

ROYAL COMMISSION ON
INDIAN LABOUR

MEMORANDUM FROM THE
GOVERNMENT OF THE
CENTRAL PROVINCES AND
BERAR



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AND BERAR

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CONDITIONS OF LABOUR IN THE CENTRAL PROVINCES AND BERAR.

CHAPTER I—INTRODUCTORY.

For the purposes of this memorandum industrial undertakings in the Central Provinces and Berar may be roughly divided into five classes:—

	Number of industrial establishments.	Average number of operatives employed daily.
i.—Cotton ginning and pressing factories in the cotton tract of the province (the four Berar districts, the Central Provinces districts of Wardha, Nagpur, Nimar and Chhindwara).	613	39,500
ii.—Cotton spinning and weaving mills in the towns of Akola, Ellichpur, Badnera, Hinganghat, Pulgaon, Burhanpur, Nagpur and Jubbulpore.	15	19,500
iii.—Mines mainly manganese (in the districts of Balaghat, Bhandara, Nagpur) and coal (in the Chanda and Chhindwara districts), but including a few limestone and other quarries.	260	38,300
iv.—Other minor industries to which the Factories Act apply—	121	12,200
Operatives.		
(a) Factories owned by the Government or local bodies (11)	3,000	
(b) Rice mills (seasonal) (33)	1,150	
(c) Engineering (18)	1,500	
(d) Food, drink and tobacco (11)	1,500	
(e) Chemicals, dyes, etc. (33)	1,750	
(f) Processes relating to stone, wood and glass (11),	3,250	
Total	12,180	
v.—Other industrial establishments, to which the Factories Act does not apply (<i>bidi</i> or tobacco factories, lac factories, etc.).	850	30,000
Total .....	...	139,480

A rough map is appended indicating the areas of the province under the three principal crops of cotton, wheat and rice and the principal industrial undertakings in the province. The cotton

area covers the four Berar districts, the Central Provinces districts of Nimar, Wardha, Nagpur and portions of the Chanda, Hoshangabad and Chhindwara districts. All the ginning and pressing factories belong to this area and as also fourteen out of the fifteen cotton mills, the fifteenth mill being at Jubbulpore. It should be noted that the concern known as the Empress Mills at Nagpur consists of five separate mills. (One cotton mill in the Rajnandgaon Feudatory State in Chhattisgarh, employing about 4,000 operatives daily, is excluded from the scope of this memorandum as the Local Government has no control over it.) The important manganese mines lie in a strip of country falling in the Nagpur, Bhandara and Balaghat districts; and the important coal mines are situated in the Chhindwara and Chanda districts. Of the important minor industries, to which the Factories Act apply, the cement and pottery works are found in the Jubbulpore district, the seasonal rice mills are mostly in Bhandara and the Raipur and Bilaspur districts of the Chhattisgarh Division, while the remainder are scattered over the province. The most important unorganised industries, to which the Factories Act has not been extended, are *bidi*, shellac and myrobalan factories, of which a number are found in the town of Gondia, on the Bengal-Nagpur Railway in the Bhandara district; while the others are scattered over the province.

The first cotton mill established in the province was No. 1 Mill of the Empress Mills, established at Nagpur, in 1877, and by 1900 the number of such mills had increased to 7. Nine mills have been added during the first quarter of the present century. The number of workers employed per diem in these mills is as follows:—

1913	...	12,981
1923	...	17,630
1928	...	19,389

The progress of the growth of the cotton ginning and pressing factories is shown in the statement below:—

Year.	Number of factories.	Number of workers employed daily.
1903	108	Not known.
1913	454	30,800
1923	519	38,651
1928	613	39,351

but the increase in the number of registered factories is due to the extension of the definition of factory by the Factory Acts of 1911 and 1922, as well as to the industrial development of the province.

The first prospecting license for manganese was granted in 1899; and the growth of this industry has therefore been confined to the present century. The Mohpani coalfield (in Narsinghpur district) opened in 1862, and the Warora coalfield (in Chanda) opened in 1873, have now been closed down. The Ghugus coal mine in Chanda which was opened in 1870, is still working; all other coalfields started working during the last 20 years. The number of manganese and coal mines now working is approximately 30 and 190. Out of these, the most important manganese mines are the property of some half a dozen companies and proprietors, while the bulk of the coal industry is in the hands of four companies. The other mines are very small and do not employ labour on a large scale. It may be noted that the Central Provinces mines are responsible for nearly 87 per cent of the manganese produced in India. The coal mines increased from five (employing 3,024 persons) in 1911 to 17 (employing 9,580 persons) in 1921, while the manganese mines increased by only two, totalling 42, during the decade ending 1921. The increase in the number of the coal mines was due to the war boom. The Central Provinces mines produce only 700,000 tons or $3\frac{1}{2}$ per cent of the total annual output of 22,000,000 tons of Indian coal. The cement and pottery works were established between the years 1901 and 1923. Of the unorganised undertakings, *bidi*-making establishments grew from six (employing 379 persons) in 1911 to 133 (employing 6,440 persons) in 1921 and today number about 775 employing some 29,000 workers.

The condition of the 139,500 workers, employed in the five main classes of industries, specified above, thus falls within the scope of this enquiry. Out of the above undertakings, the mines are administered under the Indian Mines Act by the Chief Inspector of Mines from whose annual reports most of the information now given is taken. To this is added such information as it had been found possible to collect for this report, regarding the recruitment, housing, health and wages of labour in mines. The Indian Factories Act applies to undertakings employing altogether about 70,000 operatives, and it is only with regard to these that accuracy can be claimed for the information collected. As the Indian Factories Act has not been applied to unorganised industries, the information available is meagre. It should be noted that the cotton ginning and pressing factories are

seasonal and usually work for not more than six months in the year from November to April. Similarly the rice mills, employing about 1,177 workers, are in operation for 8 months in the year from November to June. The most important of the minor industrial establishments are the three cement factories in the Katni tahsil of the Jubbulpore district, employing 1,850 operatives, the two pottery works at Jubbulpore, employing 1,110, the Government Gun Carriage Factory at the same place employing 2,426, and 25 oil mills, employing 715 operatives.

The principal industries of the province, employing labour on a large scale (with 97,300 workers or about 70 per cent of the total labour falling within the scope of the enquiry), are thus the cotton industry and manganese and coal mining. It is the condition of the labour in these industries, specially that of the labour in the cotton industry (with 69,000 operatives or 50 per cent of the total labour force) that has been the basis of the brief survey of labour conditions set forth in this report. The condition of labour in the cement, pottery, Gun Carriage Factory and oil mills (employing about 6,220 workers or 4.5 per cent of the total) has been the basis of the survey of labour conditions in the minor industries of the province. The information that it has been found possible to obtain in answer to the various questions of the questionnaire is given separately for each of the five main classes of industrial undertakings.

The existing records do not yield complete information regarding the various matters under enquiry. The only systematic reply to the questionnaire, has been received from the Empress Mills, Nagpur, the premier mills of the province, and from one or two mining firms. The former is based on reliable statistical information accumulated by the authorities of the mills by a careful study of the changing conditions in their works during several decades. A copy of this report, which is as thorough as existing statistical information makes it possible to be, is being sent by the mills direct to the Secretary of the Labour Commission. No extensive quotations therefrom have therefore been made in the present report, but it should be emphasized that the Empress Mills report deserves the most careful study. The condition of labour in these mills is, however, more advanced than those of other mills and should not be taken as typical of conditions prevailing in other industries in the province.

As Railways are a Central subject, labour conditions on railways have been excluded from the scope of this report, which is confined to matters with which this province is concerned and on which information is available.

CHAPTER II—RECRUITMENT.

ORIGIN OF LABOUR.

In the seasonal cotton factories, the bulk of the labour comes from the surrounding villages, while even in perennial factories a considerable portion of the labour force is recruited from the same source. In large industrial centres like Nagpur and Jubbulpore there is also a considerable labour population permanently settled in the towns. The only estimate it is possible to make of the percentage of local labour to the total at some of the industrial centres is given below.

EXTENT OF MIGRATION.

The movement of industrial labour follows the same lines as that of the general immigrant population, since an appreciable portion of the total migration is caused by the demands of industries. The main labour-recruiting grounds for this province are—

(a) In the north the Bundelkhand and Rewah States, which supply the hereditary earth workers, Kols, for the mining industry as well as high caste unskilled recruits for the mills. Trained or semi-skilled labour from various parts of the United Provinces mingle with this stream, as temporary unemployment or the disappearance of hereditary occupation induces them to seek employment and higher wages elsewhere.

(b) In the south-east, Mahars, Gonds and Chamars are recruited from Bhandara and the Chhattisgarh districts, as well as from the Indian States of Chhattisgarh.

(c) In the south a number of Telegu castes (known as Telingas) come from His Exalted Highness the Nizam's Dominions and the Sironcha tahsil (Chanda district) mainly for employment in the Chanda coal mines.

(d) In the south-west, several districts of the Bombay Presidency (mainly Ahmednagar, Poona and Sholapur districts) supply a certain amount of specialized labour mostly for the seasonal cotton factories of Berar.

Stream (a) is particularly strong in the northern districts and Berar, supplying the cement factories and potteries, the seasonal cotton factories of the Hoshangabad and Nimar districts, the textile mills of Berar, as well as the mining areas in the northern and eastern parts of the province.

Stream (b), which was the strongest until the scarcity in the northern districts and Central India in recent years, is still one of the main sources of labour supply in the province, specially for the manganese mines and textile mills of Nagpur and Akola.

Stream (c) and stream (d) are much weaker and the former is mainly restricted to coal mines and seasonal factories in the south, while the latter distributes itself over the cotton tract of the province (the Maratha Plain division).

The approximate distribution of local and immigrant labour in the cotton industries at the following centres is given in the table below :—

	Stream (a).	Stream (b).	Stream (c).	Stream (d).	Local.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Jubbulpore ...	10	...	...	...	90
Nagpur ...	6	10	2	2	80
Hinganghat ...	4	2	6	3	85
Amraoti ...	20	*8	2	5	65
Akola ...	25	*30	...	15	30

*Includes workers from Bhandara, Nagpur and the neighbourhood.

In the decade ending in 1921, the extent of migration from different sources was approximately as follows :—

	Percentage of immigrants.
Central India Agency States	24
United Provinces	12
Bombay Presidency	11
His Exalted Highness the Nizam's Dominions	11
Bhandara district	9
Chhattisgarh districts	33

Causes of particular streams of migration.

It appears that there are two main streams of migration, the one comes in a south-westerly direction from the United Provinces and the Central India Agency States, which is caused by the general poverty and periodic scarcity in Central India and the lure of good wages and opportunities for obtaining work in the industrial centres of the Central Provinces. The other comes in a westerly direction from the Chhattisgarh Plain division and Bhandara district, which is caused by the poverty of the not very fertile land-locked plain and periodic failure of crops in the same

region, as also the prevalence of a higher standard of wages in the developed portion of the province.

These two streams are streams (a) and (b) which have been described above. The third stream, which flows to the north-east from the bordering districts of the Bombay Presidency and the Hyderabad State, is on the wane on account of the development and more settled conditions of these parts. This north-easterly flow consists of stream (c) and part of stream (d). The streams of migration are illustrated by a map which is appended to this report (Appendix I).

The principal causes of migration are enumerated as famine and scarcity, unemployment, either permanent or temporary, the disappearance of hereditary occupations or cottage industries, the prospect of higher wages in urban areas, and inability of hereditary occupation to absorb an increasing population.

Migration of labour has thus followed the path of easy subsistence, that is, labour has congregated where the means of subsistence are in excess of the demands of the indigenous population. This general tendency is traceable in the above-mentioned streams of migration. The last census report shows that the vital statistics of the decade (1911—1920) record a deficiency of births over deaths in the Nerbudda Valley division, the Plateau division, and the Nagpur, Amraoti and Akola districts of the Maratha Plain division, accompanied by a small excess of 3 per cent in the Maratha Plain division taken as a whole. There is little doubt, however, that but for the influenza epidemic of 1918-19 which exterminated not less than 10 per cent of the population an increase would have been recorded in every division. The increase or decrease of natural population during the decade is as follows:—

	Increase (+) or decrease (—)	Total natural population in 1921.
Nerbudda Valley division	- 134,240	2,595,442
Plateau division	- 55,113	1,601,359
Maratha Plain division	+ 75,072	6,014,171
Chhattisgarh Plain division	+ 336,365	4,847,278

The increase in the Maratha Plain division is so slight compared with its total population and level of development that it could not have affected immigration to any great extent.

On the other hand, the Chhattisgarh Plain division in spite of its present undeveloped and backward condition shows a considerable increase in natural population indicating a surplus for emigration. Conditions in those Central India Agency States which contribute most to the south-westerly stream of migration are similar, an additional impetus for emigration being provided by the poorer quality of the soil.

Movements of labour like those of commodities originate from places where it is abundant and proceed to places where the demand exceeds the supply. The census figures indicate the existence of a surplus of labour at the origins of the particular streams of migration and a demand in excess of the local supply at the places to which the streams converge.

Changes in recent years.

There is no information to justify any definite conclusion. It, however, appears that acute scarcity in the Central India Agency States and in districts situated on the northern border of the province in recent years has resulted in a greater influx of labourers by the south-westerly stream, and a considerable proportion of it has been deflected further south into the cotton districts and industrial centres by reason of failure of the wheat crop in the Nerbudda Valley division, which usually attracts a quantity of this labour at the time of the wheat harvest. Moreover, there being a direct route provided by the opening of the Nagpur-Itarsi railway line, the southern influx to the industrial centres is gaining in strength.

Agricultural development in the Chhattisgarh districts due to the provision of irrigation facilities has to some extent reduced migration from this source. At the same time the large irrigation works under construction in Chhattisgarh have absorbed a considerable number of labourers during the last decade. In 1927-28 the irrigation works employed 8,600 labourers, most of whom were recruited locally.

CONTACT WITH VILLAGES.

Extent and frequency of return.

Five different types of migration are recognised in the census report of the province. They are as follows:—

(1) *Casual*, consisting of movements between adjacent villages; (2) *Temporary*, caused by movements of labour on works

of construction or by the exigencies of trade or the stress of famine (in this type of migration there is a predominance of males); (3) *Periodic*, due to the seasonal migration of agricultural labour, or to the industrial demands for labour depending on the ripening of a particular crop; (4) *Semi-permanent*, when the inhabitants of one place migrate to another for trade, but return at intervals to their native place where they sometimes even leave their families, and usually spend their declining years; (5) *Permanent*, where economic or other reasons have caused a permanent displacement of population.

Casual migration does not come within our purview as it mainly consists of movements between adjacent villages for non-industrial purposes. Temporary migration caused by movements of labour on new works of construction or by the exigencies of trade or the stress of famine are of short duration and the labour generally returns to its native place after the stress is removed or the work is completed. Famine in the northern districts and the border States of Central India in the current year, the construction work of railway bridges and alignment on the Itarsi-Nagpur line are instances in point. A predominance of males is noticeable in these cases, indicating that the emigrants are likely to return after a short interval. Periodic migrations, due to the demand for labour in seasonal industries and agricultural operations, are of the nature of an annual exodus, and such labourers return to their villages after the season is over. The attraction of labour to the cotton ginning and pressing industries and to the wheat fields of the northern districts for harvesting are instances in point. Both males and females migrate together and return within nine months or less. The employees in seasonal factories thus almost invariably return to their villages after the season is over.

The permanent and semi-permanent migration of labour is due to the attraction of labour to coal and manganese mines, to the cotton mills of the Maratha plain or to the cement and pottery works of Jubbulpore and other industrial centres. The majority of these labourers return to their villages for a short visit after two or three years' interval, but a considerable minority has settled down at these industrial centres. There are no data for enabling us to fix even approximately the extent of this permanent labour movement. The following quotation from the Provincial Census Report for 1921, however, gives an accurate indication of the position:—

“The urban population has hardly kept pace with the natural increase of the population since 1901, when 90 out of every 1,000 persons lived in towns. The real reason for the slow progress in

the urban population is that the inhabitants of this province are nearly all at heart agriculturists, and take much more readily to the traditional life of an Indian village than to existence in towns. Even the lure of higher wages frequently only proves a temporary attraction, and the male labourer will leave his family in his village and work for a time to earn the higher wages in the towns, only to return again to his home at a later date. This was recognised by the Indian Factory Labour Commission of the year 1903, and their remarks, which are quoted below, still hold good.

'The habits of the Indian factory operative are determined by the fact that he is primarily an agriculturist, or a labourer on the land. In almost all cases his hereditary occupation is agriculture; his home is in the village from which he comes not in the city in which he labours; his wife and family ordinarily continue to live in that village; he regularly remits a portion of his wages there; and he returns there periodically to look after his affairs, and to obtain rest after the strain of factory life. There is as yet practically no factory population, such as exists in European countries, consisting of a large number of operatives trained from their youth to one particular class of work, and dependent upon employment at that work for their livelihood. It follows that the Indian operative is, in general, independent of factory work, to the extent that he does not rely exclusively upon factory employment in order to obtain a livelihood; at most seasons he can command a wage sufficient to keep him, probably on a somewhat lower scale of comfort, by accepting work on the land; and there are also numerous other avenues of employment, more remunerative than agricultural labour, which are open to every worker in any large industrial centre. If the operative is not merely a landless labourer, he will in general be bound by strong ties to the land and to the village from which he originally came; he can at any time abandon factory life in order to revert to agriculture; and the claims of the village where he has a definite and accepted position are in practice, as experience has shown, sufficiently powerful to recall him from city life for a period which extends, on the average, to at least a month in each-year.'

This tendency to temporary immigration to towns of the male labourers receives further confirmation from the fact that of the total urban population 754,989 are males and 686,441 females, or a proportion of 1,000 to 909, and this distinction is even more marked in the larger places, for the proportion of females to 1,000 males is 864 in Nagpur and 762 in Jubbulpore, in which place the presence of troops accounts for the low figure. A similar phenomenon is also to be found among certain of the trading classes, such as Marwaris and Bohras, who often reside for a portion of the year at their place of business, and retire for considerable periods to their homes, which may be situated in distant parts of India. Another noteworthy feature is the almost complete absence of new towns. It might have been expected that the opening up of the province to railway communication would by now have resulted in the formation of new centres of trade and industry. The reason for this must be found in the love of the labourer for village life. Industries do not necessarily

result in the establishment of towns. This is noticeable in the coal mining areas of the PENCH valley and the Chanda district, in the manganese mines on the southern slopes of the Satpura plateau, and in the cement works of Katni and Murwara in the Jubbulpore district. The labour for these industries does not congregate together, and so form a town, but will live in a circle of villages having as their centre the work by which the labour is supported. An exception is to be found to this in the cotton country of the Maratha plain, where the cotton market forms the nucleus of urban life. Owing to the bulk of the commodity and the rush of work at the height of the season, time and space are of importance, and gins and presses will spring up in the immediate vicinity of the cotton market, while in the more important places cotton mills will also be found. It is therefore in the Maratha Plain division that the only appreciable tendency to urbanisation exists."

The labourers in the cotton mills generally visit their villages once a year or once in two years, either for the purpose of renewing their home relationships or for marriage or social ceremonies. In Nagpur, however, textile workers are much more permanent in their holds and the average frequency of return to villages does not exceed once in four years and the workers are mostly permanently settled in Nagpur. In the manganese mines about 30 per cent of the labour force returns to its villages yearly on leave for a period varying from four to twelve weeks.

In the unorganised industries, labour is mostly local and lives in surrounding villages. A few skilled workers from Mirzapur in the United Provinces are employed in the lac factories and a few from Maharashtra in the glass factories. The former return home after four to six months' work and the latter about once in two years.

The extent of the permanent labour force.

In the seasonal factories there is practically no permanent labour force.

In the cotton mills, the extent of the permanent labour force ranges from 90 to nearly 100 per cent, as in the Empress Mills and the Berar Manufacturing Mills in Badnera. At Akola, however, the proportion of permanent labour varies from 60 to 75 per cent.

The Central Provinces and Berar Mining Association reports that the permanent labour force consists of monthly paid servants from 10 to 15 per cent of the total and about 50 per cent of the recruited labour. The Central

Indian Manganese Mining Company reports that the percentage of their permanent labour is 43. In the Chhindwara coal mines it is reported to be less than 50 per cent. Trade fluctuations affect the extent of labour force in both the coal and manganese mines. Moreover, many of the manganese and other quarries suspend operations during the monsoon; and hence the extent of casual labour in the mining industry is very high.

In the cement and pottery works permanent labour amounts to about 60 to 70 per cent of the total. In the Gun Carriage Factory, Jubbulpore, it is about 85 per cent.

The extent of permanent labour in unorganised industries to which the Factories Act does not apply is at most 2 per cent.

METHODS OF RECRUITMENT.

Existing methods.

The cotton mills obtain their recruits at present from applicants at their gates. The location of the various industrial underakings which employ immigrant labour is now fairly well-known through employees who return to their homes, and by this means recruits are attracted from the various sources of supply. But formerly *mukadams* were sent to recruit, or labour contractors were invited to supply the amount of labour required on payment of commission. The latter method is still adopted when a new mill is started or a new section is added to an existing mill. Casual work like that required for building construction is given on contract and the contractors supply and employ their own labour.

Well-established perennial factories such as the Gun Carriage Factory, Jubbulpore, and the Pottery Works at Jubbulpore similarly receive their labour supply from applicants at the gate. The cement works, quarries and newly established factories recruit labour through *mukadams* who, in addition to their usual wages as employees, receive some commission from the new recruits.

Seasonal factories recruit their labour either through *mukadams* and *mukadammins*, who receive three pies per head per week from the labourers and wages from the employers, or through labour contractors who are paid (up to Re. 0-4-6 per *bojha*) on the basis of total output; or sometimes through a combination of both these methods. In the manganese mining areas labour is recruited by contractors through their *mukadams* or *sirdars* who get into touch with villages at districts where it is known that

labour is available and recruit them by families as far as possible. In the local mines recruitment is similarly done on a commission basis through colliery *sirdars* or labourers visiting their homes.

Possible improvement.

The system of recruitment through *sirdars*, *mukadams* or contractors has several evils, the chief of which is the payment of cash advances without which it is impossible to obtain recruits. These cash advances are seldom fully repaid by the recruits, and, on the one hand, are apt to keep them in a state of perpetual indebtedness; while on the other they cause loss and annoyance to employers as many recruits abscond with advances outstanding against them. The following extract from the Provincial Census Report of 1921 sums up the position :—

“Two systems of recruitment are employed. Agents may be sent to the recruiting areas, who are servants of recruiting establishments; they pay the labourer the expense of his journey, and also advance him a sum of money as an inducement to leave his home; or labour may be bought from a private contractor at so much per head. In one of the Chanda coal mines a gang of Kols was working under a Pathan headman. This gang was recently working on the Mahanadi Canal head works in the Raipur district, had then been employed on railway earth work in Chanda, and finally had reached the coal mine. As each transfer occurred, the headman received a sum which was supposed to represent the loans outstanding against the labourers on their previous work. In this case it is doubtful if the labourers themselves ever received any of the advances in cash. Where advances are directly paid to the labourers, the amount varies considerably. In the Chanda coalfields as much as Rs. 90 per labourer is paid for immigrants from the United Provinces, and Rs. 10 to Rs. 15 for labourers from Hyderabad State. Rs. 60 per head may be paid for Chhattisgarh labourers in the manganese mines. The advance system is a vicious one, which is to the advantage neither of the labourers nor of the employers. The advance is seldom, if ever, repaid, and though the more reputable employers have agreements by which they decline to employ labourers recruited by other concerns, there is always a number of smaller and less scrupulous employers who avoid the expense of importation of labour by bribing the labourers of a neighbouring concern to desert them. From the point of view of the labourer also the system is unsatisfactory, as it fastens about his neck a load of debt to the avoidance of which he devotes much ingenuity. At present, however, it is the only method by which labour can be recruited from a distance, and even if wages were raised so as to attract labour without advances, it is the experience of most employers that the labourer, when

he has received sufficient for his maintenance, ceases to work, so that a rise of wages is generally accompanied by a corresponding decrease in the work done."

Direct recruitment without any intermediary to intercept a portion of the charges of the labourer would, therefore, be much better, but as the great mass of Indian labourers is illiterate and ignorant, it is difficult in practice to suggest any improvement on the present system. The same factor operates against the successful working of a public employment agency. The difficulty of direct recruitment is illustrated by the fact that the Pench Valley Coal Company reports that it established a recruiting agency at Bilaspur in 1916 and closed it in 1928, as the results achieved were not commensurate with the cost incurred.

Extent and effects of disturbance of family life.

As the majority of the workers returns to their villages annually, there is very little disturbance of the family life of the workers in the seasonal factories. Temporary or quasi-permanent recruits from the United Provinces generally leave some members of their family at their homes to look after the family cultivation and other affairs. If they decide to stay longer at the industrial centres, their family generally joins them. Labourers permanently settled in large towns like Nagpur and Akola usually bring their families with them.

In the manganese mining area the extent and effect of disturbance of family life are reported to be negligible as it is the custom for complete families to be recruited. In the coal mines, nearly 60 per cent of the labour force is reported to consist of whole families.

RECRUITMENT FOR ASSAM.

Need of retention of control.

The bulk of such recruitment is from the three Chhattisgarh districts and during the last two years from the Chanda district. From such information as is available it appears that although there may be disagreement as to the form of control, there is none whatever about the necessity of control. If all control is abolished, recruitment will be exposed to the old evils associated with the system of *Arkattis* (professional recruiters). Recruitment by these agents often resulted in kidnapping and abduction, the

splitting up of families and the deceiving of the people with false stories regarding the conditions obtaining in the tea estates. It is also reported that free recruitment will result in lavish and uncontrolled expenditure while it will not improve the lot of the labourers.

Administration of present system.

About 90 per cent of the recruitment for Assam is effected by the Tea Districts Labour Association, who have appointed local agents in the different recruiting districts under whom *garden sardars* work. The local agents are, on the one hand, subordinate to the Tea Districts Labour Association, *i.e.*, indirectly to the tea industry, and on the other hand, to the District Magistrate and the Assam Board. The industry, however, has a predominant representation on the Board. The local agents provide accommodation, clothing, medical aid, etc., to properly registered recruits till they reach the "forwarding centres". All instances of abuse which are disclosed at the time of registering a recruit are reported to the District Magistrate. If the local agent is found to be untrustworthy, his license can be cancelled by the District Magistrate.

Defects of the existing Act and system.

The cost of the present system is high involving as it does the maintenance of an expensive recruiting agency, but it is an undoubted improvement on its predecessor and it is difficult to suggest a substitute which will maintain the present safeguards without imposing unjustifiable limitations on the free movement of labour. The representation on the Board of the districts from which the recruits are taken might be strengthened by the addition of labour representatives.

UNEMPLOYMENT.

Extent and character.

In the seasonal factories the skilled and semi-skilled labourer is thrown out of employment at the close of the season and often experiences considerable distress. The percentage of such labourers is, however, small.

No accurate figures are available regarding unemployment in the perennial industries. The Empress Mills report that there is a good deal of unemployment both amongst the skilled and

unskilled workers; they experience no difficulty in filling up vacancies and every fortnight many apply in vain for admission. Some of the other mills report that about 10 per cent of the applicants for work are turned away. Some of the manganese mines in the Bhandara district report that owing to the present depression in the industry there is a certain amount of unemployment among local labour, but imported labour finds full employment. The Central Provinces and Berar Mining Association reports that since the inception of the manganese industry there has been little unemployment on account of shortage of work or excess of labour. Should, however, the cost of production of ore continue to increase, without a corresponding enhancement of market prices, the industry will no doubt have to face this question of unemployment. The Pench Valley collieries report that unemployment does not prevail in that area.

There has been some unemployment caused by dismissals in some of the low grade manganese mines which have been recently compelled to close down on account of depression in the manganese trade.

Unemployment insurance.

Unemployment insurance does not exist in any industry and all employers are of opinion that any such scheme would be unworkable.

LABOUR "TURNOVER".

Average duration of employment.

Here again no definite figure is available except in the case of one or two mills. The Empress Mills, Nagpur, have forwarded a detailed statement indicating the turnover of their labour since 1908. The average period of continuous service put in by a worker at these mills comes to 7.89 years. Two "turnover" charts are appended, indicating in the form of curves—the turnover in the Empress Mills and the Pulgaon Cotton Mills. The rapid rise in 1924 was due to a strike. In the Pulgaon Mills the average duration of employment is 40 months. On a rough estimate the average duration of employment in other perennial factories may be put at 30 months.

The Pench Valley Coal Mines report that out of 3,700 workers, 800 have been in continuous employment for three years or longer, 700 for two years or longer, 650 for one year or longer and 1,550 for less than one year. The manganese mines report that the average duration of employment in any one year for

the whole of the labour force is 9 to 10 months continuously, the remaining two or three months being usually utilised by approximately 30 per cent of the labour in returning to their villages for seasonal cultivation. Normally the bulk of these return after the crops have been reaped.

Absenteeism.

From such information as is available the number of absentees is said to be from 10 to 5 per cent per day. The percentage of absentees increases after pay day. For example, the manganese mines report that attendance decreases by 50 per cent on the day immediately following the weekly *bazar* day; and the Chhindwara coal mines report that the number of absentees on days following pay day is as much as 30 per cent over that on other days.

Extent of casual employment.

In the seasonal cotton factories about 20 per cent of the labour force are casual. In the perennial factories the extent of casual labour is not appreciable and does not exceed 3 per cent of the regular labour force. Such casual labour is employed mostly on building construction or on loading and unloading work. Mine owners report that there is no casual labour at their works.

CHAPTER III—STAFF ORGANISATION.

The cotton ginning and pressing factories are mostly in the private ownership of Indian Banias, nearly one-third being owned by limited joint stock companies with Indian directors. A few of these companies are European and Japanese. Messrs. Ralli Brothers and Volkart Brothers are the two most important among European firms and Gosho and Company, Toyomenkwa and Company and the Japanese Trading Cotton Company among Japanese firms owning such factories. The European and Japanese firms have managers of their own nationality, and other factories are under Indian managers.

Of the 15 textile mills, 11 are owned by public joint stock companies, five with purely Parsee directors, two with a mixed directorate of Parsees and other Indians, one with a mixed directorate of Europeans and Indians and three with Indian directors. Four cotton mills are privately owned by Indian Banias. Two of the mills are managed by Europeans, two by Anglo-Indians, six by Parsees and four by other Indians. The three cement factories and two of the pottery works are public joint stock companies under a mixed directorate of Europeans and Indians. The third pottery work is under an Indian directorate. The local managers of two of the cement factories are Europeans, while that of one is an Indian. Two of the potteries have European managers and the third, an Indian manager.

Of the six railway workshops, two have European managers and four Anglo-Indian managers. Three of the five motor car repairing shops are under Indian management, two under European and Anglo-Indian managers.

The tobacco (*bidi*) factories, the lac factories, the myrobalan factories and the two glass factories are owned and managed by Indians, with the exception of one myrobalan factory which is owned by a European company.

English Boards of Directors predominate in the manganese and coal mining industries. They own the most important deposits and work the bigger mines, having been the first to enter the field for prospecting. Out of 250 mines and quarries, the agents (as defined in the Indian Mines Act) of 92 are Europeans or Anglo-Indians, of 21 are Parsees and of 11 more are other Indians. Of the mine managers, 80 are Europeans or Anglo-Indians, 14 Parsees and the rest are other Indians.

SELECTION OF MANAGING STAFF.

The appointment of the managing staff is made as a result of open selection by the Board of Directors or controlling partners generally with due regard to the merits of the persons selected. The selection, however, is generally confined to the particular community to which the capitalists owning the concern belong. The predominance of the Parsee element in the managerial staff of the larger cotton mills in the province with large Parsee interests is a very prominent feature in this province. In the smaller factories this kinship plays a more important part and selection is seldom free.

There is no open selection in the seasonal factories which generally recruit persons known to the management or owners.

In the mining industry selection is more open and based more on the qualifications of the persons, as the Indian Mines Act prescribes certain qualifications for work in the mines.

In these industries the head offices sometimes appoint specially qualified persons on agreements or covenants and in respect of such appointments the technical or managerial qualifications of the applicants are the main criterion. Europeans are sometimes covenanted in Europe and sent out. In the Gun Carriage Factory appointment on the managing staff is made by the Secretary of State after selection by a Board in England.

RECRUITMENT AND TRAINING OF SUBORDINATE SUPERVISING STAFF.

Methods in force.

The ginning and pressing factories mainly recruit their subordinate staff from outsiders. In a very few cases apprentices trained in the same factory are employed.

In the larger textile mills and the bigger perennial factories the subordinate staff is generally obtained by promotion from the ranks and from apprentices trained in their own factories. Apprentices trained in sister factories are also recruited. Jobbers are mostly promoted from the ranks in the same mill.

In the cement factories apprentices are recruited. In the Gun Carriage Factory foremen and assistant foremen are recruited by selection after advertisement, but chargemen and supervisors are promoted from the workmen and apprentices.

In the mining industry foremen are generally recruited direct or from students or apprentices trained for the Mining Board examinations in some of the coal mines. *Mates* and *sardars* are

recruited by promotion from miners. In the manganese mines new applicants are appointed by mine managers who after training them place them in grades according to their ability. In the coal mines in making selection consideration is given largely to the ability of the existing employees to handle labour decently.

Facilities for training and promotion of workmen.

The only facilities of this nature provided in the province are the following :—

The Empress Mills, Nagpur, have had a regular system of training apprentices which has been in force since the inception of the mills. The system provides for training apprentices (sometimes with University qualifications) both for managerial and supervising positions as well as for the subordinate supervising staff. An apprentice receives an incremental scale of pay during the full five-year period of apprenticeship and practically the whole staff of the mills is recruited from such apprentices. Many apprentices trained in this mill have also joined other concerns and the mill authorities report that "there have been instances of ambitious young men of ordinary education who by dint of self-help and unremitting toil have outstripped their brothers with superior initial qualifications".

The Gun Carriage Factory, Jubbulpore, maintains a regular Apprentice Class with a scheduled course of instruction for five years both theoretical and practical. Such apprentices are admitted after an entrance examination; and chargemen and supervisors are recruited from these. This institution also maintains a Boy Artisans' Class for the benefit of the sons of their employees.

Some of the other perennial, and a few seasonal, factories also provide facilities for training their own workmen and apprentices, but no accurate figures are available. In important mines like the Ballarpur and Ghugus collieries in the Chanda district and the Pench Valley and Amalgamated collieries in the Chhindwara district and the Central Provinces Manganese Ores Company's and the Central Indian Mining Company's manganese mines, training is given by the managers to miners who desire it for the qualifying examination. The managing staff always tries to train the ordinary miner as well; and mates and sardars are recruited from such trained hands. With the assistance of Messrs. Shaw Wallace and Company's collieries mining lecture classes were opened at Parasia and five students passed the third year examination in 1927. These classes, however, had unfortunately to be closed last year on account of the lack of students due

perhaps to the trade slump. Mr. G. O. Burgoyne, the Manager of the Pench Valley coalfields, who was in charge of these classes, reports: "New applicants of the right sort for apprenticeship at the collieries have become rare and unless coal mining takes a turn for the better the classes will not continue to justify their existence."

Relations between the staff and rank and file.

The relations between the staff and rank and file are reported to be good in all the industries.

WORKS COMMITTEES.

Their extent and achievements.

Works Committees are conspicuous by their absence in the industrial undertakings of this province and the employees are generally in direct touch with the managing staff.

The only exception was in the case of the Government Gun Carriage Factory at Jubbulpore, where a Works Committee had been in existence for some time, but has been in abeyance since 1926. The objects of this Committee were—

- (a) to promote feelings of good fellowship all round;
- (b) to improve outturn;
- (c) to improve educational qualifications of workmen;
- (d) to suggest means of welfare work.

CONTRACTORS AS INTERMEDIARIES.

Extent and character of work given on contract.

In the ginning and pressing factories a good deal of work is done on contract. The labour contractors supply labour on payment on output with a stipulated minimum, or on a commission basis. Pressing of bales, filling of cotton *bojhas*, picking and carrying of cotton seeds and carting are some of the items of work done on contract. In the perennial cotton mills the work done by contractors consists of building construction, cartage, the loading and unloading of goods at railway stations and at mills and stacking of bales of cotton yarn and cloth.

In some of the pottery works, quarrying and removing of clay and limestone are done by contract.

The most extensive employment of contractors as intermediaries exists in the mining industry. More than 50 per cent of coal is raised by contract. In the Ballarpur colliery all work excluding safety work, ultimate supervision and management is done through contractors. In the manganese mines, ore excavations, loading and building work are done on contract.

Extent of sub-contracting.

Sub-contracting does exist on a small scale, but is not of much importance. The mines do not recognise sub-contracts.

Control exercised over working conditions.

The employers report that the fullest control is exercised by the officials of the industries over contractors' labourers and their working conditions. But the experience of the factory department is that there is a certain amount of slackness of control over conditions of work done on contract.

Effect.

A certain amount of laxity in the observance of factory rules and regulations is observed in factories where much work is done on contract. This is specially true of the seasonal cotton and ginning factories. Control in the mines over the conditions of contract work appears to be adequate.

CHAPTER IV—HOUSING.

EXTENT TO WHICH HOUSING IS PROVIDED.

By employers.

Housing accommodation is provided for about 7,500 workers by some of the larger factories and mills. Of these, approximately 3,700 are in the textile mills and 2,000 in cement pottery and other works; and 1,800 belong to other minor industries. Details of these employers and the extent of housing accommodation provided by each are given in Appendix IV. It appears from this statement that 19 per cent of the labour in the textile industry and 7.5 per cent of the labour in the minor industries, is provided with housing by the employers.

In addition to housing accommodation the Pulgaon Cotton Mills maintain a settlement covering an area of 15 acres on which the mill hands are allowed to build their own huts on payment of a nominal ground rent of 4 annas per annum per 100 square feet.

The improved housing scheme started by the Empress Mills at Indora, a suburb of Nagpur, deserves special mention. This scheme is the outcome of a desire for establishing a model village. In 1923 a plot of land measuring about 200 acres was selected at Indora, two miles from the mills, as a considerable number of the workers of the mills lived there. The Government has co-operated in developing this scheme and granted in 1925 a lease of the land for 27 years on favourable terms. The whole scheme will require several years for completion and when completed will cost about Rs. 25 lakhs. Most of the houses so far built have been occupied by the mill hands and more houses are likely to be built gradually. The following are some of the noteworthy features of this model village:—

- (i) The houses will be of the bungalow type standing on their own ground.
- (ii) The plots measure 36' x 53' and nobody is allowed to build on more than one-third of the space.
- (iii) Each house will have in course of time its own flush latrine and water tap.

- (iv) The village will be provided with good roads and lighting.
- (v) The village will consist of both *pucca* and *kuchha* houses. Only *pucca* houses will be built by the mills, but the work people are at liberty to construct their own houses in accordance with approved designs.
- (vi) Hundreds of trees have been planted in and round about the *basti* which in course of time will make the colony shady and beautiful.
- (vii) The residents are encouraged to grow gardens in the open space in their compounds.
- (viii) The village will eventually also have its play grounds, market places and public gardens and in a central situation a hospital, an institute and residential buildings for Welfare Work Secretaries. A building has already been constructed for a primary school.

At present only one section of the proposed lay-out is being developed and there are 108 houses of which 42 have been constructed by the mills and the remainder by the people themselves. The *pucca* houses built by the mills cost Rs. 960 each, but they are being sold to the work people for Rs. 840 each. The cost of the houses built by the workers themselves ranges from Rs. 300 for an ordinary *kuccha* dwelling to Rs. 600 for a fairly large *pucca* house. Liberal advances at reasonable rates of interest recoverable in monthly instalments spreading over five to seven years are granted to enable the workers to construct houses. 75 families with an average of five members to a family are at present living in the settlement. When the scheme is fully developed it will provide for 1,500 houses. This is the most systematic attempt made to solve the housing problem of the work people. It should, however, be noted that only the better paid employees can avail themselves of the advantages of this scheme.

A large proportion of the labour in the mining areas is housed in brick-built quarters provided by the mines, but no exact figures are available. The Central Provinces and Berar Mining Association reports that labour is fully provided with housing by the employers with the exception of such proportion of it as does not wish to live in *pucca* houses and prefers to build their own *kuchha* huts. The Central India (Manganese) Mining Company reports the same about the conditions in their mines. The managers of the larger Chhindwara coal mines report that at most of their mines the Company has built up-to-date quarters for

housing the labour force and staff resident on the mines. This housing scheme is still in progress at the mines. At the present time about 50 per cent of the resident labour force is quartered in well-built houses and during the next few years this percentage will be increased. The report seems to indicate that many of the labourers prefer to live in their own *kuchha* huts. The employers provide those who do with a free supply of land and hutting materials.

By Government or other public agencies.

No housing accommodation is provided by Government for labourers. Government, however, fully co-operated in developing the Indora scheme of the Empress Mills at Nagpur by setting apart a large area of 200 acres and granting a lease on favourable terms. Local bodies like municipalities have done very little hitherto for the housing of workers, but some municipal schemes for the removal of congestion in working class localities are at present under consideration. The Nagpur Municipality proposed a housing scheme for workers in a part of the city called Pachpaoli, but dropped it for lack of funds. The Khamgaon, Shegaon and Khandwa Municipalities have also similar proposals under consideration for removing congestion in slums and providing better housing facilities for working class people. These schemes however, have not, as yet materialised.

By private landlords.

No houses have been built by private landlords in the industrial towns specially for the accommodation of the working classes. A considerable percentage of the older established workers in the larger industrial towns, however, does live in houses provided by private landlords. A rough estimate puts the percentage of labour utilising such accommodation at 25 per cent at Akola and Nagpur.

By workers themselves.

About 85 per cent of the workers live in houses constructed by themselves. No detailed figures or information are available. Some factory owners provide free land for huts for labourers; but in most cases the labourers have to take a lease of Government or private land. Government land is leased for building purposes in poorer quarters without any premium and at a rent

of 1 anna per 100 square feet. Settlements of working classes of this nature are common in the larger industrial towns like Nagpur, Amraoti and Akola, specially in the cotton districts, and are locally known as "Files". Although the amenities provided by municipalities for these labour colonies are negligible, the occupants have generally to pay house-tax or haisiyat-tax to the local municipalities at the rate of Re. 1 or Rs. 2 per annum.

As already mentioned above, a certain percentage (roughly about 40) of mine labourers live in huts constructed by them on land and with materials supplied free by their employers.

NATURE OF ACCOMMODATION PROVIDED IN EACH CLASS.

In relation to workers' demands.

All the regular houses provided by the factories and mines are brick built and are of the type of one-room tenement, with a small verandah or open courtyard attached. The plinth of the room does not exceed one foot except in the case of the big chawls like that of the Model Mills, Nagpur. The average dimensions of the rooms are 10' x 8' x 7' and the dimensions of the doors are generally 6' x 3'. Small windows are provided but they are not generally so located as to provide cross ventilation. The houses are generally constructed in the form of barracks, each block consisting of 4 to 10 rooms. The Model Mills quarters are of the type of double-storied chawls. The average number of inmates per tenement does not exceed five. The floor of the houses provided by the larger mills is generally of cement or *murrum*, but many of the houses in these mills and the houses in the smaller factories have *kuchha* floors. These houses compare favourably with those which the labourers generally occupy in the rural areas before they take to industrial life; but these colonies, except in the mining areas, have not the advantage of the open air and ventilation of rural areas. Considering the fact that the standard of life of the lower classes in India is low it cannot be said that the accommodation provided is unsatisfactory from the point of view of the workers' requirements. The area available in the environment of the tenement for subsidiary domestic purposes like cooking, bathing and washing is, however, very small and very often the workers have to supplement the accommodation which is provided by enclosing the small verandah with bamboo partition or screens of cotton stalks, sometimes plastered with cow dung and mud.

As already indicated the standard of the quarters provided by the Empress Mills at the Indora extension is superior to that of the ordinary rooms provided by other mills. Each room is 10' 8" x 10' 8" and has a front verandah 6' 6" wide as well as a back verandah 5' wide which latter has been enclosed to serve as kitchen and store-room.

With regard to mining areas, the Central Provinces and Berar Mining Association says that the houses provided are at least equal to those that the employees normally occupy in their villages. The Central Provinces (Manganese) Mining Company reports that the houses are 10' x 12' to 15' x 20' according to the number of members of the family and the average number of inmates is three. Labourers prefer a type of building which does not contain windows, but the houses are so constructed that there is an air space between the walls and the roof. Reports from the Chhindwara coal mines show that the houses provided more than satisfy the demands of the mines. Wherever *pucca* quarters have been constructed each man with his wife is accommodated in an one-room tenement with a private cooking verandah. These quarters are built in blocks of not more than four with high plinths and good roof, and the surroundings of these blocks are free of all obstacles so that the labourers can construct compounds if they so desire. For the better class of skilled labourers slightly better accommodation is provided, in that they are given two rooms with verandahs. For the Indian supervising staff the coal mines provide small detached bungalows with three or four rooms and a verandah, walled compounds, kitchen, latrines and bath rooms. From the reports received the standard of housing at the mines, specially that provided in recent years, appears to be superior to that of the accommodation provided generally by employers in urban areas.

The huts constructed by the workers themselves in the industrial towns and in the mining camps are of course of a lower standard. In these settlements all grades of houses from double-storied buildings of mud, bricks and country tiles (owned by some of the better paid workers) to mere hovels made of bamboo matting not unlike wigwams are to be seen. The most common type is a hut constructed of wattle and mud walls roofed with grass thatching, country tiles or sometimes with corrugated iron sheets, the height of which barely exceeds 6 feet even at the ridge. Plinths are practically non-existent and windows or openings are rare. In mining areas huts are generally of wattle and thatching, the door is too low and the inmates generally cannot pass upright through the doors. Leaking roofs and damp floors are common during the rains.

The best type from the health point of view.

From the point of view of ideal hygienic conditions the present accommodation of the labourers in urban areas must be considered to be capable of considerable improvement. A large percentage of the houses provided by the factories and mines are perhaps adequate in that they are not a danger to health. But it is most unsatisfactory that the same room should have to be used for residence as well as subsidiary domestic purposes like cooking. The inmates often improvise more accommodation by enclosing the verandah with bamboo *tattas* and other partitions. But this practice is not universal. Similarly, part of the courtyard is very often enclosed for a "*nahani*" (bathing and washing platform), but many of the workers have to perform these operations in the open without any privacy. Even the confinement of women takes place in the same room in which the family lives and cooks. There is very little cross ventilation although it must be admitted that such windows as are provided are generally blocked up by the inmates themselves in order to keep of the sun and rains for the sake of warmth in winter.

There is practically no provision for outside street lighting in these settlements of the labourers even in areas where the municipalities levy some tax on the occupants. Most employers, however, maintain sweepers for keeping the areas fairly clean. There is no sort of drainage and the sight of the waste water of every house accumulating into an insanitary cess pool is more the rule than the exception. Most of the mills and some of the factories provide common latrines for their labour colonies and in many cases these are used especially by the women. But it is more usual for these labourers to resort to the open land and fields adjoining their colonies. This is particularly the case in mining camps where conditions are more rural. Water supply from wells or taps in some towns, is generally adequate.

There are many cases of two or three brothers with their wives and sometimes with the addition of their parents using the same small room. But the results of inquiries into overcrowding in town made in connection with the last census of 1921 do not disclose any acute overcrowding in these areas. The number of families per house shows an average figure of less than 1, the maximum average being 1.05 family per house. The number of persons per house varies between the average of 1.73 to 6, the general figure being somewhere between 4 and 5. The average figure for the whole province has been 5 since 1891. The average

number of houses per square mile was 23 in 1891, 21 in 1901, 25 in 1911 and 24 in 1921. Inquiries in connection with the preparation of Living Index Numbers disclosed the following average and maximum figures per house at Nagpur and Jubbulpore. For workers with incomes ranging from Rs. 70 to Rs. 100 per month.

		<i>Average persons per house.</i>	
Nagpur	.. {	Male adult	... 1.47
		Female adult	... 1.47
		Children (under 14)	... 1.39
		Total	... 4.33
Jubbulpore	... {	Male adult	... 1.28
		Female adult	... 1.17
		Children (under 14)	... 1.31
		Total	... 3.76
		<i>Maximum number of persons per house.</i>	
Nagpur	... {	Male adult	... 2.4
		Female adult	... 2.4
		Children (under 14)	... 2.4
		Total	... 7.20
Jubbulpore	... {	Male adult	... 2.2
		Female adult	... 2.1
		Children (under 14)	... 2.3
		Total	... 6.60

The greater danger to the working people springs from the insanitary surroundings rather than from the inadequacy of accommodation. The census report of 1921 says "The conclusion based on the statistics is that, whether we look at the number of persons per house or the number of houses per acre, there is nothing at all comparable with the congestion in large cities in India, to say nothing of the slums of European countries. Indeed, from a sanitary point of view, it is probable that there is much more danger to the public health, arising from imperfect facilities for drainage, breeding grounds for mosquitoes formed by stagnant water, and impure water supply, than there is from the too great pressure of humanity on space."

In mining areas the housing provided by employers is reported to be suitable in every way from the hygienic point of view. The houses are so built that they can be cleaned cheaply and with ease.

Utilisation.

The major portion of the regular accommodation provided by the employers is utilised by the workers, but in the mining area a large percentage of the workers seems to prefer to live in huts in the open. In urban area nearly 75 per cent of the families are often in a position to rent better accommodation outside the mills by pooling what they are prepared to spend on house rent and sharing houses. There is perhaps also some prejudice against the standard tenement provided by the mills and a small percentage of the rooms provided thus remains unoccupied.

In mining areas the entire accommodation provided is reported to be utilised.

Rent rates in various classes.

A comparative statement of average rent rates on the various classes of accommodation in some of the leading industrial towns is given below :—

Class.	Nagpur.	Akola.	Amraoti.	Ellichpur.	Jubbulpore.	Raipur
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
(i) By employers	1 0 0	0 6 0	0 12 0	0 8 0	0 12 0	Free.
(ii) By landlords	2 0 0	2 0 0 to 3 0 0	2 0 0	1 0 0	2 0 0	1 0 0

Ground rent of 1,000 square feet.

(iii) By workers themselves	0 8 0 per month.	2 0 0 per annum.	2 0 0 per annum.	0 8 0 per month.	...	6 4 0 per month.
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No rent is charged for housing provided by mines.

Special problems arising in connection with various classes of housing.

Subletting does not exist to any appreciable extent and is prohibited in the quarters provided by the factories and mines. In some cases persons coming from the same villages as the occupants in quest of employment are temporarily accommodated. Reports have been received of stray cases of attempts to evict the workers

from the chawls provided by the employers at the time of strikes, but the intervention of the executive authorities has usually stopped this. During the strike last year in the Akola Cotton Mills, Limited, the strikers refused to vacate their quarters when an attempt was made to evict them and continued to occupy the quarters throughout the period of the strike which lasted 46 days. The mill authorities have since then imposed monthly rents varying from 4 annas to 8 annas to emphasise the position of the workers as tenants.

Moral effect on workers of industrial condition:

It is remarkable that low standard of housing accommodation does not appear to have a serious moral effect. The standard of privacy is of course very low, but it is a fact that serious moral irregularities occur very rarely in these settlements. This may be attributed to the influence of religious and social traditions which are deep-seated even in the lower classes of Indians.

CHAPTER V—HEALTH.

GENERAL HEALTH CONDITIONS OF WORKERS.

General health conditions of workers are reported to be good on the whole in all recent annual reports on the administration of both the Indian Factories Act and the Indian Mines Act. The ravages of epidemic diseases such as plague, cholera, influenza, relapsing fever, small-pox, etc., are mentioned in the factory reports of 1915 to 1920. In 1921 too mention is made of most of these diseases, but the attacks are said to have been milder. Later reports seem to indicate a healthier condition. In the mining areas, slight outbreaks of small-pox, cholera, plague and influenza in a few mines were reported in 1927, while in 1928 outbreak of cholera, influenza, malaria and small-pox in several labour camps occurred. 125 attacks and six deaths occurred in 1927, and 280 attacks and 61 deaths in 1928 from those diseases. It should be noted that most of these diseases prevailed during these years in an epidemic form in these areas and were by no means peculiar to the labour population.

Figures of mortality.

Mortality figures exclusively amongst work people are not available. But private information from the following sources indicates that death rates are—

Factory Owners' Association for Khamgaon Ginning and Pressing Factories.	20	per mille.
Burhanpur Tapti Mills	11	„
Pench Valley Coal fields, Parasia	15	„
The Empress Mills, Nagpur	6.26	„
		per annum from last five years' average.

The death rates between the ages of 15 to 50 years at the important industrial centres may be considered a fair index of the death rates of factory labourers. A few figures are given below :—

Industrial centres.	Death rate between the age period 15 to 50 years, per mille.		General death rate per mille.	
	1927.	1928.	1927.	1928.
Nagpur town ...	9.70	11.88	4.25	50.8
Amraoti ...	9.72	8.15	39.4	41.7
Akola ...	7.03	7.55	28.0	35.0
Khamgaon ...	6.86	5.46	37.5	30.3

Mortality figures for the Empress Mills, Nagpur, are :—

	Deaths in all.	
1924	...	51
1925	...	43
1926	...	74
1927	...	79
1928	...	66
Total	...	313 in five years
		66.6 per annum.

On the 31st December 1928, the number of hands on the muster roll was 8,934, and on 31st December 1927 it was 8,782. So, the death rates work out to :—

	Per mille.
1927	8.8
1928	7.5

and these figures are approximately the same as the Nagpur figures of mortality between the ages of 15 and 50 years.

Birth rate and infant mortality.

Figures for birth rate and infant mortality amongst labouring classes alone are not available. The figures of birth and infant mortality relating to these classes cannot, however, diverge

to any great extent from those of the general birth rate and general infant mortality in industrial towns. These figures for the principal industrial towns of the province are given below :—

Industrial towns.	Birth rate per mille.			Death rate per mille.			Infant mortality per mille.		
	1926.	1927.	1928.	1926.	1927.	1928.	1926.	1927.	1928.
Nagpur ...	59.23	58.47	56.35	48.28	42.50	50.86	302.33	353.59	290.47
Gondia ...	34.00	46.41	41.73	26.75	36.92	30.23	271.47	303.03	221.22
Hinganghat ...	45.23	48.02	47.09	49.30	30.64	29.42	278.92	213.08	241.98
Pulgaon ...	32.38	39.50	37.75	26.50	21.63	22.57	248.96	221.09	227.76
Jubbulpore ...	40.24	33.68	38.64	37.02	28.55	30.95	278.56	227.85	251.64
Katni ...	48.83	52.59	53.75	39.12	43.59	49.59	299.69	263.77	40.86
Khandwa ...	37.61	40.26	46.79	32.16	36.52	34.03	308.53	336.42	271.13
Burhanpur ...	52.43	51.84	56.69	42.88	35.64	40.96	292.09	210.73	277.12
Amraoti ...	51.24	55.31	56.06	48.10	39.39	41.68	318.44	231.95	254.99
Akola ...	43.00	42.63	43.57	33.86	28.02	35.02	266.58	214.37	276.67
Ellichpur ...	49.23	51.84	50.29	42.64	36.99	37.40	288.82	196.13	237.10
Yeotmal ...	48.32	48.96	49.48	34.05	28.95	29.93	250.50	201.43	236.81
Khamgaon ...	41.53	42.98	40.23	35.12	37.57	30.31	267.79	291.38	241.59
Raipur ...	39.64	38.65	41.86	33.33	38.70	36.33	300.00	303.64	315.89
Badnera ...	42.60	46.07	43.73	33.94	34.35	25.46	231.50	187.72	140.48

WORKING CONDITIONS.

At work places.

Working conditions in the perennial factories, specially the larger ones, are satisfactory. There is plenty of scope, however, for improvement in ventilation, maintenance of a suitable temperature, suitable flooring, general cleanliness, proper spacing of machinery and provision of places for meals and lockers for keeping them away from dirt and dust. In addition to these, considerable improvements are required in the seasonal factories for alleviating the dust nuisance and for proper lighting.

At home.

Very little information is available regarding the working conditions obtaining in home industries.

The Handloom industry.—The conditions are not very bad. Weavers are generally clean in their habits. Conditions at the homes of carpet and durrie makers are, however, not so satisfactory.

The Bidi industry.—Home conditions are certainly inferior to those of the neighbouring population and some over-crowding has been noticed.

Shellac factories.—Conditions are not satisfactory as overcrowding and insanitary surroundings caused by insufficient drainage of waste water exist. The Director of Public Health who has recently inspected a few of these factories has recommended early action to effect an improvement.

Dietary.

Table No. II on page 17 of the Bulletin on Index Numbers for cost of living at Jubbulpore and Nagpur gives a list of dietary and average annual consumption per family of working class people in both these towns. These data are fairly representative of the industrial centres of the province. The articles of diet and the quantities consumed per annum are—

	Nagpur.	Jubbulpore.
<i>Cereals—</i>		
Rice	... 488 seers.	331 seers.
Wheat	... 266 "	411 "
Jawari	... 39 "	101 "
<i>Pulses—</i>		
Arhar (tur) dal	... 65 "	64 "
Gram	... 26 "	13·8 "
Lakhori	... 24 "	1·5 "
Masur	... 2·8 "	15 "
Urad	... 1·5 "	8 "
<i>Other food articles—</i>		
Gur	... 9 "	14 "
Sugar	... 9 "	15 "
Tea	... 0·7 lbs.	1·2 lbs.
Fish	... 2 seers.	1·2 seers.
Beef	... 0·2 "	2·1 "
Mutton	... 16 "	10 "
Milk	... 13 "	43 "
Ghee	... 4 "	10 "
Salt	... 25 "	18 "
Chillies	... 14 "	3·3 "
Turmeric	... 2 "	2·2 "
Potatoes	... 17 "	21·4 "
Onions	... 18 "	7·8 "
Mustard oil	... 2 "	4·2 "
Til oil	... 17 "	7 "
Coconut oil	... 1 seer	1·5 "

In Chhattisgarh Division, the dietary is slightly different as the inhabitants in those parts eat very little wheat and jawari, which can, therefore, be neglected altogether, and their main cereal is rice which is often taken in the form of "*Basi*" that is, rice kept soaked in water over-night or for several hours and the consumption of vegetables, pickles and pulses is much smaller. Oil, ghee and potatoes find only a small place in the dietary, and tea and sugar are rarely taken.

The diet indicated above is not satisfactory from a scientific point of view. The nourishment obtained compares unfavourably with that of Western countries or Japan, as is evident from the comparison made in the statement given below :—

Annual consumption per man.

	United States.	Japan.
	lbs.	lbs.
Meat	... 140	21·5
Fish	... 21	50·5
Eggs	... 30	2·1
Legumes (pulses)	... 28	35·5
Bread and cereals	... 340	309·4
Vegetables	... 420	459·4
Sugar	... 63	14·1
Fruit	... 200	29·7
Other foods	... 33	0
Milk	... 500	2·2

In the United States of America 500 lbs. of milk is consumed per head as well, whereas an entire worker's family in this province does not consume more than 90 lbs. of milk.

A statement showing the average constituents of the diet of a single man has been obtained from Akola in which the monthly cost is also shown :—

		Cost.
		Rs. a. p.
Wheat	24 lbs. in one month	... 2 4 0
Rice	16 „ „	... 1 10 0
Pulses	10 „ „	... 1 5 0
Salt	½ lb. „	... 0 1 6
Red pepper	¼ „ „	... 0 3 0
Ghee	1 „ „	... 1 0 0
Fresh vegetables	„ „	... 1 0 0
Tobacco, betel nuts, etc.	„ „	... 1 8 0
Total		... <u>8 15 6</u>

Physique.

Considering the general inferiority of Indian physique, the physique of workers is said to be good on the whole in this province, though the average stature is short.

Some individuals were selected at random from textile mills and oil mills. Reports regarding physique have also been received

from some collieries and seasonal factories. The average figures thus obtained are given below :—

	Height.	Weight
<i>Textile mills—</i>		
Hinganghat	... { 5'-4½"	lbs. 117
	... { 5'-3"	120
	... { 5'-4"	113
Burhanpur	... { 5'-6"	118
	... { 5'-2"	119
	... { 4'-11"	108
	... { 5'-6"	116
Akola	... { 5'-4"	103
	... { 5'-2"	101
	... { 5'-0"	90
	... { 5'-8"	125
Jubbulpore	... { 5'-5"	125
	... { 5'-1"	101
<i>Coal mines—</i>		
Ballarpur—		lbs.
Telegu	...	140
Mahar	...	120
U. P. Man	...	150
<i>Seasonal factories—</i>		
Khamgaon	...	130
Nagpur (Ralli Brothers)	..	102
Raipur	...	125
Pandhurna	...	118

The differences between the weights of workers hailing from different places is often due to heredity. For example, the wheat-eating labourers from the United Provinces and Central India have as a rule a much better physique than those from other places. The recruits from the Bombay side come next, while the rice-eating labourers from Chhattisgarh are born with the poorest physique.

The chart published by the Factory Labour Commission of 1907 gives the following comparative figures :—

Province.	Average weight of spinners.	Average weight of prisoners.	Differencè.
Bombay	102·9	112·12	10·3
Central Provinces and Berar	100·92	110·45	9·53
United Provinces	107·01	115·08	8·07
Burma	117·14	125·70	8·56
Bengal	107·93	115·05	7·12
Eastern Bengal and Assam	108	110·84	2·84
Punjab	113·08	115·05	1·97
Madras	113·63	114·38	0·75

Effects of disturbance of sex ratio in industrial cities.

Disturbance of sex ratio in the industrial towns of this province is not so marked as in larger cities like Bombay, Calcutta or Ahmedabad, and very little practical effects of such disturbance have been noticed. In this province the tendency is for labourers to work as a family and to move together from one place to another both man and wife contributing to the common purse. The census report of 1921, however, reveals that the proportion of females to 1,000 males is 864 in Nagpur and 762 in Jubbulpore. The total urban population consists of 754,989 males and 686,441 females, or a proportion of 909 females to every 1,000 males. The difference is not large and is partly due to the presence of certain trading classes such as Bohras, Marwaris, Bhatias who reside for a portion of the year at their business centres and retire to their homes periodically.

In Akola, where the percentage of immigrant labour is high, it is reported that 25 to 30 per cent of labourers live with their wives and families. There is no conclusive evidence to show that the prevalence of venereal diseases amongst industrial labourers is high or what the extent of these diseases is in this class. Mill authorities say that labourers so affected avoid the hospitals. The dispensary figures for venereal diseases at one mill at Akola are only 2 per cent. Published figures from all the mill dispensaries are generally as low and in most cases lower still. The Tirody Manganese Ore Company report, however, that at their mines, the chief diseases are venereal, but no figures are given. The prevalence of venereal diseases is high in the Chhattisgarh districts and Nagpur. Figures for the incidence of venereal diseases in some of the main towns are as follows:—

1925.

Districts.	Venereal diseases treated.	Total number of cases treated during the year.	Percentage of venereal cases to total number of cases treated.	Percentage with respect to the population of the district.
Nagpur	2,640	219,540	1.21	0.3331
Wardha	1,034	100,043	1.03	0.2221
Chanda	596	72,756	0.82	0.0901
Balaghat	498	59,624	0.84	0.097
Chhindwara	309	43,491	0.71	0.062
Amraoti	1,460	156,487	0.93	0.176
Akola	1,806	159,994	1.13	0.226

Districts.	Veneral diseases treated.	Total number of cases treated during the year.	Percentage of veneral cases to total number of cases treated.	Percentage with respect to the population of the district.
Yeotmal ...	737	80,951	0·91	0·098
Buldana ...	1,030	137,362	0·75	0·147
Jubbulpore ...	1,052	105,458	0·998	0·141
Nimar ...	805	82,786	0·90	0·229
Total for Central Provinces and Berar.	22,594	1,894,025	1·19	0·163

1926.

Nagpur ...	2,886	243,195	1·19	0·365
Wardha ...	926	106,102	0·87	0·199
Chanda ...	547	78,667	0·70	0·082
Balaghat ...	622	60,089	1·03	0·121
Chhindwara ...	404	45,525	0·89	0·071
Amraoti ...	1,487	182,750	0·81	0·178
Akola ...	1,753	195,872	0·89	0·219
Yeotmal ...	749	98,950	0·76	0·100
Buldana ...	919	157,704	0·58	0·131
Jubbulpore ...	1,241	104,055	1·20	0·166
Nimar ...	690	89,440	0·77	0·173
Total for Central Provinces and Berar.	23,257	2,108,152	1·06	0·167

1927.

Nagpur ...	3,917	244,601	1·60	0·494
Wardha ...	738	118,700	0·62	0·159
Chanda ...	755	85,153	0·89	0·112
Balaghat ...	479	57,264	0·84	0·093
Chhindwara ...	328	46,895	0·85	0·081
Amraoti ...	1,132	191,940	0·59	0·124
Akola ...	1,678	199,318	0·84	0·210
Yeotmal ...	1,676	108,316	1·55	0·223
Buldana ...	959	165,761	0·58	0·137
Jubbulpore ...	671	110,973	0·60	0·089
Nimar ...	813	93,886	0·87	0·205
Total for Central Provinces and Berar.	27,634	2,195,902	1·26	0·126

There is no reason to suppose that the incidence of veneral diseases among labourers is higher than among other classes.

EXTENT OF MEDICAL FACILITIES PROVIDED.*By employers.*

The law requires that first aid appliances shall be provided in all factories employing more than 500 persons a day, and in all important mines. But the employers in many cases have provided well-equipped dispensaries. Medical facilities are within easy reach of almost all the factories borne on the register as well as of every important mining area in the province. In many cases a retaining fee is paid to the local doctor in charge of the Government hospital or that maintained by a local body or some annual contributions are made to the hospitals by the employers for the treatment of factory cases.

Thirteen perennial factories (with a total daily number of operatives of 20,380) maintain dispensaries of their own under qualified doctors. Altogether 1,86,634 cases were treated in these in 1928. Free medical treatment including attendance in their quarters or in camps is provided. Almost all the important mines maintain well-equipped dispensaries of their own. There are eight dispensaries with doctors and three without whole-time doctors. For the Pench Valley and the Amalgamated Coalfields, Shaw Wallace and Company maintain one main hospital and five branch dispensaries near Parasia. At the Ballarpur Colliery, 7,892 cases were treated in the mine dispensary. At all the larger mines of the Central Provinces Manganese Ore Company, Limited, well-equipped dispensaries with beds for male and female patients are provided. There are eight dispensaries with doctors and 15 without whole-time doctors. Weekly visits are paid to the smaller mines by Assistant Medical Officers.

By Government.

Government hospitals are provided in all important towns and industrial centres. Grants-in-aid are also given to hospitals and dispensaries maintained by local bodies.

By other agencies.

Local bodies such as municipalities and district councils maintain dispensaries and hospitals and women's hospitals are maintained out of the Dufferin Fund in the larger towns. Private charitable dispensaries or hospitals financed entirely by public subscriptions, are extremely rare.

EXTENT TO WHICH MEDICAL FACILITIES ARE UTILISED.*Generally.*

Generally medical facilities are utilised freely by male labourers. In the dispensaries of mills and perennial factories the number of cases treated was—

	Cases.
1925	... 111,669
1926	... 184,900
1927	... 358,300
1928	... 186,634

The figures obtained from three important mines for the year 1928 are—

	Cases.
Ballarpur colliery	... 7,892
Bharweli manganese mine	... 4,115
Pench Valley coalfields, Amalgamated coalfields.	10,208

By women.

Women workers are somewhat reluctant to accept medical facilities from male doctors. Hence they do not take advantage of the facilities provided except in case of serious illness. This prejudice is disappearing. Women workers, however, freely resort to women's hospitals wherever available. In the Empress Mills, Nagpur, two dispensaries for women are maintained under a qualified lady doctor, and it is reported by the management that the female employees are taking full advantage of the medical facilities and relief thus provided. A maternity and child welfare centre attached to a dispensary has been recently established by the Central Provinces Manganese Ore Company, Limited, at their Kandri mines under the charge of a qualified nurse. Although the services of the nurse are not as yet readily utilized by the labourers, it is reported that more advantage of the facilities provided is now taken than a few years ago.

The reports of maternity and child welfare work in Nagpur given in the annual report of the Public Health Department, as well as the attendance at the women's hospitals at different centres, show that women workers resort freely to these institutions.

The average attendance, including that of women in dispensaries maintained by the different industries, is given below :—

Textile mills	... Six mills maintain dispensaries. Average number of cases—398 daily.
Bengal-Nagpur Railway workshop.	Average number of cases from the workshop to the general dispensary of the railway—7 daily.
Manganese mines	... Eight mines maintain fully equipped dispensaries under qualified doctors. Average number of cases—90 per day. In 15 more mines medicines are stocked and medical officers pay periodic visits (weekly)
Coal mines	... Eight collieries have fully equipped dispensaries under qualified doctors. Medicines are stocked in 3 more mines visited periodically by Medical Officers. Average number of cases—141 per day.
Cement works	... All three maintain dispensaries. Average number of cases treated—36 per day.
Pottery works	... Two maintain dispensaries. Average number of cases—9 per day.
Gun Carriage Factory	... Two dispensaries are maintained. Average number of cases—90 per day.

LATRINES AND OTHER SANITARY ARRANGEMENTS.

At work places.

Latrines and urinals are provided at work places. There is also provision for the supply of drinking water. Sections 13 and 14 of the Factories Act make such provision compulsory on the following scale :—

	Seats.
Where the number of operatives does not exceed 20.	1
Where the number of operatives exceeds 20, but does not exceed 35.	2
Where the number of operatives exceeds 35, but does not exceed 50.	3
Where the number of operatives exceeds 50, but does not exceed 150.	4
Where the number of operatives exceeds 150, but does not exceed 200.	5
Where the number of operatives exceeds 200.	One seat for every 50 or fraction of 50.

If females are employed, separate latrines screened from those for males and marked in the vernacular in conspicuous letters "for women only" and indicated by a female figure shall be provided on the scale laid down in rule 25. Those for males shall be similarly, marked "for men only" and indicated by a male figure.

Scale for provision of drinking water.

If the public water supply is intermittent, then there shall be provided a storage of water, fit for drinking, supplying at least as many gallons per day as there are persons employed in the factory. In the seasonal factories in the smaller towns latrines are, however, seldom used as Indian workers invariably prefer the neighbouring fields or open land. Arrangements for washing or bathing or retiring rooms for women are not provided.

At the workers' homes.

Latrines are not generally provided as workers are accustomed to resort to the open fields. In some of the larger towns, however, municipal latrines are provided for labour colonies and these are utilised. For bathing places most workers set apart a corner of their compound where they improvise a platform of stones. These are generally open and have no privacy. Water is generally obtained from the public wells provided by the employers or local bodies or from public (municipal) water standards. At times the supply is inadequate; and for washing purposes labourers often resort to *nallas* or rivulets in the neighbourhood. This source of supply is frequently contaminated.

EXTENT AND NATURE OF OFFICIAL SUPERVISION.

Works of Boards of Health in special areas.

There is a Provincial Board of Public Health which interests itself in the general public health of the province. The Director of Public Health acts in consultation with this Board. There is, however, no special organisation for the inspection of health and sanitary conditions of operatives in industrial undertakings. Prior to 1912 the Civil Surgeon of the district and his assistants used to inspect factories and mills; but with the introduction of the Act, 1911, this has been discontinued. The local medical authorities have no statutory power to inspect factories and factory owners do not welcome informal visits by them. The Director of Public

Health and Civil Surgeons inspect the labourers' colonies in the towns and interest themselves in the removal of congestion in the settlement of poorer classes and make suggestions from time to time to the local bodies for improving the sanitation in these areas. The sanitary staff of the local bodies also inspects labour settlements in the towns. There is, however, no special inspection of mills and factories.

SUITABILITY OF EXISTING FACTORIES RULES.

Control of temperature in factories.

Under section 37 (2) (g) of the Indian Factories Act, the Local Government has framed rules regarding the standard of ventilation to be maintained in factories. Inspectors have paid particular attention to this subject, and having regard to the climatic conditions, the ventilation of factories in this province is not unsatisfactory. There is one point which still requires further consideration and that is the invention of some inexpensive and efficient method of alleviating the dust nuisance in cotton ginning and pressing factories. With the exception of rules regarding ventilation in factories and the control of humidification in cotton mills, there are no rules relating to the control of temperature in factories. It cannot be denied that temperature in most of the seasonal factories, and some of the perennial factories, is sometimes excessive, being higher than that obtaining in the majority of cotton mills. During the rains and cold weather the natural temperature is moderate and pleasant, but in the months of April, May and June, when a temperature of 116° F. in the shade is often reached, the sole problem is that of endeavouring to counteract the fierce heat of the outside.

Control of humidification in cotton mills.

Under the orders of the Government of India, following on the report of an expert appointed by them to enquire into the question of humidification in cotton mills, the Local Government framed rules relating to this subject. These rules came into force on the 15th August 1926. Prior to this date there was no control exercised by the Factory Department over artificial humidification. Under the rules systematic readings of hygrometers and Kata thermometers were made compulsory. It was not, however, until the beginning of 1927 that all mill owners in the province were able to equip themselves with the necessary recording instruments and they were therefore unable to comply with the rules immediately. Many already possessed hygrometers, but

none the Kata thermometer. It was also found that in many instances existing hygrometers were not installed in positions necessary to give an accurate indication of the temperature of the rooms in which they were placed. Many managers experienced difficulty in mastering the method of taking readings with a Kata thermometer and in consequence the inspecting staff had at the out set to devote a considerable amount of time to explaining the procedure and requirements of the new rules.

In the dry climate of the Central Provinces and Berar, where the shade temperature is often 116° F. and the natural humidity 25 per cent, humidification by artificial means is necessary in all departments of the mills except during the rains, when the natural humidity becomes excessive. The systems generally in use in this province are as follows :—

- (1) The underground gutter system.
- (2) The "Turbo" humidifier.
- (3) The "Vortex" humidifier.
- (4) The "Carrier" system.
- (5) The "Drosopher" system.

System No. 1 gives the best results. This method has the additional advantage of ensuring adequate ventilation as the air is being constantly changed. In many mills efforts have been made to improve the circulation of the air by fixing simple paddle fans to existing shafting. Large exhaust fans have also been installed in some instances. Managers have made every effort to comply with the rules and a considerable improvement in atmospheric conditions has been observed in many mills. The use of steam when the temperature of a department exceeds 85° F. is prohibited by the rules and the mills have experienced no difficulty in complying with this regulation.

Prevalence of industrial diseases.

No record of industrial diseases is maintained in the province, but dust—asthma, bronchitis, consumption and other diseases of the respiratory system prevail in the industrial centres of the cotton country and pneumonia, tuberculosis, conjunctivities, foreign bodies in the eye, ulceration, and respiratory diseases in the mining areas.

Skin diseases, such as scabies, ringworm and ulcers, are very common among industrial labourers, but are not peculiar to this class.

In confirmation of the above view, tables of patients treated at the dispensaries attached to the Pulgaon Mill, which is not an up to date in its equipment, and to the Empress Mills (Nagpur), which is a very efficient, well-organised and up to date concern are given below. The average number of mill hands at Pulgaon is approximately 1,500 and at the Empress Mills, 9,000. Statistics of important industrial diseases are shown for these two mills for 1924 and 1928. Tuberculosis is conspicuous by its absence :—

Diseases.	Total number of patients treated.				Percentage of total cases treated.			
	Pulgaon Mills.		Empress Mills.		Pulgaon Mills.		Empress Mills.	
	Years.				Years.			
	1924.	1928.	1924.	1928.	1924.	1928.	1924.	1928.
Respiratory diseases ...	1,980	620	1,189	1,677	49.13	28.2	4.94	4.93
Skin diseases ...	716	175	4,146	7,391	17.77	8.0	17.18	21.74
Diseases of the Eye ...	Not given		495	945	Not given		2.05	2.78
Venereal diseases ...	156	53	48	71	3.87	2.41	.20	24

The figures from the dispensary of Bharweli manganese mine (Balaghat) illustrate the diseases of mining centres. These figures refer to the year 1928 only :—

Malarial fever	... 1,802
Respiratory diseases	... 287
Tuberculosis	... 60
Pneumonia	... 20
Diseases of the ear	... 40
Diseases of the eye (including foreign bodies in eye)	... 193
Skin diseases	... 195
Venereal diseases	... 15
Ulcers	... 584

Total cases treated ... 4,115

On an average there is one death every month from pneumonia.

Malarial fever is very common amongst workers and an investigation in 1921 revealed that 75 per cent of the labourers in the Ballarpur coal mines and 22.4 per cent of the labourers in the Bharweli manganese mines were infected with hook or other species of worm. The management, however, claims that the agricultural labourers of the locality are similarly infected. In 1921 the Provincial Director of Public Health made a special enquiry in the Empress Mills, Nagpur, to ascertain the incidence of hook-worm amongst industrial workers and the following is an extract from the letter in which the results of his investigation were communicated to the mill authorities :—

“Out of 6,740 employees examined by our staff, 714 or 10.59 per cent show infection with hook-worm and 1,417 or 21.02 per cent with round-worm. The result of our inquiry has brought to light a valuable fact that the infection from hook-worm disease, which is the more serious, is not nearly so prevalent among your workmen as was expected. This is attributed to the good sanitary arrangements of your mills.

The town dwellers seem to make a free use of the mill latrines and these men show a very low percentage of infection in contrast to the workmen drafted from the neighbouring villages who show a much higher percentage, *viz.*, 23.07 per cent.

The special staff has treated, up to 7th March, 161 cases of the hook-worm disease among your employees with some apparent benefit, but the disease among your workmen is of a very mild type, and does not incapacitate them much.”

Sickness insurance.

The Draft International Labour Convention concerning sickness insurance adopted at the Conference of 1927 has been recently considered by this Government. A Committee of experts consisting of representatives of employers and employees has considered the subject and come to the conclusion that any comprehensive scheme of sickness insurance will not be practicable at the present stage of the industrial development of the province. It might, however, be possible to devise a scheme of sickness insurance to be applicable only to well-established perennial industries in which the labour force is reasonably stable. It is, however, anticipated that labour would be strenuously opposed to any compulsory contributory scheme. For example, a very

liberal scheme of voluntary sickness insurance has been in force for the last nine years at the Empress Mills, Nagpur. Under this scheme employees contributing 8 annas per month are entitled to sickness allowance of Rs. 25 per month up to six weeks and Rs. 15 per month for a further period of eight weeks, and employees contributing 4 annas per month receive half benefits. But during nine years, not more than 50 out of nearly 9,000 employees have taken advantage of the scheme. The views of the local Government on the other aspects of this question are set forth in the following letter :—

"Copy of letter No. C-22-652-XIII, dated the 17th April 1929, from the Secretary to the Government of the Central Provinces, Commerce and Industry Department, to the Secretary to the Government of India, Department of Industries and Labour, Simla.

SUBJECT:—*Draft Convention and Recommendation concerning Sickness Insurance adopted by the Tenth International Labour Conference, 1927.*

I am directed to refer to Government of India, Department of Industries and Labour, letter No. L-1518, dated the 20th September 1928, on the subject of the Draft Conventions and Recommendation concerning Sickness Insurance adopted by the Tenth International Labour Conference, 1927.

2. In accordance with the wishes of the Government of India, the possibility of introducing some provision for sickness insurance was examined by a small informal Committee including a few representatives of employers and employees. The report of that Committee, together with the forwarding letter of Director of Industries, Central Provinces, accompanies this letter.

3. It will be observed that the members of the Committee with the exception of the representatives of the employees are emphatically of opinion that any scheme of compulsory insurance is unworkable in practice. The Local Government agree that the introduction of such a scheme must be attended by greater difficulties in a country where the path to compulsion has not been made easier by the existence of voluntary schemes of insurance, which are found where the system of Trades Unions is more developed. The extent of these difficulties cannot, however, be accurately estimated until an attempt has been made to put a scheme into operation, and the Local Government is not prepared to accept the contention that they are insurmountable. It will, however, be conceded that, if an experiment is to be made, it must in the first instance be confined to industries in which labour is reasonably stable, that is to say, so far as the

Central Provinces is concerned, to the Textile, Coal and Manganese Industries. Nor is there any valid reason that the scheme should not equally apply to labour employed on public or quasi-public enterprises such as the railways or under departments of Government such as the Public Works Department. It follows that sickness insurance must be organized on an industrial and not a regional basis.

4. I am further to point out that the time for the introduction of an innovation affecting the relations of capital and labour must be carefully chosen. At present labour is in a state of unrest—more so perhaps in other parts of India than in the Central Provinces. The introduction of a scheme of compulsory insurance would at the present moment in all probability be accompanied by organized attempts on the part of labour to shift the whole of the burden to capital. Should these attempts be successful, the scheme would in effect lose one of its essential features that contributions should be levied alike for employers and employees. While, therefore, there is no objection to the preparation of a complete scheme, the Local Government feels considerable doubt as to whether the present time is propitious for its introduction.

5. The Government of India has directed attention to certain factors which must receive attention in any consideration of the problem. The provision of adequate medical facilities acceptable to the workers obviously is of paramount importance. The Director of Industries has suggested in paragraph 8 of his letter that in urban areas the labourer should have the option of applying to reliable indigenous practitioners. Considerable practical difficulties would arise, if there were two separate authorities to which the labourer desiring a certificate of sickness could apply; indeed, it might result in such certificates being obtainable with insufficient justification. The Local Government would therefore suggest that for all industries, both urban and rural, the western system of medicine should be utilized. Any prejudice that exists against that system would probably disappear in due course as a result of the benefits to labour resulting from sickness insurance. It is clear that the difficulties of administration from a medical point of view would be enhanced, if the persons insured do not remain in the area within which the organisation applicable to them can effectively operate. These difficulties will be minimised by the application of the scheme to industries with a stable labour force, but the Local Government agrees with the Director of Industries that in order to simplify the administration, sickness benefits should be confined to persons who remain within specified areas.

6. It is not possible in the absence of statistics as to the number of workers who would be incapacitated by sickness to compute the cost of the scheme, even if the scale on which benefits are to be granted were laid down. It follows that it is equally impossible to assess the proportion which the expense of administration bears to that cost. In the initial stages of the

scheme the administrative machinery for the settlement of disputes could probably be the same as that already provided under the Workmen's Compensation Act, but in order to prevent disputes either party should have the right of obtaining a second opinion in addition to that of the panel Doctor before recourse is had to a tribunal for the settlement of disputes. This opinion should be that of a Government Medical Officer.

7. No demand has hitherto been put forward by the workers of this province for a contributory scheme of compulsory sickness insurance, and the Local Government accept the view of the Director of Industries that employees as a class will be opposed to making any contribution. It is only when benefits are realized that this opposition can be expected to decrease. Labour, however, as a whole will obtain an indirect increase in its earnings to the extent of the contribution by the employers less any overhead charges borne by the fund. Provided, therefore, that contributions are not pitched unduly high, there is no reason to suppose that the classes whom it is proposed to insure will be unable to meet those charges.

8. The question as to the extent to which State assistance can be granted is an important one. The demand for the augmentation of this assistance whether directly or indirectly is certain to be insistent, and the finances of the province are not in a position to bear the addition of what may prove to be a large and growing liability. It is, therefore, necessary that at the outset the contribution of the State should be clearly defined. If this proposition be accepted, the most practical solution is for the State to bear the cost of administration. This will include the keeping of accounts, the provision of Government Medical Officers to give a second medical opinion, and the provision of the machinery for the settlement of disputes. Ultimately when the financial liability can be more exactly determined, it might be possible for the state to contribute a portion of the remuneration of panel doctors representing the cost of giving certificates of sickness leaving the fund to bear the cost of treatment.

9. In conclusion, I am to point out that labour welfare is a provincial subject though subject to legislation in the Central Legislature. The Local Government is fully alive to the necessity of co-ordination in matters affecting the conditions of labour, but considers that co-ordination can and should be secured by joint deliberations between the provinces at which the main principles can be settled. Control by the Central legislature over a provincial subject should be exercised as rarely as possible. Moreover constitutional changes are now under consideration, and the Local Government would deprecate the initiation of legislation in the Central Legislature in connection with a provincial subject, when there is a possibility that the provincial legislatures may have unfettered control before that legislation has reached its final stage."

Maternity Benefits.

Maternity benefits are at present given at the following five factories. The number of beneficiaries at each place is shown :—

	1928.	1927.	1926.
(a) The Empress Mills (consisting of five mills), Nagpur ...	202	215	191
(b) Rai Bahadur Bansilal Abirchand Spinning and Weaving Mills, Hinganghat. .	53	61	42
(c) Messrs. Burn and Company, Pottery Works, Jubbupore...	15	10	10
(d) Savatram Ramprasad Spinning and Weaving Mills, Akola	18	...	...
(e) The Akola Cotton Mills, Limited, Akola	4	.	16
Total ...	292	286	259

All these schemes are similar, leave of absence on full wages for a period varying from one to two months being given to expectant mothers, who are required to obtain from the Doctor attached to the mill or factory an opinion regarding the probable date of confinement. Details are as follows :—

Mill (a).—Pays two months' wages to women employees as have put in eleven months' previous service. Half the amount is given previous to confinement, and the other half afterwards. The average amount paid every year, *vide* this head, is Rs. 4,800.

Mill (b).—Pays one month's wages unconditionally. Half is paid prior to confinement and half subsequently.

Factory (c).—Pays wages for six weeks at the time of confinement.

Mill (d).—Pays wages for six weeks to all expectant mothers.

Mill (e).—Grants leave for six weeks with full pay or for three months on half pay to those expectant mothers as have put in at least eight months' service in the mill.

There is no provision for maternity benefits in any other industry. In 1924 the Legislative Assembly declined to refer to the Select Committee a Maternity Benefit Bill brought forward by Mr. N. M. Joshi, the Labour representative. In the Provincial Legislature notice of a similar measure was given simultaneously in 1928 by three members of the Council, *viz.*, Mrs. Anasuyabai Kale, Mr. M. K. Golwalkar and Mr. R. W. Fulay, a member nominated on behalf of the urban factory labourers. The last named obtained the first place in the ballot, and the Bill was introduced on the 22nd January 1929, and was referred to a Select Committee in August of the same year. The Bill has not

yet reached its final form, but if it follows the Bombay Bill which was passed by the Legislature of that province in March 1929, it will provide for maternity benefits consisting of eight weeks' wages to women workers for a period of one month, both before and after confinement, provided they have been in the previous continuous employment of the same factory for at least eleven months. It will also penalise the employment of such women, or their acceptance of employment, in other factories during the period for which they draw maternity benefits. Government accepted broad principles of the Bill, but was unable to secure a postponement until the views of the Royal Commission on Labour were known. It is anticipated that little opposition will come from the proprietors of perennial factories to which alone the Bill will apply.

CHAPTER VI—WELFARE.

EXTENT OF WELFARE WORK BY EMPLOYERS.

Nowhere in the province except at the group of five cotton mills in Nagpur known as the Empress Mills is there any appreciable organised welfare work. The Empress Mills have a most comprehensive programme carried out with the co-operation of the local Young Men's Christian Association and the local Catholic Sisters. The Catholic Sisters devote their attention particularly to the welfare and education of women workers. A full description of the welfare work carried on by these mills is given in the report which they have already submitted to the Labour Commission and details are not therefore reproduced here. The main activities of the mills in this respect are:

(1) Granting of credit chits to workpeople for purchase of grain, etc., at the mills' co-operative stores.

(2) Free medical help to employees and their relatives in the mills' four dispensaries of which two are for men and two for women.

(3) Provision of crèches for the babies of women employees.

(4) A system of maternity allowance to women employees who have worked for at least eleven months in the mills.

(5) Provision of educational classes for small boys who come to the mills, to bring babies to their mothers and food for their parents.

(6) Educational classes for half day workers.

(7) A yearly contribution of Rs. 600 to the factory schools where the half day boys attend classes. These schools are under the management of the municipality.

(8) Contributions to other schools which are attended by the children of employees.

(9) A system of pensions, long service bonuses, monthly bonuses for regular attendance, sickness benefit fund, provident fund, the mills' co-operative credit society, and gratuities. A full description of these will be found in the mills' welfare work report issued last year.

Welfare work outside the premises of the mills is conducted by the Young Men's Christian Association and by the Catholic Sisters. Their activities extend to educational work, recreation and amusement, games, medical work and the boy scout movement. The Catholic Sisters carry on similar activities amongst the women workers living in the town. In all 238 women workers and 895 male adults, 545 boys and half-timers, 205 children, 99 women, 166 girls are receiving education and other benefits. This is the only industrial undertaking in the province with a comprehensive and up to date welfare-organisation. The total cost is Rs. 1,74,880 per year.

Eight other cotton mills and four minor industries also carry on welfare work on a small scale. The benefits consist mainly of educational facilities for the children of workers, crèches, cheap grain shops, and facilities for games. A tabular statement of these is attached—

Names of industrial concerns.	Facility provided.
The Akola Cotton Mills, Limited, Akola. Number of operatives 984.	(a) A crèche under a competent nurse, visited daily by a doctor. Average number of babies 30 per day. Free milk and sugar supplied. (b) Free grinding of corn. (c) Free use of soap water for washing. (d) Occasional cinema shows. (e) Free primary school for children of workers and half-timers.
The Tapti Mills, Limited, Burhanpur. Number of operatives 1,551.	(a) Gymnasium (akhada), sports club and football ground. (b) A crèche under two qualified nurses. Average number of babies 50 per day. (c) A factory school run by the municipality is attended by 138 half-timers and children of workers. Bonus for regular attendance, free books and stationery supplied to half-timers. (d) A cheap grain shop was opened, but has been closed for lack of support.
The Berar Manufacturing Company's Textile Mills, Badnera. Number of operatives 1,482.	(a) A factory school for the education of 170 half-timers. (b) A night school was started, but dissolved for lack of sufficient attendance.
Reckchand Mohata Cotton Mills, Hinganghat. Number of operatives 1,482.	(a) Contributions are made to the municipal school maintained at the mill, and half-timers are sent to it. (b) A cheap grain and cloth shop was in existence prior to 1927, but has since been closed.
The Savatram Cotton Mills, Limited, Akola. Number of operatives 750.	(a) A crèche under the supervision of competent nurse. Average number of babies 15 per day. (b) A sports club for football and other outdoor games has been started.

Names of industrial concern.	Facility provided.
The Gun Carriage Factory, Jubbulpore. Number of operatives 2,426.	<ul style="list-style-type: none"> (a) One Anglo-Vernacular Middle School with the aid of the Local Government for education of workers, children and half-timers. (b) Gratuity to workmen of long approved service or to their widows is paid out of a Fine Fund.
Cement Works and Potteries. Cement Works 3 and Potteries 3. Total number of operatives 3,070.	<ul style="list-style-type: none"> (a) Two cement works and one pottery work maintain primary schools for the children of employees and half-timers. (b) In one cement works, a club for recreation known as the Kymore Gymkhana is provided. (c) Two cement works and one pottery provide a ground and accessories for out-door sports.
Raja Gokuldas Cotton Mills, Jubbulnore. Number of operatives 651.	<ul style="list-style-type: none"> (a) A gymnasium (Akhada) is established within the mills. (b) Attendance of half-timers to a municipal factory school controlled by the mills is compulsory. (c) Small dining sheds have been erected inside the mills. (d) A Temperance society has been started amongst the mill hands.
The Pulgaon Cotton Mills, Limited, Pulgaon. Number of operatives 938.	<ul style="list-style-type: none"> (a) A factory school for half-timers and children of mill hands. (b) A Provident Fund to which contributions equal to that of the workers and interests are paid by the mill.
The Bansihal Aberchand Mills, Hinganghat. Number of operatives 1,536.	<ul style="list-style-type: none"> (a) A crèche under competent ayahs. Average number of babies 15 per day. (b) A factory school for half-timers only. Books are supplied free of charge. (c) Interest is paid on the Provident Fund deposits.

The mines make provision for the elementary education of the children of workers. The Kandri manganese mine has recently added a maternity and child welfare centre to its dispensary and one is proposed to be opened near Parasia for Messrs. Shaw Wallace and Company's coal mines.

By other Agencies.

There is very little welfare work done by agencies other than the employers except the work done by the Young Men's Christian Association of Nagpur and Catholic Sisters of the Nagpur Convent under Mother Superior Naomi in co-operation with the Empress Mills authorities. These two bodies conduct welfare work amongst the labourers of the Empress Mills, living in the town. The work of the Young Men's Christian

Association is supervised by a Board consisting of the representatives of the mills and the Young Men's Christian Association. The Mahar Association of Nagpur also carries out some educational work amongst workmen of the depressed classes. During the last three years infant welfare centres have been established under the auspices of the Provincial Red Cross Association and the municipalities in some of the larger industrial towns like Nagpur, Amraoti and Akola. Some of these are in *mohollas* containing a large working class population; and workers are taking advantage of such centres in an increasing degree.

Missionaries are responsible for some welfare work in the mining areas of the Chhindwara and Chanda districts particularly in respect of education and temperance. Educational facilities provided by local bodies are also accessible to the working classes, the Independent Local Board for the mining areas of Chhindwara having provided six primary schools for the coal mines.

Employment of welfare officers and workers.

Except at the Empress Mills no regular staff of welfare officers and workers has been appointed. At this mill the authorities have entrusted the administration of this work mainly to the Young Men's Christian Association. Medical officers, lady doctors, nurses, assistant and nursery school teachers are appointed by the mill authorities directly. The officer in charge of the co-operative cheap grain shop is also appointed by them.

At other institutions doctors, nurses and ayahs and the few other welfare workers that are required are appointed by the mill authorities. The child welfare centres established during the last three years by the Provincial Branch of the Red Cross Association direct their efforts particularly towards improving the condition of working class mothers. There is no other official or non-official organization of welfare workers, and welfare departments such as are found in European countries.

Results achieved.

Where the work is systematically and conscientiously carried out the results achieved are very satisfactory as in the case of the Empress Mills. Welfare work has in this undertaking undoubtedly made the operatives more contented, more efficient, and more stable. Sir Sorabji Mehta, the General Manager of the Mills, reports: "All these forces have tended to create a better outlook on life. This may be gauged from the fact that the

people are giving up some of their old evil customs. There is a distinct movement towards temperance and there is also a desire for the education of their children. The results of welfare work can never be accurately measured, but such work by its very nature provides facilities for the development of personality, gives opportunities for self-expression and organisation and meets certain needs of the people which perhaps would not be met if they were left to themselves." The benefits provided at the Empress Mills amount to a real increase in wages, and are of more advantage to labour than an increase in cash earnings which might be misspent. Crèches are very popular and are much appreciated by women workers of all classes. The provision of them militates against the pernicious custom of mothers drugging their children with small doses of opium to keep them quiet. At other industrial concerns, however, there is scope for improving and expanding welfare arrangements. With this object Mr. Fulay, M.L.C., has introduced a Welfare Bill in the local Legislative Council applicable to all factories employing more than 100 workers. The Bill is pending the consideration of the Council.

Provision of educational facilities by employers.

Educational facilities have been provided by employers in the following industries only:—

(a) *Textile mills—*

- (i) One mill provides night schools for adult workers and the average attendance at these is 400.
- (ii) Seven mills have schools for children (half-timers) employed therein. Total average attendance is 700.
- (iii) Three mills have schools for workers' children. Average total attendance is 575.

In all about 1,680 persons receive instruction in the three Rs.

(b) *Coal mines—*

- (i) An evening school, provided for adults in one mine in the Chhindwara district, is progressing satisfactorily.
- (ii) Three mines started schools for children, but these have now been taken over by the Independent Mining Local Board (in the Chhindwara district) which provides six schools in the mining areas. The mine owners contribute towards the cost by means of a school cess.

(iii) One school for children is maintained by a mine at Chanda.

(c) *Manganese ore mines—*

(i) There are no educational facilities for adult workers, except short lectures given at some of the mines for "First Aid" training and instructions on safety and other regulations to the mine mates and Indian supervisors.

(ii) Schools are provided for children in eight mines, the average attendance in three of which is 80.

(d) *Cement works—*

(i) Schools are provided for the children of workers in two factories, the average total attendance being 66 or 70 nearly.

(e) *Pottery works—*

One pottery has a school for half-timers and the children of the workers, the average attendance being 88.

(f) *Gun Carriage Factory—*

There is an Anglo-Vernacular Middle School for the children of the workers, including classes for 15 half-timers and 51 boy artisans. The average attendance in the school is 270.

Co-operation.

The co-operative movement has little hold on the workers of the province; but the following instances may be cited:—

The Empress Mills, Nagpur.

(a) A co-operative store for the supply of cheap grain and cloth to the mill-hands, registered under the name of Empress Mills' Co-operative Stores, Limited, is in existence where credit chits obtained by the employees from the mills are exchanged for grain or other necessaries of life. The amount is deducted from the pay of the purchasers. Cash sales are also encouraged, the net profits being over Rs. 15,000 in the year 1926-27. Monthly sales were Rs. 27,750 in 1926-27 against Rs. 16,319 in 1924-25, and cash sales increased from Rs. 300 per month to Rs. 2,500 per month. At the beginning of 1927 a branch store was opened at Indora, and other branches are expected to be opened in different *bastis* of the town.

(b) The Mill authorities maintain a voluntary provident fund open to their employees. The number of members on the roll on the 30th June 1927 was 3,850, and contributions at the rate of 1 anna per rupee of wages are levied. The contributions of the members in two years ending on the 30th June 1927 amounted to Rs. 1,80,700.

(c) The Empress Mills' co-operative credit society was started in 1921, to provide credit at reasonable rates, and to free the employees from the grip of the money-lender. The condition of the society is apparent from the following figures :—

Year ending 30th June.	Number of members on the society's register.	Loan given to members in the year in rupees.	Society's profits.	Dividend per share of Rs. 10.
			Rs. . a. p.	Rs. a. p.
1926 ...	2,907	2,18,888	9,507 8 3	1 3 3
1927 ...	3,053	2,82,997	12,612 12 1	1 0 0

The Gun Carriage Factory, Jubbulpore.

(a) A co-operative credit society is in existence in the factory for advancing loans to members at a low rate of interest.

(b) A co-operative supply store was in existence in the workmen's lines, where any workman could obtain food-stuffs at reasonable rates and on credit up to a certain limit varying according to his pay. But, unfortunately the concern was mismanaged and has been closed down this year.

The Akola Cotton Mills, Limited, Akola.

(a) A co-operative grain shop with 200 members has been recently started for providing grain at cost price to the mill hands.

The Pulgaon Cotton Mills, Pulgaon, and Rai Bahadur Bansilal Aberchand Mill, Hinganghat, have organized provident funds for their workers.

CHAPTER VII—EDUCATION.

FACILITIES FOR GENERAL EDUCATION IN INDUSTRIAL AREAS.

Of children not in employment.

The children of workers in industrial areas are admitted to the existing educational institutions under the same conditions as apply to the rest of the population. Local bodies maintain an adequate number of primary schools at all the urban industrial centres in the province. The children in industrial areas are not under any special disadvantage in respect of educational facilities.

Of children employed in factories.

All the educational facilities provided in the factories have been mentioned in the previous chapter. As a result of the recommendation made by the Factory Labour Commission of 1908, schools were opened by Government in the vicinity of factories for the benefit of the juvenile workers during the shift hours. These schools in accordance with the general policy that vernacular education for boys should be controlled by local bodies were transferred to the local authorities concerned in 1917, but Government continues to meet the whole of their cost.

Of adults.

Beyond such facilities as are provided by the industrial undertakings which have already been described in the previous chapter, no special educational facilities for adults exist. Local bodies and Government maintain institutions for secondary and higher education in the industrial areas of the province.

Facilities for industrial and vocational training.

In this province there are three Government industrial schools and six aided industrial schools to which Government gives substantial grants. Two more industrial schools are to be opened next year. These schools give training in carpentry and smithy. The course in most of the schools covers a period of two years. A vocational Training Committee was appointed in 1923 and in accordance with its recommendations a certain amount of general education has been included in the course, which has been extended to three years, in some of the institutions, while proposals for extending the course to three years in others are now under consideration. A considerable percentage of

the passed students of these schools find employment in the industrial undertakings of the province. During the four years from 1924 to 1927 nearly 400 students passed out of these schools, nearly 30 per cent of whom found employment in existing concerns and 40 per cent started business of their own. There is also a Government Engineering School at Nagpur the students of which have no difficulty in obtaining employment after the completion of the course. This institution provides courses of training, covering a period of four years, in civil engineering, mechanical engineering and automobile engineering, while the addition of a course in electrical engineering is under contemplation. The school pays special attention to practical work. For other scientific, industrial and technical training for which the local demand does not justify the expense of establishing separate institutions in the province there exists a liberal provision of scholarships for enabling the young men of the province to obtain training in institutions in India or in Europe and America. Every year a number of scholars are sent under this scheme to the Victoria Technical Institute, Bombay, the School of Technology, Cawnpore, the School of Mines, Dhanbad, and the Institute of Science, Bangalore. One technical scholarship is also awarded every year for advanced study in Europe or America.

Effect of education on standard of living and industrial efficiency of workers.

There is no doubt that education effects a considerable improvement. The experience of the Empress Mills at Nagpur testifies to this fact; but no information based on a systematic study of the question is available.

CHAPTER VIII—SAFETY.

EXISTING REGULATIONS IN FACTORIES.

The existing regulations under the Indian Factories Act (section 18) prescribes a number of guards and fences for dangerous machinery used in a few major industries and also empower the Inspector to require such additions as he considers necessary. But there has been nothing in the form of an agreement between employers, operatives and inspectors concerning fencing of machinery, prevention of accidents in the textile or any other industry as has taken place in Great Britain and other industrially advanced countries. As a result, the prescribed guards do not cover such a wide range as is customary in Europe. Even the lay-out of new mills is not subject to any regulation for securing the above object. A comparison of the existing provincial regulations with the Notes of Agreement in the cotton spinning and weaving industry of Great Britain will bear this out.

Incidence of accidents in factories.

The incidence of accidents in the different classes of factories is shown in the analytical statement (Appendix V). The daily average number of persons employed in individual industries and the number of accidents throughout the year are taken separately and the latter is expressed as a percentage of the former. The percentage incidence of some of the important industries is illustrated year by year for the last five years by means of diagrams in Appendix VI.

The incidence of accidents in cotton spinning and weaving mills is steady with a slight tendency to decrease in recent years, showing that arrangements for the prevention of accidents are on the whole satisfactory. In the cotton ginning and pressing factories the incidence of reported accidents is very low. Considering the number of unskilled labourers employed and the fact that work in seasonal factories is carried on in rural areas, the arrangements for the prevention of accidents in this class of factory also appear to be satisfactory.

In cement works and potteries, the incidence of accidents fluctuates in the neighbourhood of 1 per cent, there being a

gradual decrease in the beginning, then a sudden rise in 1927; followed by a gradual decline. Though the number of persons employed in 1828 is greater than in 1927, the latter year was one of renewed trade activity, involving an increase in the labour force, which by the following year was in a better position to avoid accidents. The nature of the work done, and the heavy machinery used in this industry conduce to a higher percentage of serious and fatal accidents than elsewhere.

In oil mills there is a sharp rise in incidence of accidents to 1.36 per cent in 1925 on account of increased trade activity and the opening of new factories, but the industry having settled down there has since been an appreciable decline.

Employment in general engineering workshops is very limited in this province and the curve does not show any peculiarity except the effect of stringent rules and precautions on a more or less settled minor industry. The rise in the incidence of accidents in automobile workshops is regrettable and is due to increased activity. The industry has not yet settled down, and new workshops are being opened.

An exceptionally high level of incidence of accidents is noticed in railway workshops and ordnance factories. Innumerable minor accidents occur in these two factories which are reported very punctitiously. Some of them are so slight that it is doubtful whether any notice would be taken of them in other industries. The sharp rise in the curves in recent years is probably due to the expansion of the factories concerned together with a demand for an increased output.

Causes.

It is an accepted dictum in the field of industrial accidents that the rise and fall in accidents depend on the prosperity and depression respectively in the industry, and in fact constitutes a fair index of trade fluctuations. This applies more particularly to settled industries. In factories where increased output is obtained by the new erection, extension or modification of plant, and there is an influx of fresh labour in consequence, a sudden rise in industrial accidents occurs. But if the prosperity continues and suitable preventive means are provided in the light of experience, the incidence of accidents declines, even though new or partially trained labour may be recruited under continued

prosperity. The point in question is well illustrated by the curves of incidence of accidents in the following industries :—

Textile industry	...	(i) Increase of 773 hands in 1926, with consequent rise in accidents (0·1 per cent).
		(ii) Slight decline in number of accidents in 1927, with stationary conditions.
		(iii) Decline in accident curve in 1928 with an increase of 655 hands in the year.
Cement industry	...	(i) Increase of 12 per cent in employees in 1927. Consequent rise in accidents (0·37 per cent).
		(ii) Another rise of 25 per cent in the number of employees in 1928, with perceptible fall in incidence of accidents.
Motor workshops	...	(i) Rise of 15 per cent in the number of employees in 1927, with consequent rise in accidents.
		(ii) Another rise of 15 per cent in the number of employees in 1928, with appreciable decline in accidents (0·2 per cent).

Some interesting facts are revealed by the curves shown in Appendix VII. The fatal accidents are all due to unforeseen events and the erratic character of their variations shows that chance plays the greatest part in such accidents. The curve of serious accidents on the other hand is the real index of progress in precautionary measures and enforcement of safety regulations, the effectiveness of which keeps such accidents at a low level. Causes of minor accidents are so very diverse and the scope for such accidents is so very wide, that no general deductions are possible.

The above general deduction, however, does not apply without qualification to some of the minor works. The incidence of accidents in the Gun Carriage Factory and the railway workshops is on a different footing, as a rise in accidents is noticed in them in spite of the number of persons employed being on the decline or stationary. The following is a table of the average number of persons employed in these two classes of factories :—

Year.	Gun Carriage Factory.	Increase (+) or decrease (-)	Railway workshops.	Increase (+) or decrease (-)
1924	1,937	...	995	...
1925	1,953	+ 16	1,016	+ 21
1926	2,200	+ 247	1,256	+ 240
1927	2,400	+ 200	1,019	- 237
1928	2,426	+ 26	1,040	+ 21

Occasionally a high percentage of incidence of accidents is noticed in electric power houses, ice factories and saw mills, but these variations are due to the limited number of persons employed.

Accidents Prevention (including "Safety First" propaganda).

The beneficial results of the enforcement of safety measures by the Local Government are apparent by the decline in the incidence of accidents whenever the conditions in the industry are steady. The efficacy of safety measures adopted is illustrated by the curve of incidence of accidents in oil mills. The curve rose to a peak in 1925, but has steadily gone down since then in spite of an increase in the number of mills and employees as indicated below :—

Year.	Number of factories.	Increase (+)	Number of persons daily employed.	Increase (+)
1923	9	...	260	...
1924	13	+4	356	+ 96
1925	14	+1	368	+ 12
1926	17	+3	502	+134
1927	18	+1	654	+152
1928	25	+7	715	+ 61

"Safety First" propoganda has been carried on by means of posters at the Health exhibition held by the Nagpur Municipality in 1928, in the section of Industrial Hygiene, organized by one of the Inspectors of Factories. "Safety first" posters relating to cotton textile mills are distributed by the organisation of Mill-owners' Association Mutual Insurance for Workmen's Compensation, to those mills that subscribe to the insurance fund, and are being exhibited at about six mills in the province, this year.

In the Bengal-Nagpur Railway Workshops, too, some "Safety first" posters similar to exhibited at Nagpur have been prepared and exhibited at different places.

Accidents in non-regulated establishments.

There is no information on the subject, but a few accidents in such non-regulated factories as flour mills, rice mills and power houses have come to the knowledge of the Inspectors.

First aid and medical relief.

All factories employing more than 500 persons per day are required under the law to maintain first aid appliances. But many of the cotton textile mills, important mines, cement factories, potteries and the Gun Carriage Factory provide medical relief by maintaining well-equipped dispensaries, instead of mere first aid appliances. Altogether eight factories have arrangements for rendering first aid, and 15 factories provide medical relief in their own dispensaries. But almost all the other factories of any size have made arrangements for accident cases to be treated in the local public hospitals, towards the support of which they in return make a regular contribution.

STRINGENCY OF INSPECTION AND ENFORCEMENT OF REGULATIONS.*In industry generally.*

On an average the perennial factories are inspected thrice a year. The result of action taken for the enforcement of regulations will be apparent from the following statement of prosecutions:—

Prosecutions.	1924.	1925.	1926.	1927.	1928.
(1) For not fencing machinery	10	12	24	24	24
(2) For lack of protective clothings.	10	5	11	3	19
Total ...	20	17	35	27	73
(3) Prosecutions on all counts	68	63	94	111	176

In Seasonal Industries.

All seasonal factories are inspected once every season and 50 per cent of them twice a season. Most of the prosecutions mentioned above pertain to seasonal factories and regulations are enforced with sufficient stringency in these. These factories, however, show a tendency to neglect safety precautions.

Effect upon safety of hours, health, light and working conditions generally.

No statistics are available to illustrate the extent to which these factors are separately responsible for accidents, but it is obvious that long hours, poor health, bad lighting and adverse working conditions must result in an increased number of accidents. But from a perusal of the evidence in a number of accident cases it is apparent that the usual cause is ignorance or breach of rule on the part of the injured person. From this it may be inferred that the most frequent cause of accidents is lack of discipline in industrial concerns, while a contributory cause is the wearing of loose garments which though suited to a warm climate are a source of danger in the neighbourhood of machinery.

CHAPTER IX—WORKMEN'S COMPENSATION.

The Act came into force on the 18th July 1924. All District Judges have been appointed Commissioners under the Act for the areas within their jurisdiction. The figures of expenditure on compensation paid up to the end of the year 1928 are as follows:—

Year.	Awarded through Commissioners.		Paid by employers direct.				Grand total.
	Fatality.	Temporary dis- ablement.	Permanent disablement.	Fatality.	Tempor- ary dis- ablement.	Permanent disablement.	
	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.
1924 ...	No application.			5,753 0 0	928 0 0	383 0 0	7,064 0 0
1925 ...	15,889 0 0	392 0 0	1,234 0 0	8,332 0 0	2,667 0 0	2,368 0 0	30,882 0 0
1926 ...	16,656 0 0	7 0 0	3,302 0 0	6,224 0 0	2,139 0 0	11,660 0 0	39,988 0 0
1927 ...	21,915 5 0	8 12 0	2,544 10 0	8,027 0 0	2,250 6 6	5,656 2 3	40,402 3 9
1928 ...	Total for t h r e e c l a s s e s .	19,800 2 0	...	6,927 12	0 2,659 6 11	5,090 1 9	34,477 6 8

Comparison with extent of possible claims.

No reliable information is ready, but the Commissioners report that there is no method available of ascertaining the total number of accidents taking place and the extent of possible claims. In the Wardha district one case in which the employer had not paid any compensation was reported by the Factory Inspector to the Commissioner, and though the employer was asked by the latter to take action, none has so far been taken nor has the workman instituted any proceedings. The Commissioners seem to be of opinion that provision for enabling them to compel the employer to take action is necessary.

Effects on industry.

No appreciably adverse effects are reported. Even before the Act came into force the larger employers were in the habit of paying a certain amount of compensation for fatal accidents and permanent disablement. The incidence of increased cost has not been severely felt.

The other points in connection with this subject have been recently investigated by the Director of Industries in connection with the amendment of the Act proposed by the Government of India and the conclusions he has arrived at are set forth below :—

“The opinions of leading organisation of employers and employees were invited on the matter.” No reply has been received from any organization of employees. The matter was also placed before the Board of Industries who left it to a sub-committee.

After discussing the matter with leading employers and a few individuals associated with the Trade Union movement at Nagpur, I have to offer the following views on the 16 main questions raised in the letter of the Government of India :—

(1) *The scope of the Act.*—I do not think it is necessary to extend the Act to any fresh classes of employers in our province for the present. I, however, think that it is unfair to lay down the restriction on the height and purposes, of buildings, and on the length of the bridge, as is done in the present Schedule II (vi) (a), (b) and (c). I have known of fatal accidents occurring to workmen employed in the repair of Government buildings without the dependants given any relief. There is no reason why such workers should be deprived of the benefits of the Act.

(2) *Compulsory insurance for compensation.*—All the employers I have consulted consider this impracticable at the present stage of the industrial development of the province. I think this may be dropped for the present, but there is room for a provision for making claims to compensation a first charge on the estate of an insolvent employer.

(3) *Payment in lump sum.*—Considering the improvident ways of the Indian labourers it would be ideal to provide for recurring payments specially when the beneficiaries are women and minor children. It will, however, be too hard to impose the obligation for recurring payment on the employer. If the responsibility for making recurring payment is fixed on the Commissioner, such a system would be desirable. Otherwise, the system of payment in lump sum should continue.

(4) *Scale of compensation.*—The present opinion in the province is decidedly in favour of leaving the scale of compensation unaltered. I do not think any increase is called for.

(5) *Waiting period.*—I think the present waiting period of 10 days is not at all unfair; but when the disability extends beyond 10 days, compensation should be paid for the full period of absence from work.

(6) *Addition to the list of relatives.*—It is difficult to give an exhaustive list of relatives. It would be best to add the words "or any other relative proved to have been actually dependent on the worker at the time of his death", to section 2 (1) (d) of the present Act.

(7) *Proof of dependence.*—Proof of dependence should be required from all relatives other than those specified in the present definition of the word "dependent" in section 2 (1) (d) of the Act.

(8) *Compensation and number of dependents.*—The opinion received is against the suggestion of compensation being made to vary with the number of dependents and with the extent of dependence. I, however, think that when the number of minor dependents is large it is necessary to raise the compensation and recommend, as has been done by several bodies in the Bombay Presidency, that in regard to permanent total disability the amount of compensation should be 50 months' wages instead of 42 and the maximum should be Rs. 4,500 instead of Rs. 3,500 whichever is lower, in cases where the number of minor dependents exceed two. Similarly, in the case of death the amount of compensation should be 32 months' wages instead of 30 and the maximum of Rs. 3,000 instead of Rs. 2,500, whichever is lower, in cases where the minor dependents exceed two.

(9) *Section 12.*—It will cause hardship to the workers if the right of recovering compensation is made enforceable only against contractors and sub-contractors, as suggested in the opinions attached. The business of such contractors and sub-contractors is generally unorganized and they often do not maintain any record of their employees. They will find it easy to evade their obligations to ignorant workmen. I am definitely of opinion that in the first place the responsibility for paying compensation should be fixed on the principal and a provision should be added for indemnifying the principal against the contractors or sub-contractors.

(10) *Penalty for not complying with the provisions of section 16.*—There should be a provision for a small fine for delay or failure to submit returns.

(11) *Return of accidents when compensation not paid.*—The opinions received are against this suggestion on the ground it would cause unnecessary addition to work. I think it is necessary to make some provision which will bring to the notice of the Commissioner every case of accident so that the Commissioner

might see that nobody entitled to compensation lost the benefit thereof. The amount of extra work entailed on the employers will be very trifling.

(12) *Claiming compensation through the employers.*—I have heard of cases in which the employers have sought to make their own terms with the injured workmen or with the dependents of the deceased workmen. I think it is desirable to make a provision which will relieve the dependents from the necessity of approaching the employers.

(13) *Safeguarding dependents against ignorance of their rights.*—Opinion is unanimous that the intimation of fatal accidents to the Commissioner should be made obligatory on the employers and the Commissioner should be authorized to advise the dependents to take necessary action.

(14) *Register of relatives.*—All the employers are against the suggestion as it would be impracticable and would entail unnecessary work on account of the migratory character of Indian labour. I am, however, of opinion that if such a register is maintained and periodically checked and kept up to date, it will be conclusive evidence of the number of relatives and dependents of a worker and would facilitate the decision of disputes. Such a register, if kept up to date, will be of greater benefit to the employers than to the employed.

(15) *Power of calling for further deposit.*—Such a provision is necessary.

(16) *Suspension of distribution pending appeal.*—All agree that there is no objection to such a provision.

In the end, I would suggest that it would be better to postpone further legislation in this matter till the Labour Commission completes its inquiry."

It may be added that the views of the Director of Industries were endorsed by the Local Government with the exception, that it was not thought practicable to compel employers to maintain a register of employees' relatives.

CHAPTER X—HOURS.

FACTORIES.

Hours worked per week and per day.

Under the Indian Factories Act, working hours are limited to 60 per week in accordance with the International Labour Convention. The daily hours of work are limited to the maximum of 11 hours with a recess of at least one hour after a period of work not exceeding six hours at a time. The above limits are not exceeded except under special exemptions granted by the Local Government.

But in industries working on a shift system, the total actual hours per week fall a little short of 60. For example, in textile mills and all ordinary factories (both seasonal and perennial), there are six working days in a week with ten hours of work per day. But for those seasonal and perennial (e.g., oil mills) factories which are worked by shifts, the weekly total for each man varies from 54 to 60 hours (i.e., 9 hours to 10 hours a day). Exemptions from sections 21, 22 and 26 of the Indian Factories Act are generally extended to cement factories, pottery works, electricity supply works, water works, furnaces, kilns, and such factories as have to maintain a continuous technical process or service. Workmen thus employed work eight hours continuously every day or 56 hours a week. Other workers in these factories generally work 9½ hours a day (with the usual recess) for six days in the week or 57 hours a week.

Persons employed in railway workshops or other engineering workshops have duties fixed for eight to nine hours a day or 48 to 54 hours a week.

Normal, i.e., as determined by custom or agreement.

Total number of factories.	Number of factories in which the normal weekly hours are.								
	Men.			Women.			Children.		
	Under 48.	Between 48 and 54.	Above 54.	Under 48.	Between 48 and 54.	Above 54.	Under 30.	Above 30.	
677	48	27	602	37	31	463	15	10	
704	47	36	621	38	34	482	14	10	
756	51	52	653	42	46	530	15	12	

It is clear from the above that factories with hours of work exceeding 54 hours per week predominate.

Actual, i.e., including overtime.

The amount of overtime is negligible even where it is allowed. Some mills and perennial factories employ a few of the exempted workmen on cleaning and machinery tests for about 5 hours on the weekly holiday, which brings their total to 65 hours a week. Otherwise the average actual hours of work are from 54 to 60 per week.

Spreadover.

Spreadover applies to a very limited number of workers in this province, and no estimate can be made with any degree of accuracy. The operatives mainly affected by the question of spreadover are—

- (1) Jobbers and members of the supervising staff in the textile mills.
- (2) Firemen, assistant firemen, engine drivers, mechanics and mochis in all factories.
- (3) Furnace attendants, kiln attendants, motor and switch board operators, persons employed in the raw material preparation department, crushing department, cement mill and power house departments of the cement works.
- (4) Firemen and persons in the burning department of pottery works.

No reliable figures are available, but the Empress Mills report that spreadover does not exceed one hour per day.

Days worked per week.

The number of days worked per week is generally six. Only 40 factories, or about 5 per cent of the total number are exempted from section 22 of the Indian Factories Act, prescribing one holiday in a week. These factories work throughout the week for seven days.

Effect of the 60 hours restriction on workers.

The reduction of hours has put a stop to conditions which were not easily distinguishable from 'Sweating'. Prior to the restriction of hours imposed by the Act of 1911, textile mills used to work, from sunrise to sunset with the same gang of workers, that is, for nearly 12 hours in winter and about 14 hours' work in summer. The seasonal cotton factories used to work from 5 a.m. in the morning to 9 p.m. in the evening, generally with the same

batch of workers without cessation, and sometimes they worked even longer when the state of the cotton market placed a premium on early delivery.

Wages on the other hand were not affected by the reduction in working hours. On the contrary they have increased slightly with the rise in the standard of living. Piece rates have also been increased so that the total earnings of the piece-workers should not be diminished by the decreased outturn. Workers have more leisure and undergo less fatigue. Leading employers, however, maintain that efficiency has not increased in the same proportion as working hours have been restricted and that the workers as a body have not learnt to make better use of their increased leisure. The general health of workers too, must have improved, though there is no statistical evidence on which to base this conclusion.

On Industry.

The immediate effect on industry has been an increase in the capital invested and also in working costs, to maintain the same level of production. The burden, however, does not appear to have been excessive, for there has been considerable expansion in the cotton industry even during the last five years two cotton mills and 97 seasonal factories having been newly constructed during this period. Perennial and seasonal factories of all kinds have also increased by 50 and 169, respectively. The level of production has not fallen but has risen in many cases, particularly during the post-war boom. In cotton weaving and spinning mills, there was an increase of 41 per cent in the number of employees within the decade 1911—21; and from 1921 to 1928 there has been a still further increase of 20 per cent. Old plant and inefficient machinery had to be scrapped or renewed and new machinery of a more modern type had also to be installed in order to maintain the output.

Effect of daily limit.

As already stated, the daily limit has put a stop to the inordinately long hours of work which were previously in force, an abuse which was most common in seasonal factories, and has led to the introduction of the shift system with an adequate number of relievers and proper periods of rest for all. The number of industrial workers has as a result greatly increased. Employers, however, complain that it is impossible to comply with 'rush' orders during the busy season for even though they are prepared to employ additional labour for that purpose, it is not always available. Employees, too, often deplore their inability to add to their earnings by working overtime on such occasions.

Possibility of reduction in maxima.

There has been no genuine demand for a reduction of hours and the employers are opposed to any further reduction particularly during the present trade depression. Sir Sorabji Mehta of the Empress Mills, however, would welcome a reduction in hours, provided that it is of universal application. He considers that present hours are too long for the physique of the Indian worker who in consequence absents himself without permission. At present workers have insufficient interests in life to enable them to utilise increased leisure to the best advantage, and it is therefore better to concentrate on the improvement of their education rather than on a reduction of working hours.

Interval.

Section 21 of the Indian Factories Act provides for rest intervals of one hour after a working period not exceeding six hours.

EXISTING PRACTICE.*In relation to fatigue and workers' meal times.*

The existing practice differs in different classes of factories—

- (a) In factories working without the shift system for the first eleven hours an interval of one hour is allowed after five hours of work, generally about 12 noon or for the night shift midnight.
- (b) In factories which work on the shift system, shifts are arranged to suit the convenience of the workers' meal times. Two typical time tables are shown below :—

	1st shift.	2nd shift.	3rd shift.
1st period { from ... to ...	5-30 a.m. 11-00 a.m.	8-00 a.m. 12-15 p.m.	5-30 a.m. 8-00 a.m.
2nd period { from ... to ...	12-15 p.m. 4-30 p.m.	1-30 p.m. 7-00 p.m.	11-00 a.m. 1-30 p.m.
3rd period { from ... to ...	...	...	4-30 p.m. 7-00 p.m.
Recess ...	1½ hours	1½ hours	3 hours each.
Total hours of work	9½ hours	9½ hours	7½ hours.

The above time table is only suitable where the number of shifts does not exceed three; for a greater number the following is substituted :—

Shifts.		No. 1.	No. 2.	No. 3.	No. 4.	No. 5.
1st period	... { from	5-30 a.m.	5-30 a.m.	5-30 a.m.	5-30 a.m.	7-30 a.m.
	... { to	8-00 a.m.	9-00 a.m.	9-00 a.m.	7-30 a.m.	11- 0 a.m.
Recess		1 hour	2 hours	2 hours	1½ hours	2 hours.
2nd period	... { from	9-00 a.m.	11-00 a.m.	11-00 a.m.	9-00 a.m.	1-30 p.m.
	... { to	11-30 a.m.	2-30 p.m.	3-30 p.m.	1-30 p.m.	6-30 p.m.
Recess		2½ hours	1½ hours	1½ hours	2 hours	...
3rd period	... { from	2-00 p.m.	4-00 p.m.	5-00 p.m.	3-30 p.m.	...
	... { to	6-30 p.m.	6-30 p.m.	6-30 p.m.	6-30 p.m.	...
Total hours of work		9½ hours	9½ hours	9½ hours	9½ hours	9 hours.

Suitability of the law.

Labourers in this province usually take 3 meals at 8 or 9 a.m., 1 or 2 p.m., with a third, the principal meal, in the evening after return from work; but the times may be altered to suit their hours of work. So long as these do not exceed ten the existing system in non-shift factories allows sufficient time both for meals and for periods of rest. But in factories which work by shifts the rest interval coincides with the time of a meal and workers have often to work continuously for an unduly long period of 6 hours. It is, however, difficult to suggest a more convenient time-table for a ten-hour day.

DAY OF REST.

Existing practice.

Sunday or the local bazar day is observed as a weekly holiday. Sometimes, however, Muhammadan proprietors substitute Friday for Sunday.

Suitability of the law.

The law is suitable and well adapted to local conditions for the days on which local festivals fall can be observed as holidays in place of the usual day without any inconvenience either to employers or to employees.

The exempting provisions and the use made of them.

The exemption provisions are enumerated in section 30 of the Indian Factories Act. The exemptions which have been granted are tabulated below:—

Factories.	Exemption provision.	Exemption from.
3 Cement works ...	Under section 30 (1) (c) due to necessity of continuous production for technical reasons.	Section 21 (rest period) and section 22 (weekly holiday).
5 Electricity supply stations.	Do. ...	Sections 21 and 22. Employed on 8 hours shift a day.
1 Water pumping station	Do. ...	Sections 21 and 22. Employed on 8 hours shift a day.
24 Oil mills ...	Do. ...	Sections 21 and 22.
4 Distilleries ...	Do. ...	Section 22.
1 Gas works ...	Do. ...	Sections 21 and 22. To be employed on 8 hours a day.
2 Ice factories ...	Under section 30 (1) (d) for supplying articles of prime necessity which must be made every day.	Section 22. A holiday to be given to each worker once a fortnight.

Exemption from observing the rest period (section 21) and the weekly holiday (section 22) is allowed roughly to 5 per cent of factories.

Exemption from section 27 (*i.e.*, weekly limit) and section 28 (*i.e.*, daily limit) are given only to special classes of workers in different factories. Exemption under these sections has been allowed in the case of a few classes of workers in cotton mills, ginning and pressing factories, pottery works and glass works, with limits on the maximum overtime allowed; details are to be found in the Central Provinces Factory Manual.

Under section 30, sub-section (3), the Local Government has exempted work on "Urgent repairs" from the restrictions

imposed by sections 21, 22, 27 and 28, provided that previous intimation of the same is sent to the Inspector and adequate payment is made for all overtime work in excess of 60 hours.

Advantage is usually taken of all these exemptions, and the factory owners and managers are opposed to any reduction in their number. At one time improper advantage was taken of exemptions for work on "Urgent repairs" and it occasionally happens that the conditions subject to which exemptions are granted are not properly observed.

Mines.

The limit prescribed by the Indian Mines Act is 60 hours a week for surface work and 54 for underground; but in actual practice these limits are usually not reached, and are never exceeded. At some mines the surface worker does not work for more than 6 hours a day, though at others he attains the maximum. Underground miners, who are piece-workers, work for 8 to 9 hours a day and 48 to 54 per week. No overtime is paid. No interval is prescribed, but no ill effects result from eight hours shifts, as in practice the miners break off work from time to time for rest or meals.

A weekly holiday either on Sunday or the local bazar day is observed.

There is general agreement that the provisions of the law regarding hours of work are adequate, but employers are opposed to any further restriction on the working hours. The restrictions imposed by the Mines Act of 1923 did not in fact make any difference, as the hours of work at that time did not exceed the maxima allowed by law.

The exemptions allowed by sections 24 and 25 of the Indian Mines Act are adequate, though not much use is made of the latter section.

Other Establishments.

The most important of the industrial establishments, to which the Indian Factories Act does not apply, are shellac factories, *bidi* factories, *dal*, i.e., pulse grinding factories, myrabolam (harra breaking) factories, hand or treadle printing presses, brick and tile works, tanneries, forage presses and one glass factory. The hours of work not being subject to any regulation in these establishments, no accurate information is available; but work in excess of ten hours a day is certainly common.

Most of the establishments are seasonal in character, and payment being made in many cases under "ship" system (*i.e.*, lump payment at piece-rates to a group of workers consisting either of members of the same family or of friends) no fixed hours of work are observed.

Glass Factory (Gondia).

The normal hours of work are 8½ hours a day or 56½ hours a week.

The actual hours are 7-30 a.m. to 12 noon and 1-30 p.m. to 5-30 p.m. But on the bazar day work is limited to the first period only, *i.e.*, from 7-30 a.m. to 12 noon. Furnaces are worked by three shifts of eight hours each, each shift being composed of two persons. Shorter hours are observed in the glass works, as efficiency falls with longer hours. Children even below 12 years of age, however, work for the same hours as adults. The management treats its labour sympathetically.

Bidi factories (Gondia).

The normal hours of work at these establishments are about ten hours a day and nearly 70 hours a week.

Work commences between 7 and 9 in the morning after the morning meal, and finishes by 6 in the evening with intervals for meals not exceeding half an hour per day. Payment is made on the workers output of *bidis* with the result that no weekly holiday is taken. On bazar days, however, work ceases about 2 hours earlier than usual. Numerous children are employed in this industry, and they work for the same hours as adults.

Shellac factories (Gondia).

The normal hours of work are nine hours a day and 58 hours a week for labourers, and 7½ hours a day and 50 hours a week for the class known as Bhattawalas who melt the lac.

Working hours are from 6 a.m. to 2 p.m. for Bhattawalas with an interval of about half an hour for the morning meal, and 8 a.m. to 12 noon and 1 p.m. to 6 p.m. for the other labourers. A half holiday is given on bazar days. Few children are employed, but those that are, work nearly as long as adults.

Dal (pulses) factories, Myrabolam factories, etc.

The normal working hours in dal grinding factories, harra factories, brick and tile works, tanneries, etc., are from sunrise to sunset, with a midday interval for nearly two hours for meals. Half holidays are granted on bazar days or on days of local festivals.

The actual hours of work, however, vary considerably depending upon the season, the pressure of work, and various other factors. The dal factories situated at Piparia and Gadarwara are during the dry months open late at night, sometimes until midnight, and female employees after an interval of about two hours from 6 p.m. for the evening meal again return to the factory and resume work. Extra payment at enhanced rates, however, is given for this night work. Children work during the day time for the same hours as adults.

Hand or Treadle Printing Presses.

The hours of work vary with the amount and urgency of the work in hand. The usual maximum is 10 hours except for compositors who are on an 8-hour basis. These presses do not work at night except when urgent work comes in.

In view of the long hours of work, the employment of children, many of whom are below 12 years of age, and the employment of women at night, a strong case exists for the regulation of hours of work in the establishments mentioned in this section of the report.

CHAPTER XI—SPECIAL QUESTIONS RELATING TO WOMEN, CHILDREN, ETC.

FACTORIES.

The Effect of Act of 1922—on employment.

The only effects of the Act of 1922 brought to notice are that it has by reducing working hours to ten per day made labour more permanent in the textile industry, which as a result attracts labour from other industries.

The number of women and children employed daily in the various industries was as follows in 1928 :—

Female and child labour in cotton spinning and weaving mills.

Females	...	3,696
Boys	...	1,198
Girls	...	76
		Total
	...	4,970

Female and child labour employed in all factories under the Indian Factories Act.

Females	...	24,591
Boys	...	1,346
Girls	...	93
		Total
	...	26,050

Female labour in mines.

No children under 13 years are employed.

Manganese	...	10,504
Coal	...	2,075
Other mines	...	2,880
		Total
	...	15,459

Total of female labour. ... 40,050

Admission of infants to factories.

The practice of female workers bringing their infants into the mills is discouraged, but still exists. Crèches have effected considerable improvement in this respect in some of the larger mills. A circular under section 19 (a) of the Indian Factories Act has been in force prohibiting the admission of infants into the ginning and pressing factories. But children sometimes of not more than five or six years of age often bring meals for their mothers, and remain on the premises of the factory. The Empress Mills opened primary classes for these children as it was not found possible to stop the practice. Fortunately few accidents are reported to have occurred among these children. But it is obviously desirable that the practice should cease and the only satisfactory remedy is the compulsory provision of crèches and nursery schools at the factories.

Suitability of regulations for women's work.

The Act of 1922 has prescribed a limit of 11 hours a day for both male and female workers, with a proviso that women shall not be employed before 5-30 a.m. and after 7 p.m. The management of Empress Mills considers that with these hours for the commencement and cessation of work there is a risk that women will be molested on their way to and from their homes. For this reason, the hours of attendance have been so fixed for the last 12 years that women arrive after and leave before the men. As a result women cannot be employed jointly with men in departments where the machines must be in operation as long as the factory is working.

The regulations, however, are generally satisfactory, and sexual offences are extremely rare particularly among the working classes.

The suitability of the regulations affecting children.

Many factories have recently come into existence in remote places where provision for the certification of children is not available and inspecting staff is finding increased difficulty in verifying the age of employees suspected to be under 15 years. The employment of children, however, is gradually diminishing. In some factories children have to work continuously for five hours. It is desirable to make a recess compulsory after every 2½ or 3 hours' continuous work, as is the practice in the Empress Mills and some other factories. Apart from this there is no need to amend the regulations.

The simultaneous employment of children.

The simultaneous employment of children at more than one factory is prohibited by section 25 of the Indian Factories Act, but offences under this section are difficult to detect. The practice, however, is believed to be for practical purposes non-existent in the mills and is rare even in seasonal factories situated in the moffusil.

The extent of "Blind-alley" employment.

The employment of boys in occupations which offer no scope for their making a livelihood on attaining maturity is rare in this province. Boys are seldom recruited as messengers, peons, or call-boys in mills or factories. The doffer-boys and half-timers in the textile mills are gradually absorbed in the spinning department as siders, piecers or doffers.

Comparative merits of double and single shift systems as affecting health of women, young adults and children.

Wherever the shift system is in force (*vide* Chapter VIII) double shifts for women and young adults are usual. Half-timers too are frequently employed in double shifts. No exact data, however, are available. From the point of view of health the double shift system is preferable, but it causes inconvenience to the workers who frequently live at some little distance from the factory.

The work of women and children in factories not subject to the Act.

A reference is invited to the remarks at the end of Chapter VIII. The regulation of the employment of women and children in these industries is certainly desirable and the Local Government has considered from time to time the advisability of extending the Indian Factories Act to these establishments under section 2 (3) (b) of the Act. The question of extending the Act to *bidi* and shellac factories is still under consideration. As yet the Act has not been extended to these industries because mechanical power is not used in any of them and because they are little organised. The argument has been advanced that strict regulation would result in loss.

MINES.

Effect of the Act of 1923.

The effect of Act of 1923, so far as hours of work is concerned, has been salutary, and no difficulty is experienced in its

operation. It is reported that as the result of the enactment of section 26, child labour between the ages of 8 and 13 has ceased to be employed.

The provisions for the certification and for prohibition of employment of women underground in coal mines appear to be suitable.

EXCLUSION OF WOMEN.

Suitability of regulation.

Mine managers consulted report the provisions of the Act of 1923 to be suitable. The regulations introduced by the Government of India's Notification No. M-1055, dated the 7th March 1929, are intended to eliminate gradually all women labour underground in coal mines by the end of June 30th, 1939. The practical effect of the prohibition is not yet known as the regulations came into force only on the 1st July 1929.

The probable effect on the industry.

The mine owners are unanimous that the exclusion of women from underground working has increased the cost of production. They assert that any extension of the regulations so as to exclude women from open cast mines would be disastrous to the manganese mining industry. The women on the mines form large percentage of the labour force and are in all cases employed on work suitable to them and not suitable to men. Two large manganese mines, in which there is underground working, owned by the Central Provinces Manganese Ore Company, Limited, one in the Balaghat district and the other in the Nagpur district, have been hard hit by the new regulations regarding the exclusion of women. 300 women were suddenly discharged causing reduction in the output as well as discontent among the labour force. The company has attempted unsuccessfully to have these mines classified as exempted mines so that the reduction in the number of women workers might take place gradually over a number of years as in the case of coal mines.

Other establishments.

This question has already been discussed in the earlier portion of this chapter and in Chapter VIII.

CHAPTER XII—WAGES.

PREVAILING RATES OF WAGES AND EARNINGS.

Beyond the average figures of monthly wages of various classes of labour, submitted by the factories every year for inclusion in the Annual Report on the Administration of the Indian Factories Act no regular and detailed statistics of wages are available. On the basis of these figures and such information as it has been possible to collect for the purposes of this enquiry, the average wages of the various classes of workers are indicated in the statement below. It will be seen that the rates of wages vary in the different industrial areas of the province. Broadly speaking, wages are highest in the cotton area of the province. Even in this area wages are higher in the districts of Berar (Amraoti, Akola, Ellichpur and Khamgaon) than in the cotton districts of the Central Provinces (Burhanpur and Hinganghat). The rates of wages at Nagpur are higher than those in other cotton districts in the Central Provinces. This is due to Nagpur being the Provincial headquarters and the largest town with six textile mills, the wages in five of which (constituting the Empress Mills group) have been higher for years. But even the Nagpur rates, particularly for unskilled labour, are generally lower than the rates prevailing in the larger towns of Berar like Amraoti and Akola. In Berar the supply of agricultural labour is inadequate and in consequence wages have been high for many years.

	Anraoti.	Akola.	Khamgaon.	Ellichpur.	Burbanpur.	Hinganghat.	Nagpur.	Jubbulpore.	Katni.	Gondia.	Raipur.	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
<i>Skilled.</i>												
Fireman	30 0 0	45 0 0	31 0 0	35 0 0	30 0 0	30 0 0	28 0 0	20 0 0	20 0 0	25 0 0	20 0 0	} Rupees per month.
Fitter	61 0 0	60 0 0	61 0 0	60 0 0	58 0 0	41 0 0	58 0 0	40 0 0	53 0 0	25 0 0	35 0 0	
Weaver	40 0 0	45 0 0	...	...	42 0 0	31 0 0	35 8 0	26 0 0	...	...	...
<i>Semi-skilled.</i>												
Dyer	...	18 0 0	23 0 0	18 0 0	20 0 0	12 0 0	} Rupees per month.
Oilman	19 0 0	20 0 0	17 0 0	17 8 0	30 0 0	18 0 0	19 0 0	16 0 0	17 0 0	18 0 0	15 0 0	
Spinner (adult)	17 0 0	17 0 0	...	18 0 0	21 0 0	17 0 0	19 0 0	12 0 0	...	...	...
Spinner (boy)	8 0 0	10 0 0	...	6 0 0	...	7 8 0	11 0 0	6 12 0	...	...	...
<i>Unskilled.</i>												
Gin coolie (male)	23 0 0	23 0 0	19 0 0	19 0 0	...	19 0 0	17 0 0	} Annas per day.
Gin coolie (female)	11 0 0	15 0 0	11 0 0	9 0 0	...	7 0 0	9 0 0	...	...	...	...
Press coolie (male)	26 0 0	26 0 0	30 0 0	25 0 0	...	30 0 0	23 0 0	...	...	...	...
Press coolie (female)	11 0 0	15 0 0	12 0 0	13 0 0	...	...	11 0 0	...	...	...	...
Other coolie (male)	0 10 0	0 10 0	0 9 0	0 8 0	0 9 0	0 7 0	0 9 0	0 8 0	0 8 0	0 7 0	0 5 6	
Other coolie (female)	0 6 0	0 6 0	0 5 9	0 5 6	0 4 6	0 4 0	0 5 6	0 5 0	0 5 0	0 5 0	0 4 6	

*Expeller men (wages Rs. 15 per month) and glass blowers (wages Rs. 15 to Rs. 20 per month) may be classed with spinners and blower boys with spinner boys (wages Rs. 9 per month).

The rates available for mining areas are as follows :—

Class of Labour.	Coal.		Manganese.		
	Chhindwara district.	Chanda district.	Nagpur district.*	Bhandara district.	Balaghat district.
	Per day.	Per day.	Per day.	Per day.	Per day.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
<i>Skilled.</i>					
Overmen, sardars or mates.	1 0 0 to 2 0 0	1 0 0 to 3 0 0	0 12 0 to 1 8 0	0 12 0 to 1 6 0	0 12 0 to 1 6 0
Coal-cutters	1 0 0 to 1 6 0	0 8 0 to 1 0 0	... to 0 9 0	... to 0 8 0	... to 0 8 0
Miners	0 8 0 to 1 0 0	0 9 0 to 0 10 0	0 9 0 to 0 12 0	0 8 0 to 0 10 0	0 8 0 to 0 10 0
<i>Unskilled.</i>					
Loaders	0 8 0 to 0 12 0	0 9 0 to 0 12 0	... to 0 8 0	... to 0 6 0	... to 0 6 0
Male coolies	0 7 0 to 0 9 0	0 6 0 to 0 8 0	0 8 0 to 0 9 0	0 6 0 to 0 8 0	0 6 0 to 0 12 0
Female coolies	0 4 0 to 0 9 0	0 4 0 to 0 4 0	0 5 0 to 0 6 0	0 4 0 to 0 6 0	0 4 0 to 0 6 0

Movements in recent years.

The average monthly wages for the whole province, as given in the annual factory reports, are tabulated below :—

	Years.						
	1922.	1923.	1924.	1925.	1926.	1927.	1928.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>Skilled.</i>							
Fitter	47	48	49	50	51	47	52
Boilerman	27	31	30	29	29	28	29
Weaver	31	28	37	34	31	31	31
Spinner	15	15	17	16	16	15	15
<i>Unskilled.</i>							
Coolie (male)	17	18	17	17	16	15	15
Coolie (female)	10	11	10	10	10	9	9

The table shows that there has been a general reduction during the last five years, the wages of unskilled labour having fallen steadily since 1923. The year 1928 marks a slight increase in the wages of skilled labour; otherwise a general decline is noticeable since 1924.

It is difficult to draw any deductions regarding the movements of wages in recent years for such data as are available are conflicting. The figures of average monthly wages for the whole province, as published in the annual factory reports, indicate, a definite decline in the wages of unskilled labour since 1923. While such information as we have been able to collect for the present enquiry from some of the mills, mines and other works indicates a definite rise during the last five to eight years. Figures of such increases are as follows:—

Areas.	Percentage of rise in wages. Per cent.
Nagpur, Bhandara and Chhattisgarh Division.	20 to 25
Balaghat manganese mines ...	5
Gondia (lac factories, etc.) ...	15 to 25

It is difficult to reconcile the results obtained by enquiries made for the purpose of this report with the figures embodied in the annual reports. The latter are calculated on the basis of the figures of average wages prevailing in about 50 of the leading industrial undertakings of various classes, cotton concerns of Berar predominating. The only reliable information available is in the Cost of Living Index Numbers prepared by the Department of Industries for Nagpur and Jabulpore since January 1925. These show that real wages have on the whole varied with the rise and fall in the cost of living.

Comparison of Nominal and Real Wages with Cost of Living (Base, July 1914).

	Year.				
	1914.	1925.	1926.	1927.	1928.
	Rs. a. p.	Rs.	Rs.	Rs.	Rs.
CENTRAL PROVINCES.					
<i>Average monthly wages.</i>					
Male (unskilled) ...	11 0 0	17	16	15	15
Female (unskilled) ...	6 8 0	10	10	9	9
<i>Index numbers.</i>					
Cost of living ...	100 0 0	149	147	145	137
<i>Nominal wages.</i>					
Male (unskilled) ...	100 0 0	154	145	136	136
Female (unskilled) ...	100 0 0	154	154	138	138
<i>Real wages.</i>					
Male (unskilled) ...	100 0 0	103	98·6	93·8	99·3
Female (unskilled) ...	100 0 0	103	105	95·2	100·7

Variation in Nominal and Real Wages at Nagpur (Base period—1914).

	Year.				
	1914.	1925.	1926.	1927.	1928.
	Rs. a. p.	Rs.	Rs.	Rs.	Rs. a. p.
<i>Average monthly wages.</i>					
Semi-skilled		17	19	19	19 8 0
Male (unskilled) ...	11 0 0	16	17	17	17 0 0
Female (unskilled) ...	6 8 0	9	10	10	10 0 0
INDEX NUMBERS.					
<i>Nominal wages.</i>					
Male (unskilled) ...	100 0 0	145	154	154	154 0 0
Female (unskilled) ...	100 0 0	138	154	154	154 0 0
Cost of living	100 0 0	149	147	145	137 0 0
<i>Real wages.</i>					
Male (unskilled) ...	100 0 0	97·3	104·8	106·2	112·4
Female (unskilled) ...	100 0 0	92·6	104·8	106·2	112·4

The extent of remittances by workers to their villages.

No definite information is available on this question. The practice of remitting part of the wage earned to the place of origin is most common among immigrants from the United Provinces, nearly 80 per cent of whom leave their families behind in their villages to look after their ancestral cultivation. These immigrants are said to remit nearly 75 per cent of their income in this way. It is also reported that a few workers who have immigrated from Central India and the Bombay Presidency remit to their homes about 25 per cent of their earnings.

Payments in kind.

Payment in kind is not common in this province. Some instances have, however, come to light. Fuel and light are supplied free to special classes of workers in some of the minor factories and to fitters in ginning and pressing factories firemen and mechanics in rice and oil mills, Bhattawallas (lac melters) in shellac factories, blowers in glass works, kiln attendants and furnacemen in cement works and potteries. Some oil mills supply the workers with free oil for domestic purposes; and the extent to which housing accommodation is provided free or below the market rate has already been described in Chapter IV.

The method of fixing wages.

There is no organisation such as a Trades Union which intervenes between the employers and employee for the purpose of fixing wages. These are usually fixed by oral agreement.

The Extent of standardisation.

Wages are not standardised in different industries or in the same industry. It is even found that different rates are prevalent in the same industry in the same locality for the same work. This is illustrated by a comparison of the wages paid at the Empress Mills and Model Mills, Nagpur, or Burn and Company's Pottery and Perfect Pottery at Jubbulpore, or Reckchand Mohota Mills and Bansilal Aberchand Mills at Hinganghat.

Class of workers.	Nagpur.				Hinganghat.		Jubbulpore.	
	Empress Mills.		Model Mills		Rai Bahadur Bansilal Aberchand Spinning and Weaving Mills.	Rai Sahib Reckchand Mohota Spinning and Weaving Mills.	Burn and Co., Pottery Works.	Perfect Pottery Company, Limited.
	Mini-mum.	Maxi-mum.	Mini-mum.	Maxi-mum.	Average wages.	Average wages.	Average wages.	Average wages.
	Rs.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
<i>Skilled labour.</i>								
Fitter ...	62	122	20 0 0	125 0 0	32 0 0	45 0 0	37 0 0	78 5 0
Blacksmith ...	77	92	30 0 0	85 0 0	47 0 0	43 0 0	25 8 0	45 0 0
Carpenter ...	47	62	25 8 0	90 0 0	44 0 0	35 0 0	32 0 0	44 0 0
Engine driver ...	...	...	40 0 0	80 0 0	87 0 0	55 0 0	20 0 0	32 8 0
Boilerman ...	24	32	22 8 0	25 8 0	32 0 0	31 0 0	19 8 0	22 8 0
Mason ...	54	69	...	...	...	...	...	...
Weaver ...	22	50	25 0 0	50 0 0	30 0 0	32 0 0	...	...
Spinner ...	15	24	16 8 0	19 8 0	15 12 0	18 0 0	...	...
Dyer ...	18	25	18 0 0	24 0 0	70 8 0	18 4 0	...	...
<i>Unskilled labour.</i>								
Coolie (male) ...	15	29	15 0 0	20 0 0	13 0 0	15 0 0	14 8 0	16 4 0
Coolie (female) ...	11	14	9 0 0	11 4 0	8 0 0	8 0 0	7 8 0	12 6 0

MINIMUM WAGES.*Advisability and possibility of statutory establishment.*

The subject of minimum wages was considered by the Local Government early in 1928 in connection with the questionnaire issued by the Tenth International Labour Conference. Opinions then received including those of labour representatives were opposed to legislation to this end.

Demands for minimum wages of Rs. 30 per month have been occasionally put forward at strikes, but such demands are usually made by leaders of the pleader class who are aware of the practice in more highly developed industrial countries; it is doubtful, however, whether any such demand exists among the labouring classes, who do not understand the implications of the proposal. It has already been shown that wages are not standardised, and until in practice wages in the same or similar industries are more or less on the same level, it is difficult to see how a minimum wage can successfully be brought into operation. A further difficulty arises from the fact that the cost of living varies in different parts of the province. In the cotton districts to which food grains are imported the cost of living is definitely higher than elsewhere. Government has recognised this fact by the grant of dear district allowances to its lower paid employees. It follows that a minimum wage applicable to Berar or Nagpur would not be suitable for Jubbulpore. It is moreover doubtful whether the fixation of a minimum wage would be beneficial to labour. There is always a tendency for wages to gravitate towards a minimum fixed by law and where, as in this province, the organisation of labour is weak and consequently unable to combat this tendency, it is not improbable that legislation of this nature would result in a decrease in the total earnings of labour.

DEDUCTIONS.

The extent of fining.

Deductions do not appear to exceed the 5 per cent of workmen's wages. Fines are generally imposed for—

- (a) breaches of discipline like late attendance, absenteeism, misbehaviour, etc.,
- (b) bad work,
- (c) loss of, or damage to, materials.

All firms consider (a) as absolutely necessary for the maintenance of discipline, but the fines imposed are nominal. Fines imposed for bad work or loss of or damage to materials are generally higher, but only a very small fraction of the loss incurred by the management is recovered. In Bombay and other places the workman is compelled to buy the cloth or material spoiled at the price, but this practice is not in vogue in this province; in the case of the Empress Mills, the fines under this head range from 2 annas to Re. 1 (and average 1/10th of the loss caused). The practice of "double khada", *i.e.*, the deduction of two days wages for one day's absence, is recommended and adopted by the Mill Owners' Association of Bombay. It is, however, not in

operation in this province except at the Savatram Mills at Akola, and even there though nominally recognised it has not been enforced during recent years.

Other deductions.

Articles requiring frequent replacement such as read-hooks, combs, split chains, etc., are issued to workmen and have to be regularly accounted for. Deductions are made for loss of these articles, which find a ready sale in the local bazars. Deductions under this head amounted to Rs. 825 in one year in the Empress Mills, compared with a total wage bill of Rs. 3,92,859. The average of the total fine on all accounts in the Empress Mills amounts to Rs. 2,600 per annum, and is equivalent to 0.12 per cent of the wage bill.

The utilization of fines.

These deductions are generally spent for the benefit of the workers themselves by crediting them to provident or recreation funds, but occasionally are credited to the account of the firms themselves. The Empress Mills credit all unclaimed wages and fines to the Pension Fund. The Jubbulpore Gun Carriage Factory credits them to the Gratuity Fund. Burn and Company's Pottery and Perfect Pottery of Jubbulpore spend such fines on sports and prizes to the labourers. The Nagpur Automobile and General Engineering Company, Limited, refund deductions after a month if the conduct of the operative improves.

Desirability of Legislation.

The question of legislation for regulating deductions was investigated by the Local Government about two years ago in response to a reference from the Government of India. It appears that the system prevailing in the province is neither a source of profit to the employer nor a cause of harsh or improper treatment to the workers. It has, on the other hand, been effective in enforcing discipline, and preventing careless or negligent work. In recent industrial disputes in the province, the subject of fines has not been brought up as a grievance, and no complaints from employees regarding excessive fines have been made to the factory inspection staff. The employers of labour are unanimous in opposing legislation on the subject, and having regard to the conditions obtaining in the province, the Local Government has taken the view that it is unnecessary to introduce legislation on the lines of the English Truck Act. It

is suggested, however, that it might be prescribed by a rule under, or an amendment of, the Indian Factories Act, and the Indian Mines Act, that the owners of factories and mines shall maintain a register in which the amount of fine or deduction from wages and the nature of the act or omission in respect of which such fine is imposed or deduction made should be entered. Such a register which should be open to inspection by the Factory or Mines Inspector would furnish means for the verification of any complaints and would enable the Local Government to watch how far the system is abused in practice.

PERIODS OF WAGE PAYMENT.

Periods for which wages paid.

In most cases wages are paid weekly, but sometimes monthly and occasionally fortnightly.

Periods elapsing before payment.

Weekly wages are generally paid on the bazar day, and payment is made as soon as the wages are earned for the whole week, but sometimes wages are calculated up to the second day previous to the bazar day.

The payment of monthly wages, however, is generally made between the 10th and 25th of the month following the one to which the wages relate. Interim payments as advances against the wages earned in the previous month are, however, often made according to the workers' needs in the first week of the following month. At one time interest was sometimes charged on these advances, but the practice has now ceased. The larger mills take a week to 10 days to complete all payments.

Desirability of legislation.

The question of legislation on this subject was investigated by the Local Government in 1924 in response to a reference from the Government of India. It appears that in the case of monthly payments, delays for periods exceeding 15 days are not usual, while in the case of payments on shorter periods than a month, the scale of four days' delay for fortnightly wages, two days' delay for weekly wages and one day's delay for daily wages, as suggested by the Government of India, is rarely exceeded. In the circumstances, therefore, and in view of the fact that no complaints on the part of workmen of delay in payment have come to its notice, the Local Government has so far concurred in the view of the managers of industrial concerns that the need for introducing legislation on this subject is not urgent. Should

it, however, be decided on general grounds to undertake legislation on the subject, it is suggested that the measure should be confined to payments made monthly and that a period of 10 days should be allowed for payment on this basis.

The treatment of unclaimed wages.

Unclaimed wages are negligible in amount except in cases of textile mills where they are utilized for public religious celebrations by the work people. One or two mills pay them to claimants even if they turn up after a considerable interval.

Indebtedness.

A large percentage of labourers is indebted, but no reliable figures are available. Information received from employers puts this percentage between 25 and 50. The Empress Mills, Nagpur, have a flourishing co-operative credit society. Out of 4,500 members of the society, 2,431 are indebted to the extent of Rs. 5,10,224. The report of the mills adds that borrowing from outside has not yet ceased. If any inference can be drawn from these figures, the percentage of labourers indebted appears to be more than 50. The rate of interest is sometimes as high as 37.5 per cent per annum. Loans are generally advanced by the ordinary Marwari and Bania money-lenders and in a very few cases by Pathans. Indebtedness is attributed mainly to the improvident character of the labourers aggravated by customary ceremonial expenses. Employers deny that the low level of wages is to any appreciable extent responsible for indebtedness.

Bonus and profit-sharing schemes.

There is no scheme of profit-sharing in force in any industry. Some textile mills are reported to have granted bonuses from profits during the war boom, but payment of bonuses from profits is unknown at present. Some mills grant a regular attendance bonus to their workers up to Rs. 2 a month.

Annual leave.

Leave without pay is always granted by the employers to ordinary unskilled workers and the latter often avail themselves of it for visiting their native places or for ceremonial purposes.

The clerical and supervising staff are allowed one month's leave every year on full pay, while in the textile mills the subordinate staff is allowed leave up to 15 days. Other important industries also adopt similar practices, but in smaller factories and minor industries no leave is recognised or countenanced.

CHAPTER XIII—INDUSTRIAL EFFICIENCY OF WORKERS.

No systematic study of this question has been made in the province and very few accurate data are available on this subject. The following views are based on information provided by the Empress Mills, Nagpur, and a few mining companies.

Comparative changes in efficiency of Indian workers in recent years.

The Empress Mills report that the reduction in hours of work has not resulted in any improvement in efficiency in their spinning department and has effected only a slight improvement in their weaving department. The cost of production has also increased with increases in wages and other charges and the net result is shorter working hours and more pay for the workers without any compensation to the employers. Although the increase in wages has tended to make the labour force of the textile industry more permanent it at the same time became more irregular in attendance; for the workers absent themselves without permission whenever they like, being able to support themselves on the wages earned in a shorter period of work. This opinion of the Empress Mills is based on a careful study of the figures of production of their mills during the last quarter of a century.

Some manganese mine owners assert that there has been no appreciable increase in the efficiency of their labour during recent years, while the Central Provinces and Berar Mining Association reports that employment has been stabilized in the larger manganese mines and there has been an improvement in the efficiency of miners; but no noticeable change has occurred in the efficiency of the workers in the coal mines. As, however, it has been reported in Chapter X, the Indian Mines Act of 1923 did not make any practical change in hours of work, any increase of efficiency must be due to other causes.

Comparative efficiency of Indian and foreign workers.

No systematic study of the question has been made in the province, but the Empress Mills report that although the wages paid to individual workers in India are much lower than those paid to workers in Lancashire, it has to be borne in

mind that four to five Indian workers have to be employed on work which one Lancashire worker can do. The following figures from the report of the Indian Tariff Board (Cotton Textile Enquiry Committee, 1927), which give only a very rough idea of the relative efficiency of Indian and foreign labour, are quoted by the Empress Mills :—

Name of country.	Number of spindles looked after by each operative.	Number of looms attended by one weaver.
United States ...	1,120	9
United Kingdom ..	540—600	4—6
Japan ...	240	2— $\frac{1}{2}$
India ...	180	2

The manager of the Central India Manganese Company, Limited, is of opinion that compared to the efficiency of the Western countries, that of Indian workers is about 33 per cent. The manager of the Balaghat manganese mines is of opinion that in hand-drilling and mining the average Indian miner has only 10 per cent of the efficiency of Western miners which he attributes mainly to the difference in skill and methods of work.

EXTENT TO WHICH COMPARISONS ARE AFFECTED BY:
Migration of workers.

The Empress Mills report that although the turnover of their labour has improved from 18 months to eight years and labour has become steady on their mills, there has been no increase in production worth the name. There is not that steady application of workers which one expects from shorter working hours and better working conditions now prevailing in factories, and consequently production shows a fall in place of the expected increase.

Use of machinery.

The Empress Mills report that the use of machinery has led to increased efficiency on the part of workers. Such efficiency has ensued from Vacuum Stripping Plant, Automatic Looms, Ring Spindles in place of Mules and Throstles in the spinning department. Eccle's Drop-boxes have also given better results than Hacking's Drop-boxes. No other information is available.

Comparative efficiency of plant.

The Empress Mills report that efficiency of plant has improved the efficiency of the workers.

Physique.

The efficiency of workers varies with their physique. The Momins (Muhammadans) and Koshtis (Hindus) who have a better physique than Mahars (low caste Hindus) are more regular in attendance and produce better work as weavers.

Health.

It is obvious that the health of workers does affect their efficiency, but no reliable statistics of the incidence of sickness on the efficiency of workers are available.

Education.

Education is certainly a most important factor affecting the efficiency of the workers and it is reported that the main reason why the efficiency of Indian labour is so much less than that of foreign labour is that the majority of Indian labourers are illiterate.

Standard of living.

There is no doubt that the inferiority of Indian labour is largely due to its low standard of living, but there is no definite information available.

Climate.

The climate in India is subject to such extreme variations that the Indian labourer is handicapped in this respect as compared to his European brothers. The excessive heat in summer decreases the efficiency of the workers. The ventilating and humidifying systems at No. 1 Mills (the oldest) of the Empress Mills not being so up to date as those at their No. 3 and No. 5 Mills, the warmth of the atmosphere in No. 1 Mills not only disturbs the evenness of the yarn made therein, but also decreases production and adds to the discomfort of the workers therein.

The effect on production of changes in working hours.

The information supplied by the Empress Mills has already been referred to above. As a result of the reduction of hours,

there has been no improvement in production in the spinning department, but there has been some improvement in production in the weaving department. The Empress Mills report that an experiment was made at their mills about half a century ago by the late Mr. J. N. Tata, the founder of the mills, with the object of improving production. He started working the mills with two shifts, each working for 12 hours with half an hour's rest period the day and night shift men changing places every fortnight. "The result was disastrous; for, the total production of the two shifts did not even equal that obtained by the usual day time working from sunrise to sunset." This was due to the night shift people not taking rest during the day time as they should, so that they were unable to keep awake at night, and their machines were left untended.

Changes in other working conditions.

Good light and ventilation and efficient humidification undoubtedly improve production. The effects of the atmospheric conditions in No. 1 Mills of the Empress Mills have been referred to above. In the weaving department deficient light, ventilation and humidification affect production by about 5 per cent.

Expenditure on health and sanitation.

A few mine owners report that expenditure judiciously made on health and sanitation repays itself by preventing disease and maintaining labour in a more healthy condition, enabling it to give increased production. The same applies to expenditure on housing of labour.

ALTERATIONS IN METHODS OF REMUNERATION.

Movements of wage levels.

The observation made by the Indian Industrial Commission of 1916—18 (paragraph 235) that "all authorities who are qualified to speak on the subject agree that Indian labour is content with a very low standard of comfort. This secured, the Indian workmen, speaking generally, takes advantage of the greater earning power given to him by increased wages to do less work, and shows no desire to earn more money by working more regularly or by improving his own efficiency" still generally applies to Indian labour. The mine owners report that the upward movement in wages tends to give a downward trend in production per head. The Empress Mills report that they cannot say that all

that they have done to improve the wages and remuneration of their workmen has induced in their work people a desire to put more energy into their work.

Legislative enactments.

Mine owners report that the effect of legislation has been beneficial to workers, but has increased the cost of production. The Empress Mills report that while legislation has ameliorated the condition of the workers, it has also been exploited by agitators who emphasise the responsibilities of the employer, but are silent as regards any corresponding obligation on the employees to become more efficient.

Dietary, alcohol and drugs.

Reports received indicate that a liberal diet brings about an improvement in production. The use of drugs by labourers is very rare. The Empress Mills report that the drink evil is not so prevalent among their work people as to attract attention or affect the production of their mills.

Possible methods of securing increased efficiency.

All employers are emphatic that better education would be the most effective method by which the efficiency of labour can be increased.

CHAPTER XIV—TRADE COMBINATIONS.

EXTENT OF ORGANIZATION OF :

Employers.

The following associations of employers exist in the province :—

- (1) The Mechanical Engineers' Association, Akola.
- (2) The Factory Owners Association, Khamgaon.
- (3) The Central Provinces and Berar (Manganese) Mining Association, Kamptee.
- (4) The Central Provinces and Berar Coal Mining Association, Chhindwara.
- (5) The Katni Lime Burners' Association.
- (6) The Merchants' Association, Yeotmal.
- (7) The Merchants' Association, Jubbulpore.

Employed.

The following associations of the employees exist in the province :—

- (1) The Nagpur Textile Union, Nagpur.
- (2) The Model Mills Labour Union, Nagpur.
- (3) The Press Employees' Association, Nagpur.
- (4) The Scavengers' Union, Nagpur.
- (5) The Textile Labour Union of Central Provinces and Berar, Nagpur.
- (6) The Motor Drivers' Association, Nagpur.

The above are registered in this province, but the following outside organizations have branches at Nagpur :—

- (1) The Railway Mail Service and Postal Union, Central Circle.
- (2) The Great Indian Peninsula Railwaymen's Union of Bombay.
- (3) The Bengal-Nagpur Railway Labour Union of Kharagpur.
- (4) The Clerks' Association.

EFFECT OF ORGANIZATIONS ON :

Industry and conditions of workers generally.

These associations, with the exception of the Central Provinces and Berar Mining Association, Kamptee, are of recent origin and cannot be said as yet to have produced any appreciable effect on the industries. These associations are, however, consulted by Government on all matters affecting the industries to

which they relate and the relations of the employers and the employed, and the views thus obtained are always considered. An Advisory Board of Industries was established in the year 1914 for giving Government the benefit of its experience and opinion on industrial and labour questions, and some of the associations named above are represented on the Board. At some cotton centres the owners of ginning and pressing factories form combines (locally known as pools) with the result that only a few of the local factories are worked in the season and the rest remain closed. The total profits earned by the factories that work are distributed at the end of the season amongst the owners of all the factories in proportion to the number of gins and presses possessed by each. These combines have been successful in enhancing the cost of gining and pressing at the expense of the cultivator. The matter has been brought before the local legislature by a member of the Council and is now under the consideration of the Local Government.

Owing to trade depression in the coal and manganese industries, the Mining Associations have recently on several occasions approached Government for assistance, and the Local Government has reduced the rate of dead rent on areas occupied by mines by 50 per cent. The Local Government has also approached the Railway Board in order to secure a reduction in railway freights.

The associations of employers appear competent to safeguard the interest of their members, but trades unionism is yet in its infancy in the province, and Labour Associations have done little to improve the conditions under which their members work.

Nature of Trade Union activities.

Apart from taking part in a few recent strikes, trade unions have not displayed much activity as yet. The Postal Union branch has established a co-operative society and a Mutual Benefit Fund for its members and the Clerks' Association branch has a Mutual Benefit Fund.

Individual Trade Unions.

The history of individual trade unions and the attitude of employers to them are indicated below :—

(1) *The Nagpur Textile Union.*

The above union came into existence on the 11th December 1927 by a resolution passed by the executive of the union and

was registered under the Indian Trade Union Act, 1926, on the 23rd December 1927. Out of 51 members of the Executive Committee, 39 are employed in the Empress and Model Mills and the remainder are professional men such as pleaders and doctors.

The attitude of the employers has so far been conciliatory and both the Empress and Model Mills, Nagpur, have recognized the union.

(2) *The Model Mills Labour Union.*

This union was brought into existence on the 5th December 1927 by a resolution of a general meeting of the union and was registered on the 9th January 1928.

Out of 17 members of the Executive Committee, nine are directly concerned with the industry. In February 1929 the operatives of the mills made representations formulating certain demands and pressing for the recognition of the union, but no decision has yet been reached.

(3) *The Press Employees' Association, Nagpur.*

The above union came into existence on the 5th February 1928 following a resolution of a general meeting of the members and was registered on the 11th February 1928.

From the report of the association it will be seen that there were 236 members on the roll on the 31st December 1928. Out of 17 members of the Executive Committee, 12 belong to the industry.

(4) *The Scavengers' Union, Nagpur.*

The above union came into existence as a result of the recent strike of sweepers in Nagpur. It was inaugurated on the 8th April 1929 by a resolution of a general meeting of its members and was registered on the 9th April 1929.

Out of 15 members of the committee, 10 are working as sweepers.

On the occasion of the recent strike, the district authorities and the municipal committee refused to hear the grievances of the sweepers unless they formed themselves an union and were registered under the Trade Unions Act.

(5) *The Textile Labour Union, Central Provinces and Berar.*

This union was brought into existence on the 30th September 1928 by a resolution of the general meeting of the members and was registered on the 11th April 1929.

TRADE UNIONS ACT, 1926.*Extent to which utilized.*

The Act came into force on the 1st June 1927 and six trade unions have been registered up to date.

Effects.

It is too early to judge of the effects of the Act. Trade unionism is still in its infancy in the province and is more under the control of politically-minded members of the intelligentsia than of genuine workers. The two or three most active leaders of the trade union movement in this province belong to the legal profession. The unions have all been recognized by the employers concerned, though the Model Mills refused to do so for some time.

No amendment to the Act has been suggested nor has any necessity therefor yet been experienced.

CHAPTER XV—INDUSTRIAL DISPUTES.

EXTENT OF STRIKES AND LOCK-OUTS.

Since 1921 there have been 36 strikes affecting the various industrial undertakings of the province, 29 being confined to the cotton mills. A statement giving details is appended (Appendix VIII).

Causes.

The causes which led to these industrial disputes may be classified generally as follows:—

- (1) Demands for increases in wages and allowances.
- (2) Demands for bonuses.
- (3) Demands for shorter hours of work.
- (4) Personal causes such as the dismissal or refusal to reinstate individuals.
- (5) Resentment at the adoption of disciplinary measures.
- (6) Resentment at reduction of allowances.
- (7) Political.
- (8) Others.

It was only in the case of two strikes that political causes were operative. In one (at the Pulgaon mills) in 1921 the management refused to close the mills on a *hartal* day (13th April); but these strikers also put forward demands for raising their grain compensation allowances in the course of the strike. The other strike on the Bengal-Nagpur Railway was a demonstration of sympathy with an office-bearer of the Railway Union who was arrested in connection with a strike outside the province.

Outside influences were traceable in only seven out of 35 strikes. Only three strikes, two at Nagpur and one at Pulgaon, were organised by labour unions. One strike at the Jubbulpore mills in 1923 is reported to have been inspired by sympathy with strikers at Ahmedabad. Otherwise, the strikes were for the most part local and did not present any special features though the demands of the strikers were occasionally extravagant.

In the following table the strikes are classified according to their causes :—

	Pay and allowance.	Bonus.	Hours of work.	Personal.	Discipline.	Reduction of attendances.	Political.	Others.
1	2	3	4	5	6	7	8	9
<i>Akola.</i>								
Hukumchand Mills (5) ...	1	3	...	1	...	...	...	...
Savatram Mills (4) ...	2*	...	2*	...	...	1	...	1
<i>Jubbulpore.</i>								
Raja Gokuldas Mills (7) ...	2	1	...	...	1	1	...	2
Municipal sweepers (1) ...	1	...	...	...	...	...	...	...
<i>Nagpur.</i>								
Empress Mill (2) ...	1*	1 (a)	1*	...	1 (a)	...	...	...
B.-N. Railway workshop (1) ...	...	...	...	...	...	...	1	...
Municipal sweepers (2) ...	2*	...	1*	...	...	...	...	1*
<i>Rajnandgaon.</i>								
B. N. Cotton Mills (4) ...	1	...	1	2	...	...	...	...
<i>Pulgaon.</i>								
The Pulgaon Cotton Mills (2).	1*	1 (a)	...	...	...	1 (a)	1*	...
<i>Hinganghat.</i>								
Bansital Mills ...	1	...	...	...	...	...	...	...
Reckchand Mohota Mills ...	...	...	...	1	...	...	...	...
<i>Burhanpur.</i>								
The Tapti Mills ...	1	...	...	...	...	...	...	...
<i>Badnera.</i>								
Berar Manufacturing Co. Mills.	1	...	...	...	...	...	...	...
<i>Murtizapur</i>								
C. P. Railway ...	...	...	...	1	...	...	...	...
<i>Yeotmal</i>								
Taxi-drivers ...	...	...	...	...	1	...	...	...
<i>Kamptee.</i>								
Municipal sweepers ...	1	...	...	...	...	...	...	...
<i>Damoh.</i>								
Municipal sweepers ...	1	...	...	...	...	...	...	...
Total ...	16	6	5	5	3	3	2	

NOTE.—Where the disputes are caused by more than one reason the combined causes of disputes have been indicated by * or (a) over the figure.

Duration and character.

The following is a tabular statement showing the duration of the strikes :—

Locality.	Number of disputes lasting.					Total.
	2 days or less.	2—7 days.	8—15 days.	10—30 days.	Above 30 days.	
Akola	...	1	5	3	...	9
Jubbulpore	...	3	1	1	3	8
Nagpur	...	1	2	...	1	4
Rajnandgaon	...	2	...	...	1	3
Hinganghat	1	...	...	1	...	2
Pulgaon	...	1	1	...	...	2
Badnera	...	...	...	1	...	1
Burhanpur	...	...	1	...	...	1
Damoh	...	...	1	...	...	1
Kamptee	1	...	...	...	...	1
Yeotmal	...	...	...	...	1	1
Total	2	8	11	6	6	33

The nature and methods of settlement.

The results of the disputes may be classified broadly as follows :—

- (1) Entirely favourable to workers.
- (2) Partially favourable to workers.
- (3) Entirely unfavourable to workers.
- (4) Results unknown.
- (5) Inconclusive.

The following table indicates the nature of the settlement of the strikes :—

Locality.	Entirely favourable.	Partially favourable.	Entirely unfavourable.	Results unknown.	Inconclusive.
Akola	1	2	2	...	4
Jubbulpore	2	..	4	...	1
Nagpur	...	1	3	1	...
Pulgaon	...	...	1	...	1
Hinganghat	1	1	...	...	...
Rajnandgaon	1	...	2	...	1
Burhanpur	...	...	1	...	...
Badnera	...	...	1	...	...
Yeotmal	...	...	1	...	...
Kamptee	...	...	1	...	...
Damoh	...	..	1	...	...

About half the strikes ended with results entirely unfavourable to the strikers; about one-seventh yielded favourable results to strikers and seven were inconclusive.

The loss to industry and workers.

No reliable estimate of the extent of loss resulting from these strikes is available. The loss in working days has already been indicated in the statement appended. The following statement, however, gives a rough estimate of the loss caused by some of the strikes. It will be seen that practically the entire incidence of the strikes and the consequent loss fell on the cotton textile industry :—

Year.	The number of mills to which figures relate.	Loss to employers.	Loss to workrs.
		Rs.	Rs.
1921	Savatram Mills, Akola	22,000	5,500
1922	Tapti Mills, Burhanpur	5,900	3,300
1922	Bansilal Abeerchand Mills, Hinganghat	64,725	12,968
1922	Empress Mills, Nagpur	1,16,263	39,191

Year.	The number of mills to which figures relate.	Loss to	Loss to
		employers.	workers.
		Rs.	Rs.
1923	... { Raja Gokuldas Mills, Jubbulpore ... Do. ...	42,000	17,500
		15,000	9,500
1924	... Empress Mills, Nagpur ...	5,74,482	2,64,651
1925	... { Raja Gokuldas Mills, Jubbulpore ... Savatram Mills, Akola ... Hukumchand Mills, Akola ...	15,000	14,000
		12,000	6,000
		6,000	6,000
1926	... Raja Gokuldas Mills, Jubbulpore ...	13,000	14,000
1927	... { Savatram Mills, Akola ... Raja Gokuldas Mills, Jubbulpore ...	17,000	8,500
		5,000	4,000
1928	... The Akola Cotton Mills, Limited (formerly Hukumchand Mills). ...	40,000	30,000
1929	... Reckchand Mohota Mills, Hinganghat ...	1,200	800

The following extract from the census report of 1921 sums up the history of the strikers prior to that year :—

“With the rapid development of industrial organization in India it is not to be expected that any account of it can be anything but ephemeral. Just prior to the time of the census, however, there was a strike epidemic the force of which, possibly as a result of a fall in the price of the staple food-grains, has since diminished. The most important strikes occurred in the cotton mills at Akola, Badnera in the Amraoti district, Pulgaon and Hinganghat in Wardha, Nagpur, Jubbulpore and Rajnandgaon, and also in the Gun Carriage Factory at Jubbulpore. The strike virus undoubtedly spread from the Bombay mills, and is evidence of the interchange of labour between the two provinces. The first strikes occurred in two of the Akola mills in 1917, and were due to agitation for increased wages, which were granted after a few days, when work was resumed. These strikes were entirely due to the rise in prices. The next occurred in the Savatram mills in Akola in February 1919, and is said to have been organized by the local home rulers owing to a quarrel between them and the management of the mill. This strike was settled after one day by a further advance in wages; in February 1920 the workmen of the Mid-India mills at the same place, fearing that a bonus which had been promised them would not be paid, as the ownership of the mill was about to change hands, ceased work for eight days, and a union was formed under the auspices of the local Home Rule League. Work was resumed on the bonus being promised. Towards the end of the same month the Savatram mill hands formed a union under the guidance of a prominent Bombay politician, and formulated certain demands, but a month later they went on strike without

notice to the management or the union officials. The workers obtained a substantial increase of pay varying from 20 to 50 per cent and a reduction of the daily working hours to 11. The labourers in the Mid-India mills also struck in sympathy and were given the same terms on promising to abandon their union. At the Burhanpur mills a strike of 10 days' duration occurred in February 1920. It appears to have had no connection with local politics, but to have been influenced by labour imported from Bombay. It was settled by a substantial increase in wages and the reduction of the daily working hours from 12 to 10. In Badnera an unsuccessful strike occurred at the end of March 1920, which lasted for a fortnight. At Hinganghat the workers of one of the mills struck in January 1920 in order to obtain concessions which had been granted by the other mill at the same place. The local extremist leaders attempted to organize a regular union, but the workers were reluctant to pay even the small subscription of 1 anna a month, and owing to lack of funds the union did not live long. It is significant that one of the demands put forward was for longer working hours in order to increase earnings. The demands of the workers were in the main conceded before work was resumed. In the Empress Mills in Nagpur the workers went on strike on Christmas day in 1919, apparently instigated by local politicians, but owing to the considerate treatment which the management had always shown to their work people the strike only lasted one day. Some concessions which were already under contemplation, when the strike occurred, were subsequently granted. The strike at Pulgaon occurred early in February 1920, and appears to have been influenced by the news of the strike at Nagpur. It was settled by the intervention of the Deputy Commissioner after six days. The workers obtained an increase of pay varying from 33 to 50 per cent and a reduction of the daily working hours to 10. The longest strike occurred in Rajnandgaon, and lasted for 44 days. This was largely political, owing to the fact that the management and owners of the mill are European. It was organized by the local pleaders, assisted and instructed from Nagpur, and was finally settled by an advance of $8\frac{1}{2}$ per cent in wages, a reduction of working hours to 10 and the payment of one month's bonus; the hands resumed work on the 6th April 1920. In Jubbulpore at the Gokuldas Ballabhdas Mills one strike occurred in February 1920, which was settled by a 25 per cent increase in pay, and another three months later, instigated by a discontented employee who had resigned. It was unsuccessful, and the strikers resumed work after a few days. Of the strikes outside the cotton mills, the most important was that in the Gun Carriage Factory at Jubbulpore, lasting from the 12th February to the 15th March 1920. The strikers acted through two local legal practitioners, with whom the authorities negotiated, and the final settlement, the terms of which were not to be published until the men resumed work, granted increases of wages and of the rates for piece-work. Subsequently, the authorities attempted to establish a permanent committee elected by the workers from their numbers, but found that there was great difficulty in securing persons to serve on

the committee owing to accusations raised against them of not acting in the true interests of the workers. Among other industrial concerns, the most important strike was one at the Katni cement works, where a lighting strike was declared on the 11th October 1920. The strikers relied on imported legal advice from Jubbulpore, but no permanent union has been formed. This strike was undoubtedly fomented by anti-European agitation. Apart from the instances quoted, strikes have not been of importance although there has been an undoubted wave of industrial unrest. The slipwriters in the census tabulation office at Jubbulpore were affected by the prevalent strike mania, but were content with very small concessions. The sweeper community, owing to the scarcity of its members and impossibility of replacing them, has organized successful strikes, particularly in the Nagpur Municipality, and it is probable that, owing to the favourable position for negotiating in which they are placed, they will succeed before long in materially improving their value in the labour market. The general cause of the outbreak of strikes undoubtedly was the rise in prices and the worldwide industrial unrest. This was exploited by political agitators, particularly where European interests were involved, but the subsidence of the movement when prices began to fall, and the fact that strikes were most common in the cotton mills, where the interests involved are largely those of Indians, indicate that a subsidiary place in the causation of strikes must be assigned to political agitation. The day appears to be far off when trade unionism on a scale approaching that of most advanced countries will be a powerful factor in the industrial world."

Conciliation and arbitration machinery.

There is no sort of conciliation and arbitration machinery for the settlement of industrial disputes in the province except the formal provision for such machinery as will now be available by virtue of the Trades Disputes Act having come into force with effect from the 8th May of the current year. The necessity of some machinery for conciliation and arbitration has, however, been keenly felt in connection with one or two recent strikes. Leading industrialists like Sir Sorabji Mehta of the Empress Mills and leaders of the labour movement have made informal representations to Government for the establishment of conciliation and arbitration machinery.

The local executive authorities have intervened in a few strikes and succeeded in bringing about a settlement. The local authorities although they have no legal status in the matter have intervened in the interests of the maintenance of public peace.

Although there is no machinery for settling disputes workers never experience difficulty in making representations to the management of the industrial undertakings in the province,

Trade union leaders from Nagpur have on occasions interested themselves in strikes in the moffusil and have taken part in the negotiations for settlement. For instance, Mr. Ruikar, a Nagpur lawyer and honorary secretary of the Central Provinces and Berar Textile Union acted in this way in 1927 at Pulgaon and in 1928 at Akola and utilised both the occasions for establishing local trade unions.

Trade Disputes Act.

The Act came into force in this province with effect from the 8th May 1929; but no experience of its working has yet been gained.

ATTITUDE OF GOVERNMENT.

Towards trade combinations.

The Local Government has appointed a Registrar of Trade Unions under section 3 of the Trade Unions Act, 1926; and every facility is provided for the proper registration of all *bona fide* organization. In one or two recent cases the executive authorities have used their good offices and secured the registration by the employers of such unions.

In connection with industrial disputes.

Precautions to maintain order are generally taken by the local executive authorities in all cases of strikes in which the attitude of the strikers is threatening; but Government officers do not in any way interfere in these disputes unless breach of the peace occurs or unless both the parties to the dispute seek their arbitration. The District Superintendent of Police settled one strike at Pulgaon in 1921 at the request of the parties, and the District Magistrates settled two strikes, one at Akola last year and the other at Nagpur during the current year. Both parties voluntarily accepted the arbitration of these officials.

CHAPTER XVI—LAW OF MASTER AND SERVANT.

THE EFFECT OF THE REPEAL OF WORKMEN'S BREACH OF CONTRACT ACT.

No serious complaint has been received as a result of the repeal of the Act, but the Central Provinces and Berar Mining Association reports that the effect of the repeal of the Act has been to lessen the hold of the employer upon his recruited labour and has encouraged labourers to take advances from employers without any idea of fulfilling their obligations. When the Workmen's Breach of Contract Act was in force, on satisfying a criminal court of their *bona fides*, employers were able to obtain assistance from the criminal courts to bring back labourers absconding while advances were outstanding against them. They now find it impossible to recover dues of this nature, as the only remedy lies in the civil courts.

The extent to which (i) civil, (ii) criminal law is available and used for enforcement of the law of master and servant.

No statistics are available to show the extent to which the civil or criminal law is used to enforce the law of master and servant. Criminal courts have no jurisdiction *ad hoc*; and it is believed that few cases occur in the civil courts. The Workmen's Disputes Act is in force in the province but is rarely used.

CHAPTER XVII—ADMINISTRATION.

ACTION AND ATTITUDE OF THE PROVINCIAL LEGISLATURES ON LABOUR QUESTIONS.

It is not necessary in this memorandum to refer to the labour legislation enacted in the central legislature during the last eight years. Such legislation has been enacted on a very large scale. Mr. R. W. Fulay, a Nagpur pleader, who is associated with several local trade unions and interests himself in the welfare of labour, has been nominated by Government to the provincial legislature as a representative of urban factory labour. He and a few other members put several questions in the local legislature in the years 1921, 1925, 1927, 1928 and 1929 on various matters affecting the welfare of industrial labour. Government always gave as full answers to these questions as were possible from the material available. In the session of the Council in January 1928, Mr. Fulay introduced a resolution recommending the appointment of a committee for an enquiry into the conditions of the working classes in the organized industries of the province such as mills, mines and workshops. Government opposed the resolution on the ground that the working conditions in industries were not particularly unsatisfactory and the subject-matter of the resolution came more within the purview of the central legislature. The resolution was, however, carried by the Council by 20 votes against 14 and the Local Government forwarded a copy of the debate on it to the Government of India for information. Mr. Fulay has also introduced a Maternity Benefit Bill and a Workmen's Welfare Bill in the local Council, the details of which have already been referred to in this report. The commercial and industrial interests of the Central Provinces and Berar elect two members to the local Council, one from the Central Provinces and one from Berar, and the Central Provinces and Berar Mining Association also elects one member. The attitude of the majority of the members of the legislature is, however, markedly sympathetic towards any measure affecting the welfare of labour.

Relations between Central and Local Governments.

Relation between the Central and Local Governments on labour questions have been satisfactory. Under the Devolution

Rules (Schedule I, Part II, rule 26) industrial matters included under the heads factories and welfare of labour fall within the scope of the provincial legislature, but in all such matters there has been a tendency on the part of the Local Government to leave legislation more to the Central Government in order to secure uniformity of law and practice. The Central Government has regularly consulted the Local Government in respect of all the labour questions that have come up for consideration from time to time.

Administrative authorities in various Governments.

The department of Commerce and Industry of the Government of the Central Provinces is the administrative authority which deals with all labour questions; but the revenue department is consulted in all matters relating to mines. The Department of Industries under the Director of Industries, who is also Registrar of Co-operative Credit, is in immediate charge of all matters relating to labour. Under his general supervision the Chief Inspector of Factories with his staff of Inspectors administers the Indian Factories Act. The Director of Industries is also Registrar of Trade Unions. All District Judges in the province have been appointed Commissioners under section 20 of the Workmen's Compensation Act for areas within their jurisdiction.

Work of special labour office or officers.

There is no special labour office or labour officers in the province. The factory staff is utilised for collecting such information on labour questions as is required from time to time; but the necessity of some regular organisation for the collection of labour intelligence has been keenly felt, specially in connection with the enquiries which the preparation of this memorandum has involved. With the advent of unionism labour leaders have also urged on the Government the necessity of such an organisation. A Board of Industries, consisting of representatives of the employers and the employed, has been in existence since the year 1914 and all matters affecting the interests of labour are considered by this Board. The Board, however, acts in a purely advisory capacity.

Effect of differences in law or administration in Indian States and British India.

This problem is not of importance in this province. The only industrial concern of any importance is one cotton

mill in the Rajnandgaon State. The Indian Factories Act does not apply to it, but the employees of the mill, who number about 4,000, have by their unaided efforts secured conditions which are not dissimilar to those in similar concerns in British India. Recently the leaders of the Nagpur trade union movement tried to form a union of the employees of this mill, but did not succeed on account of the opposition of the State authorities.

Acquaintance of workpeople with factory legislation.

Every effort has been made by the factory department to acquaint the workers with the provisions of the Factory Act and the Workmen's Compensation Act. Under the rules it is compulsory for a factory owner to place an abstract of the Factories Act translated into the vernacular in a conspicuous position in the factory premises. It must be remembered, however, that this alone is not sufficient as the majority of the workpeople are illiterate. The prosecutions that have been launched in recent years against the owners and managers of seasonal factories has, it is believed, been instrumental not only in acquainting workers with the law, but also in bringing home to them the fact that every effort is made to safeguard their interests both as regards safety and hours of work. It is believed that failure on the part of workers to take advantage of the Workmen's Compensation Act is rare.

ADMINISTRATION.

FACTORY INSPECTION.

Adequacy of staff.

The factory staff consists of one Chief Inspector, whose duties are combined with those of the Chief Inspector of Boilers, and two Inspectors. In addition Sub-Divisional Magistrates have been appointed as additional Inspectors, but have no power independently to pass orders. They exercise, under section 5 (a) and (b) of the Act, the power to enter and inspect a factory, reporting the result to the District Magistrate. A number of medical officers have been appointed as certifying surgeons under section 6 of the Act for the certification of children in factories situated within the limits of the areas allotted to them. As far as the perennial factories are concerned, the staff would appear to be adequate, but during the short cotton ginning season the need of

extra assistance is keenly felt. These factories are often situated in remote places where communications are bad and it is extremely difficult to pay surprise visits with sufficient frequency. During the year 1928 there were 97 perennial and 659 seasonal factories at work. The perennial factories were all visited twice at least and in some cases three or more times; and with the exception of six newly registered concerns, all seasonal factories were visited at least once during the short season of four months.

Uniformity of administration in different provinces.

The Act is an All-India Act and the rules framed under it by the various Local Governments were modelled on the draft rules circulated by the Government of India. A Conference of Chief Inspectors of Factories was held at Simla in 1924, some two years after the advent of the new act, with a view to securing uniformity in the rules.

Rigour and efficiency of administration.

The number of visits paid to the factories, together with the number of prosecutions, are indicative of the rigour of administration—

	1927.	1928.
Factories on the register—		
Perennial	87	97
Seasonal	617	659
	<hr/>	<hr/>
Total ...	704	756
	<hr/>	<hr/>
Factories inspected by Expert Inspectors—		
One visit	274	308
Two visits	232	229
Three visits	103	108
More than 3 visits	86	105
	<hr/>	<hr/>
Total ...	695	750
	<hr/>	<hr/>

The number of prosecutions has increased from 22 in 1923 (after the amendment of Indian Factories Act in 1922) to 176 in 1928, and convictions were obtained in practically every case.

Prosecutions and their result.

The following table giving particulars of prosecution for the years 1924—1928 inclusive shows the nature of the offences that are most prevalent :—

Year.	No. of prosecutions.	Results.	Convictions under sections.
1924	68	66 convicted	26 under 41 (a) 1 " 41 (b) 1 " 41 (c) 13 " 41 (f) 1 " 41 (g) 8 " 41 (h) 2 " 41 (i) 3 " 43 (a) 1 " 43 (c)
1925	63	61 convicted	24 " 41 (a) 1 " 41 (b) 1 " 41 (c) 12 " 41 (f) 3 " 41 (g) 2 " 41 (h) 1 " 41 (i) 3 " 41 (j) 1 " 43 (c)
1926	94	94 convicted	26 " 41 (a) 1 " 41 (b) 30 " 41 (f) 4 " 41 (g) 12 " 41 (h) 2 " 41 (i) 9 " 41 (j) 1 " 43 (c)
1927	111	111 convicted	22 " 41 (a) 12 " 41 (f) 3 " 41 (g) 19 " 41 (h) 7 " 41 (i) 6 " 41 (j) 1 " 43 (c)
1928	176	173 convicted	21 " 41 (a) 2 " 41 (c) 36 " 41 (f) 1 " 41 (g) 15 " 41 (h) 2 " 41 (i) 7 " 41 (j)

Fines ranged from Rs. 15 to Rs. 400 in 1928 against Rs. 15 to Rs. 300 in 1927. In some cases, particularly in those relating to the infringement of rules regulating hours of work, fines are too low to have any deterrent effect. The fines levied form a very small percentage of the profit earned by working the operatives beyond the legal time limit. District Magistrates have been asked to ensure that adequate penalties are imposed in these cases.

CHAPTER XVIII—INTELLIGENCE.

EXISTING STATISTICS.

Existing statistics on labour questions are extremely meagre. The only statistics that are available now are the following :—

- (1) Census report of 1921, which contains information on the general conditions of labour and an industrial census.
- (2) Annual reports on the administration of the Indian Factories Act on questions relating to factory labour.
- (3) An annual statement of rural and urban wages of agricultural labourers and workers employed in cottage industries.
- (4) Annual reports on the administration of the Indian Mines Act, which contain information on questions relating to labour in mines.
- (5) A bulletin on index numbers for the cost of living at Nagpur and Jubbulpore, specially prepared during the years 1926 and 1927.
- (6) A certain amount of information regarding health, housing, welfare and vital statistics is also available from the annual reports of the Departments of Public Health and Civil Hospitals.

Method of collection.

The statistics in the census report were collected by the census staff by personal enquiry as well as from returns made by the managers of industrial concerns. The statistics in the annual report on the Factories Act are based on returns received from factory managers and on a certain amount of personal investigation made by the inspecting staff. The statement of annual rural and urban wages is prepared from information supplied by the revenue authorities of the districts after general enquiries made through Tahsildars. The statistics of the cost of living index numbers were collected by an officer of the Provincial Service, placed on special duty for the purpose, by personal enquiries in the labour colonies of Jubbulpore and Nagpur over a period of one year. The annual reports of the Departments of Public Health and Civil Hospitals are prepared from the registers maintained in the public hospitals in the interior and in municipal offices.

Degree of accuracy.

The Superintendent of Census operations remarks in the 1921 report that the accuracy of the industrial census was not ideal as the investigators often did not understand the exact character of the enquiries to be made and there was a distinct tendency on the part of the enumerating staff to give inadequate information. Further errors arose in tabulation as the low paid staff to whom it had to be entrusted was not in spite of supervision sufficiently intelligent for the task. It is believed that the percentage of error was not very great.

The same remarks apply to the statistics prepared every year for the annual report on the Factories Act from the returns submitted by factories. This work is often left to clerks of low education who cannot be expected to notice that a return is obviously incorrect. While statistics regarding the number of operatives and hours of work are generally accurate those of wages leave much to be desired. The statement of rural and urban wages is based on very rough and ready enquiries made at tahsil headquarters. The special officer deputed to prepare the Cost of Living Index Numbers had to contend with difficulties arising from the aversion of workers to supply true information about their affairs. But it is believed that the margin of error is not great, and the investigation disclosed sufficiently accurately the trend of the cost of living.

Possibility of improvement in statistics.

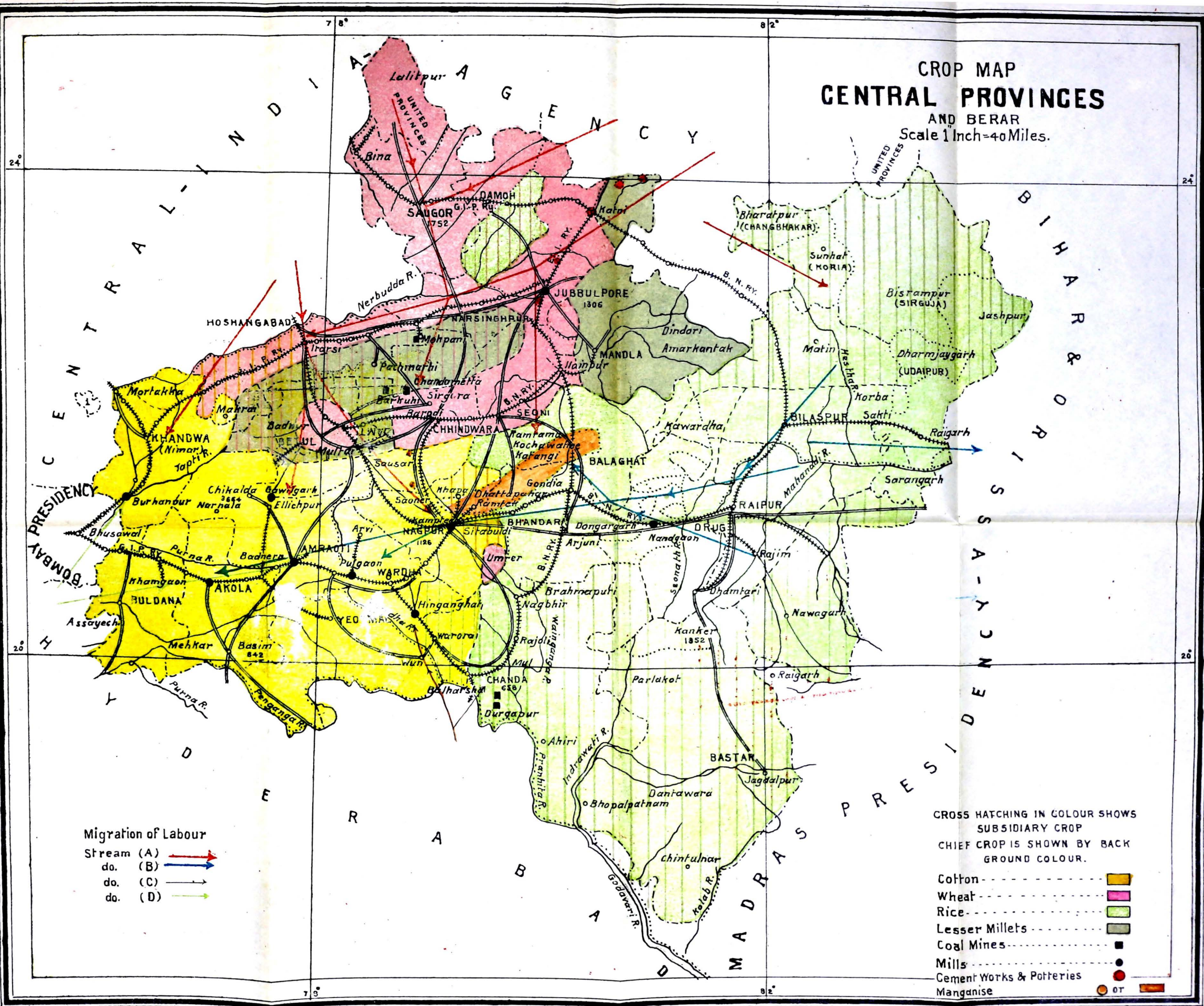
The only method by which more accurate and complete statistics can be secured is by the work being undertaken by Government. This would involve the creation of a separate department in the charge of a trained statistician. Power would have to be taken to enforce employers to give information, but care should be taken that they are not compelled to give information the disclosure of which would be injurious to their business. It is not anticipated that Trade Unions will be in a position to assist in the compilation of statistics for a very long period.

The Investigation into the cost of living.

An officer of the Provincial Service was placed on special duty in 1927 and he conducted enquiries at Nagpur and Jubbulpore. The results of his labours have now been published in the form of a bulletin. These figures for the two towns are now being kept up to date every month. A copy of the bulletin has already been submitted to the Government of India.

CROP MAP CENTRAL PROVINCES AND BERAR

Scale 1 Inch = 40 Miles.



Migration of Labour

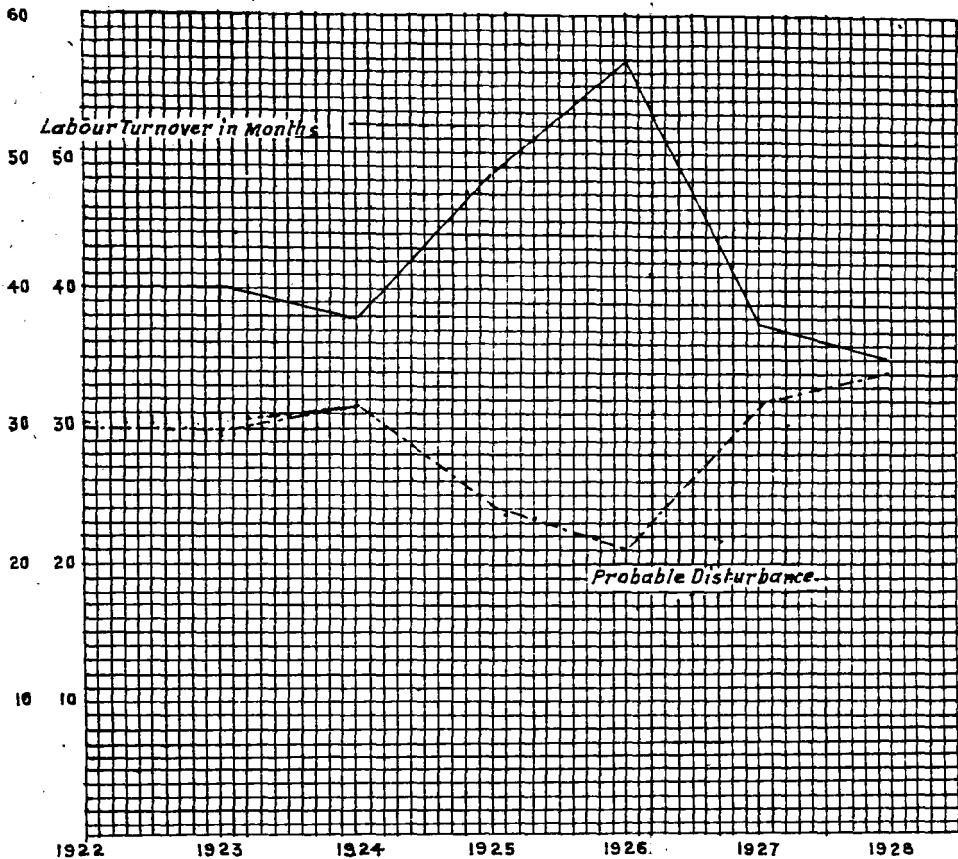
- Stream (A)
- do. (B)
- do. (C)
- do. (D)

CROSS HATCHING IN COLOUR SHOWS
SUBSIDIARY CROP
CHIEF CROP IS SHOWN BY BACK
GROUND COLOUR.

- Cotton
- Wheat
- Rice
- Lesser Millets
- Coal Mines
- Mills
- Cement Works & Potteries
- Manganese

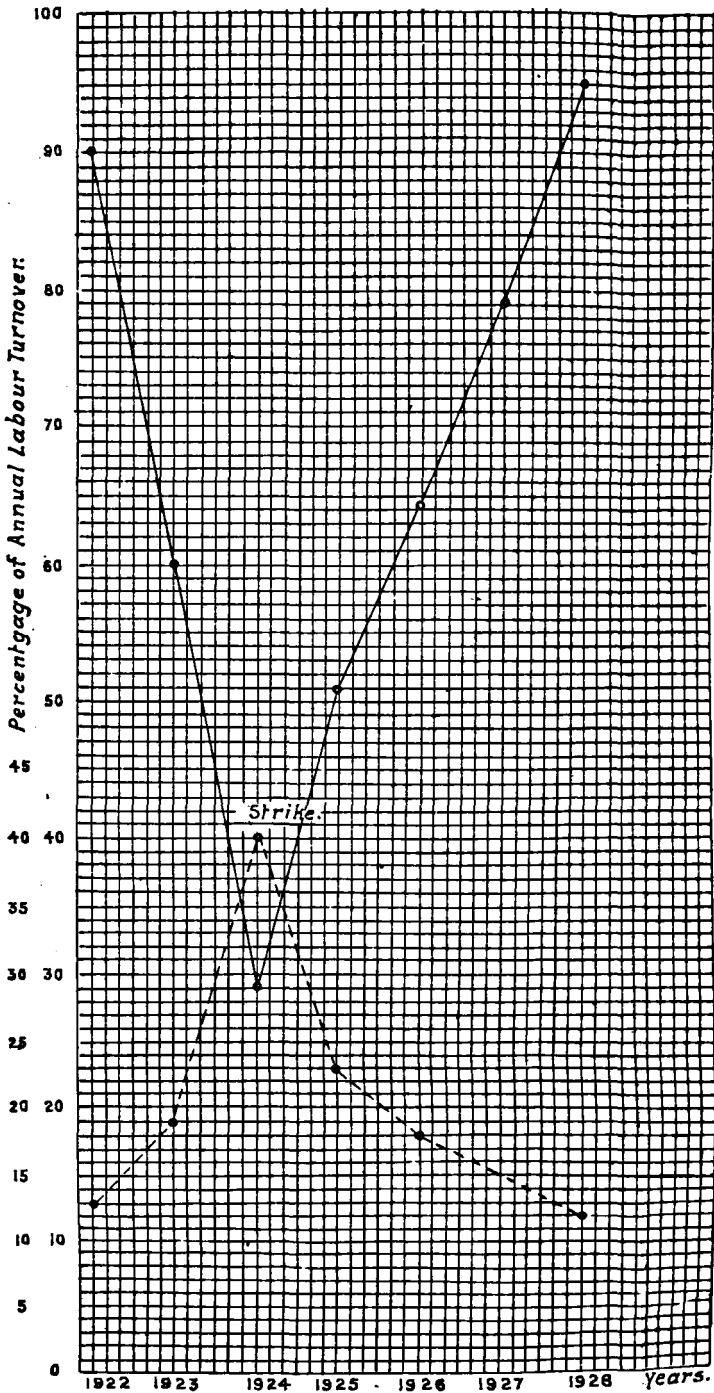
APPENDIX II
 LABOUR TURNOVER
 IN
 PULGAON MILLS PULGAON

Percentage Turnover Per annum.



APPENDIX III LABOUR TURNOVER IN NAGPUR MILLS (EMPRESS.)

Turnover
in
Months.



APPENDIX IV.

I.—GINNING PRESSING FACTORIES.

Average daily number of persons employed 39,500.

No regular housing arrangements are provided. Less than one per cent of the operatives who belong to certain class of mechanics, such as engineers, fitters, etc., are provided with free quarters.

II.—Cotton Spinning and Weaving Mills.

Average daily number of persons employed 19,500.

Name of factories.	Description and number of rooms.	Accommodation available.	Accommodation utilized and rent paid.	Approximate number of operatives housed.
The Empress Mills...	108 houses in Indora settlement. 72 rooms, i.e., 6 chawls of 12 rooms each. 60 supervisors' quarters.	72 rooms ...	Owned by work- kers. 56 rooms Re. 1 per month. Free ...	294
The Model Mills, Limited.	600 rooms with verandah and path.	600 families	297 rooms. Re 1 per month.	600
Rai Bahadur Bansilal Mills.	do. ...	50 families	Re 1 per month	100
Burhanpur Tapti Mills, Limited.	Kutchha ...	232	Free ...	950
	New ...	31	8 annas per month.	
	Old pucca ...	185	6 annas per month.	
	Total ...	448		
Akola Cotton Mills, Limited.	...	330 rooms...	4 annas per month, 6 annas per month, 8 annas per month.	600
Berar Manufacturing Company.	...	...	12 annas per month.	558
Vidarbha Mills ...	...	224 rooms...	8 annas per month.	450
Raja Gokuldas Mills	...	59 quarters	12 annas per month.	112

III.—Other industries registered under the Indian Factories Act—

Average number of persons daily employed—12,180.

Name of factory.	Description and number of rooms.	Accommodation available.	Accommodation utilized and rent paid.	Approximate number of operatives housed.
(a) Gun Carriage Factory.	775 quarters ...	...	12 annas to Rs. 4 per month.	666
(b) Bengal-Nagpur Railway Workshops.	127 quarters ...	97 occupied	8 annas to Rs. 2 per month.	97
(c)	...	...	...	...
(d) Laxmi Oil Mill, Akola.	Huts are built on factory's land.			33
Amrit Match Factory, Kota.	...	150 operatives.	Free ...	25 closed
(e) Central Provinces Portland Cement Works.	240 ...	...	Free ...	350
United Cement Company.	Provide quarters	...	Free ...	150
Burn and Company	Provide houses	...	..	100
Perfect Pottery Works, Jubbulpore.	Brick built rooms.	...	Free ...	500
Katni Cement Company.	150 quarters ...	...	Free ...	200

IV.—There is practically no information except for a few shellac factories, where imported labour is provided with free quarters.

APPENDIX V.
Statement of Accidents from 1924 to 1928.

Serial No.	Classification of industry.	Total number of accidents in 5 years.				Incidence of accidents per 100 persons of average daily employees.				
		Due to moving machinery.	Due to fall of persons or objects or flying chips.	Caused by fire or electricity or chemicals.	Miscellaneous including transport.	1924.	1925.	1926.	1927.	1928.
						Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1	Spinning and weaving mills ...	239 ^a	65 ^a	13	65 ¹	0.40	0.38	0.46	0.44	0.33
2	Motor works ...	...	4	1	5	0.84	1.72	0.98	2.54	2.20
3	Electric power house ...	...	4	1	...	3.85	5.0	...	...	0.64
4	General engineering ...	3	3	...	1	1.21	1.25	0.42	...	...
5	Railway workshop ...	27	96 ¹	7	61	2.11	3.86	2.63	3.53	5.86
6	Tramway works ...	...	...	...	...	...	0.70	...	...	...
7	Distilleries ...	...	...	1	...	...	...	...	...	...
8	Flour mills ...	...	...	...	...	...	...	...	...	3.33
9	Ice factories ...	...	1 ¹	...	...	...	...	...	...	0.34
10	Rice mills ...	2	1	1	...	...	...	...	...	...
11	Water pumping stations ...	...	...	...	...	...	...	...	...	...
12	Dye works ...	...	...	...	...	...	...	...	...	...
13	Gas works ...	...	...	...	...	...	...	...	...	...
14	Oil mills ...	21 ¹	1	1 ¹	1	0.56	1.36	1.20	1.07	0.56
15	Match factories ...	...	...	1	...	...	...	1.43	0.41	...
16	Paint works ...	...	...	...	1	...	...	...	...	0.33
17	Printing Presses ...	2	...	...	...	...	...	...	...	...
18	Brick and tile works ...	...	...	...	...	...	...	...	...	...
19	Cement works and potteries ...	47 ^a	24 ¹	27 ^a	21 ^a	0.94	0.81	0.82	1.22	1.08
20	Glass works ...	...	...	...	...	...	...	4.88	...	5.66
21	Saw mills ...	2	3	...	...	...	...	...	...	...
22	Forage press ...	...	...	...	...	...	...	...	...	...
23	Ordnance factories ...	86	198 ¹	24	96 ¹	4.70	2.62	2.77	3.96	4.41
24	Ginning and pressing factories ...	109 ^a	33 ^a	22 ¹	55 ^a	0.10	0.138	0.072	0.09	0.137
25	Miscellaneous ...	...	...	...	...	...	...	...	...	...

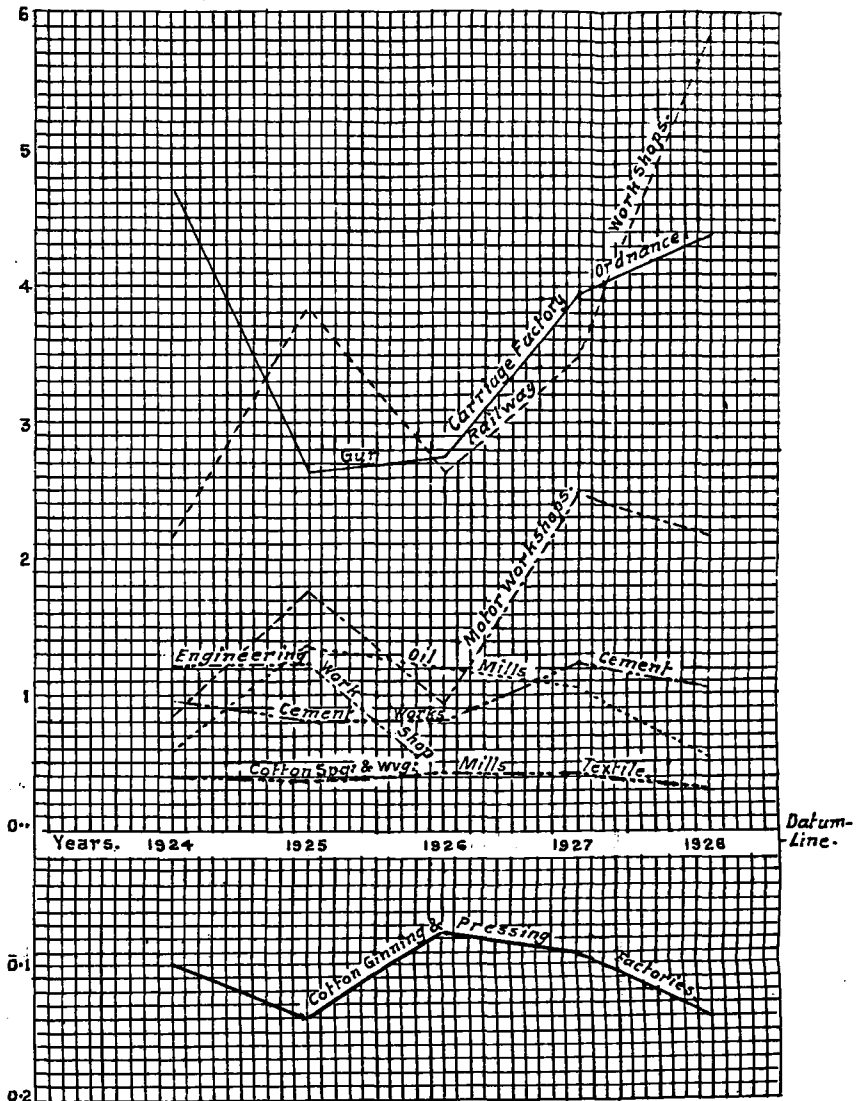
NOTE.—Indices in small numbers give the number of accidents that resulted fatally.

APPENDIX VI

INCIDENCE OF ACCIDENT

PER 100 PERSONS DAILY EMPLOYED

Incidence (%)



Percentage Incidence.

APPENDIX VII ACCIDENT CHART.

AV: Daily
No of persons
employed.

Incidence
Accidents of
per 100 daily
employed.

80-000

0.4

Total
Accidents.

70-000

350

60-000

300

0.3

50-000

250

40-000

200

0.2

No of
Serious
Accidents.
70

30-000

150

0.15

20-000

100

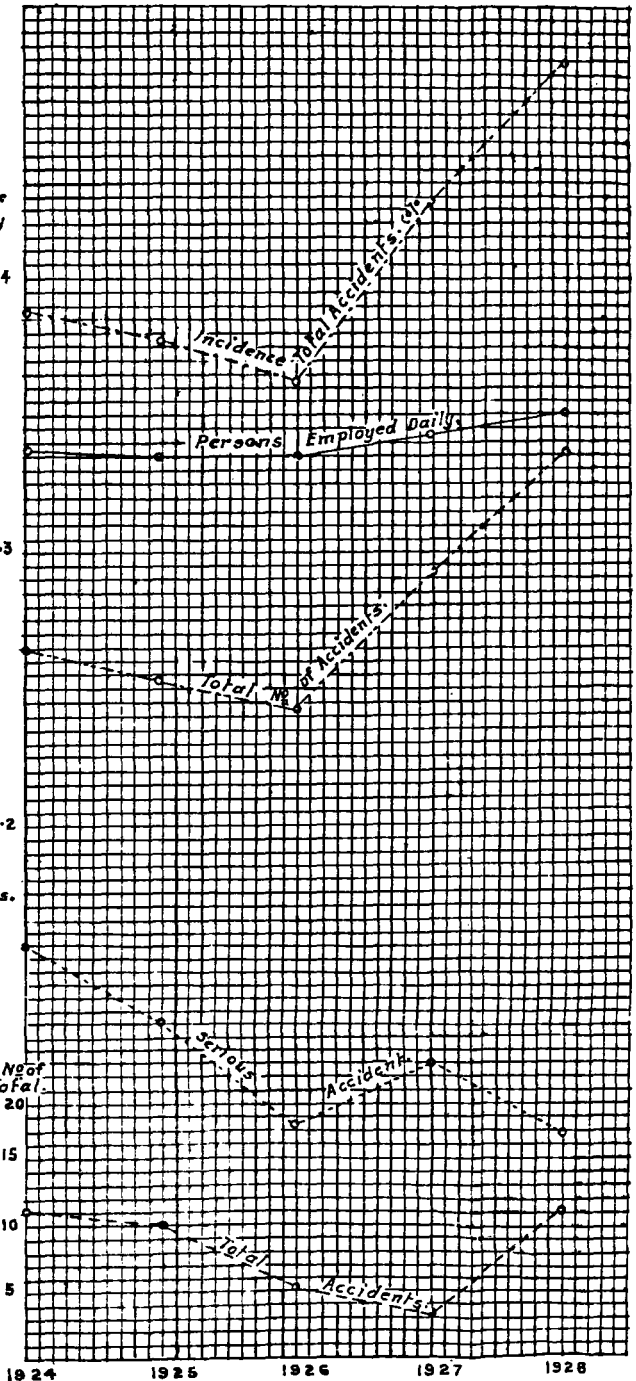
0.1

10-000

50

0.05

0



APPENDIX VIII.

Statement of statistics in the Central

Year.	Number of disputes.	Number of work people involved.	Number of working days lost.	Particulars.
1921 ...	4	3,870	29,690	<p>(1) Raja Gokuldas Mills, Jubbulpore. The strike lasted for four days.</p> <p>(2) Sir Hukumchand and Dalmia Mills, Akola. Strike lasted for nine days.</p> <p>(3) Pulgaon Cotton Mills, Pulgaon. Strike lasted for seven days.</p> <p>(4) Savatram Ram Prasad Mills, Akola. Strike lasted for eleven days.</p>
1922	6	14,680	170,877	<p>(1) Burhanpur Tapti Mill. The strike lasted for 11 days.</p> <p>(2) Raja Gokuldas Mills, Jubbulpore. The strike lasted for 12 days.</p> <p>(3) Bengal-Nagpur Cotton Mills, Rajnandgaon. The strike lasted for three days.</p> <p>(4) Rai Bahadur Bansilal Abirchand Mills, Hinganghat. The strike lasted for 23 days.</p> <p>(5) Bengal-Nagpur Cotton Mills, Rajnandgaon. The strike lasted for ten days.</p> <p>(6) Empress Mills, Nagpur. The strike lasted for 12 days.</p>
1923 ...	5	6,719	58,255	<p>(1) Raja Gokuldas Mills, Jubbulpore. The strike lasted for 43 days</p> <p>(2) Raja Gokuldas Mills, Jubbulpore. The strike lasted for 25 days.</p> <p>(3) Sir Hukumchand Dalmia Cotton Mills, Akola.</p> <p>(4) Murtizapur-Ellichpur-Y e o t m a l Branch Line.</p> <p>(5) Bengal-Nagpur Cotton Mills ...</p>

DIX VIII.

Provinces and Berar from 1921.

Cause.	Settlement.	Remarks.
(1) Inadequacy of wages.	(1) By raising the grain compensation allowance from 40 to 50 per cent.	
(2) Bonus demanded.	(2) Bonus and Rs. 1,000 as reward paid.	
(3) Non observance of "har-tal" by the mill coupled with demand for grain compensation allowance at 75 per cent and grain at cheaper rate.	(3) Resumed unconditional-ly and grain was cheapened from 4½ pailies to 4¼ pailies.	
(4) Demand of dearness allowance, reduction in working hours, extra pay for extra work and full wages for closing the mill on account of engine trouble.	(4) Payment of one month's bonus, discharged persons to receive bonus for days worked, increase in dearness allowance and pay of machine and boiler department men to be calculated on the basis of 26 working days to constitute a month.	
(1) Increase in wages.	(1) Demand refused and workers resumed un-conditionally.	
(2) Not known.	(2) Resumed unconditional-ly.	
(3) Increase in wages.	(3) Do. do.	
(4) Increase in wages and dearness allowance.	(4) The wages of piece workers increased by 12½ per cent.	
(5) Reinstatement of dis-missed workers. Remo-val of weaving master.	(5) Resumed unconditional-ly.	
(6) Demand for early pay-ment of bonus and allegations of ill-treat-ment by overseers.	(6) Do. do.	
(1) Extra wages.	(1) Resumed unconditional-ly.	
(2) Owing to trade depres-sion bonus paid at half rate.	(2) The workers got a dhoti in addition to bonus.	
(3) Demand for payment of bonus in before 2nd March.	(3) Resumed unconditional-ly.	
(4) Resentment at a reduc-tion in the number of fremen.	(4) Fresh men were employ-ed.	
(5) In continuation of previous strike.	(5) Resumed work uncondi-tionally.	

APPEN
Statement of statistics in the Central

Year.	Number of disputes.	Number of work people involved.	Number of working days lost.	Particulars.
1924	3	10,183	606,062	(1) Sir Hukumchand Mills, Akola. The strike lasted for 24 days. (2) Bengal-Nagpur Cotton Mills, Rajnandgaon. The strike lasted for 69 days. (3) Empress Mills, Nagpur. The strike lasted for 62 days.
1925	7	4,759	128,252	(1) Badnera Mills. The strike lasted for 77 days. (2) Raja Gokuldas Mills, Jubbulpore. The strike lasted for 33 days. (3) Jubbulpore sweepers. Five days' strike. (4) Savatram Mills, Akola. Twelve days' strike. (5) Taxi drivers, Yeotmal. Forty-six days' strike. (6) Hukumchand Mills, Akola. Six days' strike. (7) Municipal sweepers, Nagpur. Five days' strike.
1926	4	1,514	105,298	(1) Municipal sweepers, Kamptee. Three days' strike. (2) Municipal sweepers, Damoh. Ten days' strike. (3) Savatram Mills, Akola. Strike lasted for 50 days. (4) Raja Gokuldas Mills, Jubbulpore. Work stopped for 107 days.
1927	4	2,000	82,350	(1) Savatram Mills, Akola. Strike lasted for 18 days. (2) Bengal-Nagpur Railways. (3) Pulgaon Mills. Strike lasted for 70 days. (4) Raja Gokuldas Mills, Jubbulpore. Strike lasted for eight days.
1928	1	1,287	19,305	(1) Akola Cotton Mills. Strike lasted for 46 days.

DIX VIII—contd.

Provinces and Berar from 1921—contd.

Cause.	Settlement.	Remarks.
(1) Non-payment of bonus	(1) Resumed work unconditionally.	
(2) Demand for reduction in working hours.	(2) Agreed to work for 10 hours.	
(3) Demand for increase in wages and reduction in working hours.	(3) Resumed work unconditionally.	
(1) Demand for increase in grain compensation allowance.	(1) Resumed work unconditionally.	
(2) Owing to reduction in grain allowance.	(2) Allowance raised.	
(3) Non-payment of hutting allowance.	(3) Resumed work unconditionally.	
(4) Demand for payment of wages for closing the mill on a working day.	(4) Resumed work unconditionally.	
(5) Objection to monthly inspection of taxis and demand for appointment of a local inspector.	(5) Strike ended with unconditional surrender.	
(6) On account of dispensing with the services of some mill workers.	(6) Resumed work and wages were paid.	
(7) Demand for increase in pay, privilege leave and provident fund, etc.	(7) Resumed work unconditionally.	
(1) Demand for increase in pay.	(1) Resumed work unconditionally.	
(2) Demand for increase in pay.	(2) Resumed work unconditionally.	
(3) Owing to reduction in allowance.	(3) Resumed work when account was settled.	
(4) Closing of mills owing to plague and trade depressions.	(1) Mill resumed work on the 15th January 1927.	
(1) Demand for increase in wages and reduction in working hours.	(1) No demands were granted.	
(2) Political reasons—sympathetic strike.	(2) Not known.	
(3) Discontinuance of bonus and reduction in allowance.	(3) Strike ended and the workmen were given advances for purchasing grains.	
(4) Resentment at issue of passes to regulate absence.	(4) Resumed unconditionally.	
(1) Demand for increase in wages.	(1) Strike ended as certain concessions were granted.	

Statement of statistics in the Central

Year.	Number of disputes.	Number of work people involved.	Number of working days lost.	Particulars.
1929 ...	2	1,650	13,980	(1) Municipal sweepers, Nagpur. Strike lasted for 13 days. (2) Rai Sahib Reckchand Mohota Mills, Hinganghat. Three days strike.

DIX VIII—concl'd.

Provinces and Berar from 1921—concl'd.

Cause.	Settlement.	Remarks.
(1) Demands for increase in wages, shorter hours and annual leave.	(1) Resumed work on old terms of wages, hours and leave. No strike-pay, but consideration of compassionate allowance for the discharged sweepers was promised.	
(2) Grievances against time office and accounting system for wages.	(2) Grievances redressed.	