Welfare Committees for Ordnance Factories.*

A copy of the Department of Labour's 'Model Constitution' for Labour Welfare Committees is forwarded herewith and proposals outlining the suggested application of the 'Model Constitution' to Welfare Committees in Ordnance Factories is annexed hereto.

Superintendents|Officers-in-Charge are requested to examine "Model Constitution' and suggestions for their application to Ordnance Factories and submit their comments to this office for consideration before 31st July 1944, after which date no recommendations will be considered.

Copy to O. F. (C).

ANNEXURE.

Proposals Outlining the Suggested Application of the Model Constitution to Welfare Committees in Ordnance Factories.

The Labour Welfare Officer should be the President of the Committee ; or, in his unavoidable absence, an officer nominated by the Superintendent| Officer-in-Charge, and the constitution for the larger Factories should be on the following lines, which should be regarded as a maximum :—

President :—Labour Welfare Officer.

Managements Representatives.	*Workers' Representatives.*
1 W.M. (A) or A.W.M. (A) ..	.. 1 representing Supervisors' Establishment.
1 Production officer	.. 1 representing Clerical Establishment.
1 Foreman or Assistant Foreman	.. 2/3 representing E.T.A. Establishment.
1 In-charge of Labour Bureau ..	.. 1 representing Menial Establishment.

The E. T. A. representatives should represent groups of sections each group having approximately similar numbers of workmen and one representative being chosen by each group.

2. In the smaller factories the number of members should be scaled down *pro-rata* which may be done by combining the Supervisory and Clerical Establishments into one constituency and including the Menials with E.T.A. Establishment but a certain amount of flexibility in the numbers of representatives can be provided for.

3. In accordance with the 'Model Constitution', the Superintendent| Officer-in-Charge will be entitled to attend the meetings of the Committee and take part in the discussion when he so desires. His right of attendance will ordinarily, however, be exercised only when he wishes to explain to the Committee his views on a particular subject.

4. The Government of India's Assistant Labour Welfare Officer in the Province will also be entitled to attend the meetings of the Committee.

5. As regards the method of electing the representatives to the committee, it is considered that the alternative method laid down in para. 5 of the 'Model Constitution' should in the meantime, be adopted in the Ordnance Factories and the election made by a show of hands, after nominations have been made, at a meeting of the group, presided over by the Labour Welfare Officer, a separate meeting being held for each group entitled to elect a representative.

6. As far as practicable the Committee should consist of representatives of the Management and the Workers in equal proportions but, it is advisable to keep the number of members as low as possible and, in no case, should the total membership exceed 12.

7. It should be explained to the workers that they are free to choose any of their colleagues as their representative and they should be advised to choose men who are intelligent and in whom they have confidence. The actual selection of candidates should be left to the workers themselves and names should not be suggested to them by the Management.

Model Constitution for Labour Welfare Committees in Central Establishments, Constitution of the Labour Welfare Committee Factory|Depot.

The name of the Committee shall be the Labour Welfare Committee,

..... Factory|Depot.

2. The objects of the Committee are :—

(i) To furnish a means for the association of representatives of workers in the development of welfare activities in the establishment ;

(ii) to enable the administration to explain to representatives of workers, and the workers through them, relevant departmental orders and the views of the administration on representations made on behalf of workers.

3. The powers and duties of the Committee shall be :—

(i) to lead workers towards greater efficiency in their work.

(ii) to help the growth of a sense of responsibility and value of organisation amongst workers and the spirit of co-operation between the workers and the administration.

(iii) to assist in the dissemination of correct information regarding departmental rules, orders and procedure and to neutralise erroneous information.

(iv) to put forward proposals for extension and improvement of welfare activities in the establishment and in labour residential areas.

(v) to make representations regarding general terms and conditions of employment and work, provided that the Committee shall not concern itself with individual grievances and representations, except where they involve some general principle, in which case the matter may be raised in the Committee, with the prior consent of the President, and

(vi) to inculcate Safety First principles amongst workers.

4. The Committee shall consist of :—

(a) The Officer-in-Charge of Administration [or another senior officer nominated by the (Head of the establishment) and assistants] :

(b) The Labour Welfare Officer (or the Civilian Labour Officer) and

(c) Representatives of workers elected as follows :—

Constituency.	*No. of representatives.*
Department/Group/Section	
Department/Group/Section	
Department/Group/Section	
* Artisans.	
* Supervisors.	
* Leading Hands and/or Clerks.	
* Searchers, Chowkidars and Peons.	
* Sweepers.	
Total Number of representatives ..	

* NOTE.—Workers who are entitled to elect representatives from their own class, shall not be entitled to vote at the election of representatives from the Department/Group/Section to which they are attached.

(ii) The (Head of the establishment) and the Government of India's Assistant Labour Welfare Officer in the Province may attend and participate in the meeting of the Committee, whenever they so desire.

(iii) The Labour Welfare Officer (Civilian Labour Officer) shall be the President of the Committee.

(iv) The Committee shall elect one of its members as Honorary Secretary.

6. The procedure relating to election of representatives of workers shall be as follows :—

(i) A date shall be fixed as the closing date for nominations. At least seven days' notice shall be given to workers of this date.

(ii) Simultaneously, the date of election shall also be announced. This date shall not be earlier than three days after the close of nominations.

(iii) Every candidate shall be attached to the constituency from which he is seeking election. Within 24 hours after the close of nominations, the names of the candidates, who have been properly nominated, shall be announced. It shall be a condition of proper nomination that the candidate's nomination paper is signed by at least two workers belonging to the constituency.

(iv) If there are more candidates from any constituency than the number of seats allotted to it, then voting shall take place on the election day. If the number of candidates is equal to or less than the number of seats, the candidates shall be declared elected without contest.

(v) Separate boxes or separate compartments in one box shall be allotted to the various candidates. The lid shall be kept locked during the voting, slots being provided for dropping voting tokens. The top of each box or compartment shall be marked in a distinct colour. The colours allotted to the various candidates shall be announced to the workers concerned. A board shall be placed near the ballot box to indicate the allotment of colours the names of candidates being written in the languages of the province. The ballot boxes shall be kept in such a manner that a worker may cast his voting token into whichever box or compartment he desires without being seen by any other person.

(vi) Each worker in the constituency shall be given as many voting tokens as there are seats from the constituency. Workers' identity discs may be used for this purpose.

(vii) If two or more candidates for a seat get equal number of votes, the matter shall be decided by lot.

(viii) If no nominations are received for any seat or the number of nominations are less than the number of seats, a second announcement shall be made as provided for hereinabove, calling for nominations for seats then remaining vacant. If some seats again remain unfilled thereafter, they shall be filled by nomination by the (Head of the Establishment).

Alternative :

6. The procedure relating to election of representatives of workers shall be as follows :—

(i) Meetings of workers in each constituency shall be held separately. The date, time, and place of the meeting shall be announced at least three days before the time fixed.

(ii) The Labour Welfare Officer (or Civilian Labour Officer), or in his absence an officer to be nominated by the (Head of establishment) shall preside over the meeting. He shall call for nominations, and in the event of a contest, votes shall be taken by show of hands.

(iii) If two or more candidates for a seat get equal number of votes, the matter shall be referred to the meeting a second
once again, the matter shall be decided bu lot.

7. The members of the committee shall hold office one calendar year. They shall, however, be eligible for re-election. Members elected at bye-elections shall also retire at the end of the calendar year.

8. Members (of each side) shall form a quorum. A meeting adjourned for lack of a quorum shall not require a quorum.

9. If a representative ceases to belong to the constituency from which he was elected, or is absent from three consecutive meetings of the Committee without leave or sufficient cause, he shall cease to be a member of the Committee.

10. A bye-election shall take place to fill a vacancy in the Committee not later than 30 days after the occurrence of the vacancy.

11. The committee shall meet at least once a month. At least three days notice of an ordinary meeting shall be given.

12. The minutes of the meeting of the Committee shall be recorded in a book, and shall after signature by the President and Honorary Secretary be submitted to the (Head of the establishment for orders.)

13. A matter which has been discussed and decided at a meeting of the Committee shall not again be raised until three months after the date when it was last discussed, except with the special permission of the President.

14. (a) The Committee may suggest amendments to the Constitution for the consideration of the (Head of the establishment).

(b) The Constitution may be amended or repealed by the (Head of the establishment), provided that he shall, as far as practicable, give the Committee an opportunity to discuss and express their opinion on the proposed amendment or reasons for the proposed repeal.

Explanatory Note Regarding Model Constitution for Labour Welfare Committees in Central Establishments.

1. (a) It is advisable to keep the number of members of the Committee as small as possible, in any case not exceeding 12.

(b) Representatives may be allotted to various Departments|Groups| Sections or classes of workers in proportion to their strength. If the number of workers in Departments|Group|Section or a class of workers is small, such workers may be included in another constituency.

2. It should be explained to workers that they are free to choose any of their colleagues whom they like as their representatives and need not hesitate to exercise their votes freely. They should be advised to choose men who are intelligent and in whom they have confidence. The actual selection of candidates should be left to the workers and it is advisable not to suggest names to them.

3. (a) It is recommended that the system of secret ballot outlined in section 5 of the Model Constitution be preferably adopted for the election of representatives. The system has been tried in a large Depot in the United Provinces and found workable. No difficulty was experienced in conducting the election.

(b) The system is not so complicated as it may at first sight appear. Some advance publicity amongst workers is, of course, essential. This may be entrusted to the Labour Welfare Officer|Civilian Labour Officer and his staff who will also be responsible for conducting the election.

(c) 2 to 4 hours may be fixed for voting in a constituency. Heads of Departments|Group Officers may be asked to send workers to the place of voting which should be as near to the place of work as possible in batches of, say 20. In this manner voting is well regulated and the work of the establishment is hardly affected.

4. Minutes should be brief but correct record of the proceedings of meetings of the Committee. All matters raised and decisions thereon should be recorded even if a proposal or resolution had been withdrawn after discussion or on the advice of the President or the Officer representing the Administration at the meeting.

5. There may be a tendency especially at beginning for some representatives to make lengthy speeches. They should be tactfully persuaded to be brief ; but they should at all times be permitted to express themselves freely.

6. Representations should be received patiently and considered sympathetically. If they are not acceptable from the Administration's point of view. representative should be told so and the position should as far as possible, be explained to them.

7. Representatives should be made to realise that it is their duty to put forward the point of view of the workers in a responsible and reasonable manner, to act as their leaders and at the same time to explain to the workers the point of view of the Administration.

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