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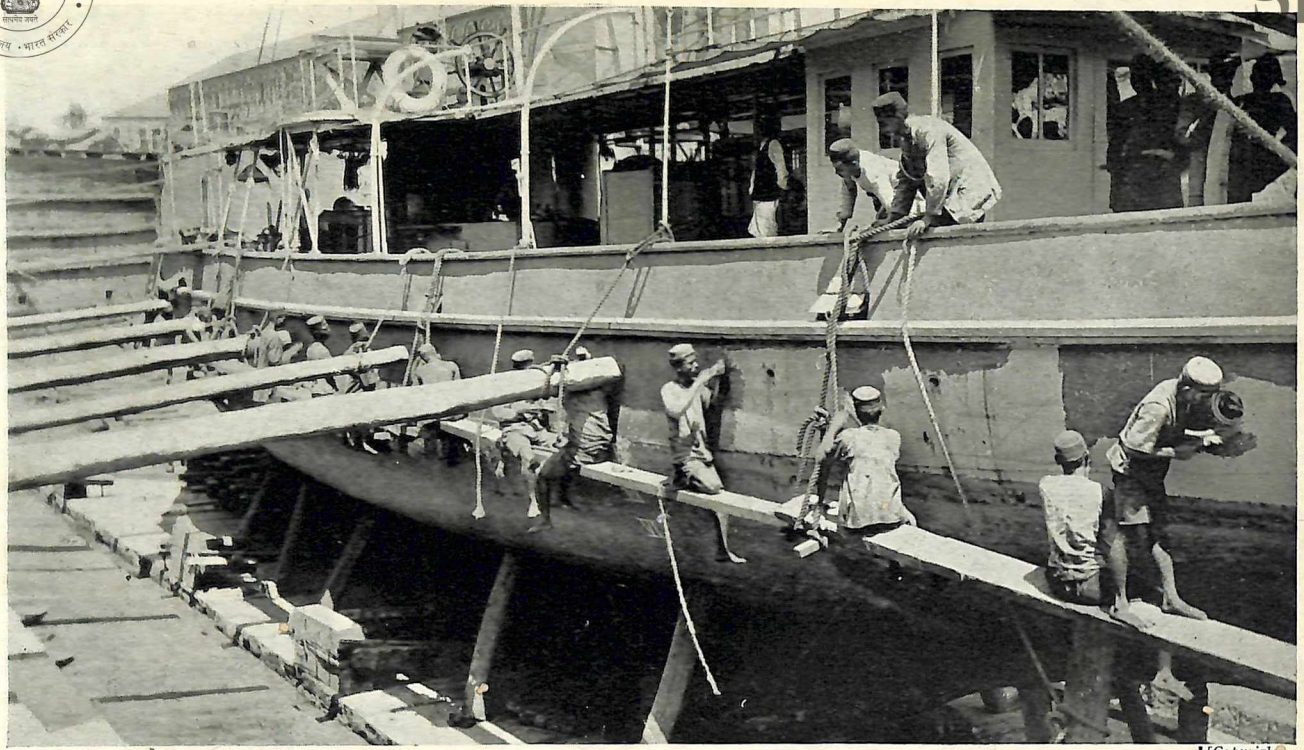
LABOUR AND HOUSING IN BOMBAY



R.I.M. DOCKYARD—" CHIPPING."

LABOUR AND HOUSING IN BOMBAY

A STUDY IN THE ECONOMIC CONDITIONS OF THE WAGE-EARNING CLASSES IN BOMBAY

BY

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FOREWORD

INDIA ranks at the International Labour Office at Geneva as one of the great industrial countries of the world. But during this period of universal trade depression the whole future of her manufacturing industries is giving food for anxious thought. When I left Bombay in March, 1925, there was apparent a most pregnant fact. Notwithstanding natural advantages which should have been decisive—raw material at the doors and an immense home market—Bombay yarn was being undersold in the local market by the products of the mills of Japan and Shanghai, not only on price but on quality, and this despite a substantial measure of protection. The explanation generally offered for this fact was that apart from the adventitious influence of the Exchanges, the mill labour of Japan and Shanghai was more efficient and cheaper than that of Bombay. Those who look below the surface are convinced that the whole prosperity of India is not so much a question of tariffs as of increasing the efficiency and stability of the labour force.

Indeed, the condition of the Labour force in the industrial centres of India is one which sadly perplexes the industrialist, the humanitarian and the sociologist. The aged fiction that India is a land with an unlimited supply of cheap labour persists in England; it has long ceased to bemuse the industrialist in India. Under ordinary conditions—periods of exceptional depression like the present excluded—the supply of labour in Indian industries, even in the staple agricultural industry, is never sufficient, and in relation to quality and quantity of output it is not cheap. The reasons for this are found deep down in the social

conditions of the people. Although the great textile industries are three-quarters of a century old, there has not yet been evolved a permanent corps of craftsmen. A prominent industrialist declared of the Bombay mill operative that an agriculturist he was, an agriculturist he is, and an agriculturist he will be. Mr. Burnett-Hurst puts the position less epigramatically, but with absolute truth, when he says that in the chief centres of industry " employers are compelled to depend upon a fluctuating labour population, consisting largely of semi-agriculturists, who migrate hundreds of miles and only reside in the towns for part of the year, returning to their villages when their labour is required for agricultural operations." The chief consequences of this incessant migration are a low standard of technical efficiency, an absence of responsibility arising from treatment of factory work as a disagreeable necessity only to be practiced long enough to enable the worker to earn enough to return to his village, and a social disruption separating the worker from his home and his family for long periods. This in turn has its roots in the deplorable living conditions in the chief centres of industry. In the pages which follow, Mr. Burnett-Hurst gives a vivid picture of life in the immense tenement houses where the Bombay labourer resides, and he has not over-emphasized its squalor and discomfort. The whole future of Indian industry, based as it must be on an efficient and contented labour force, is bound up with an improvement in the hygienic conditions in the great industrial centres.

Until recently we have not been in possession of the information necessary to provide the foundation for an effective policy. When I presided over a Committee formed in 1920 to consider the possibility of devising means for the settlement of the industrial disputes which were then so common, we found that there did not exist the data on which a conciliation or arbitration tribunal could decide on the economic merits of a strike. On our recommendation there was set up the efficient Labour Office of the Bombay Secretariat, which has thrown a flood of light on the conditions of labour in the city. Two years later,

when I was asked to conduct a more formal inquiry into the same subject, it was unanimously agreed that the first essential to a better state of affairs was improved housing. In both these respects great progress has been made. The inquiries of the Labour Office, and of unofficial investigators like Mr. Burnett-Hurst, have kept public opinion in accurate touch month by month with the economic condition of the labouring classes. The work of the Development Directorate, inaugurated by Sir George Lloyd, was originally designed to furnish sanitary housing for a quarter of a million of people, and there are signs that the provision of better accommodation has temporarily outstripped the demand. The depressing picture, limned by Mr. Burnett-Hurst, of the homes of the people therefore belongs to the past rather than to the present, although the insanitary tenement is still too much in evidence, and full advantage will not be reaped from the work of the Development Directorate until there is a more active policy in the destruction of dwellings which are obviously unfit for human habitation.

Two other evils spring from the migratory habits of the Indian workmen. One is that higher wages are not always, nor even generally, reflected in the betterment of the recipient; they are too often lost in increased absenteeism, even now reckoned as high as 20 per cent. The other is the existence of a large parasite class preying on the worker. Heavy toll is taken of his wages by the money-lender, the jobber or labour supplier, the foreman and the liquor seller, with more recently the "bucket-shop" keeper. At almost every stage the wage-earner is mulcted of some fraction of his wage. This leads to the conclusion that the immediate problem of Indian industry is not so much the raising of wages, for there are many signs that industry cannot bear higher charges, as the extraction of higher service for the wages paid, and securing to the worker a better return for the wages which he is supposed to receive.

In these directions a healthy beginning has been made. Several of the most progressive mill-owners have established and encourage welfare work amongst their employees. The Social Service League and other philanthropic bodies are

spreading co-operation as an alternative to the money-lender, whose charges are anything from 75 to 150 per cent. per annum. The drink traffic is being restricted. Housing and sanitary conditions are improving and education is being extended. The Child Welfare Movement, inaugurated by Lady Willingdon and pressed forward by Lady Lloyd, is tackling the appalling infant mortality. But we have so far only touched the fringe of these immense problems, and the pages of Mr. Burnett-Hurst's work indicate how much remains to be done.

The great essential is that all who are interested, either directly or indirectly, in the future of Indian industry, should take to heart the advice which Mr. Stanley Baldwin gave to the City of London—to think economically, to go down to the homes of the people and see how they live. That is what Mr. Burnett-Hurst has done in this thesis, and it can be unreservedly commended to all who desire to know something of Indian industry. I have indicated only a few of the economic problems which confront all who are responsible for the governance of India. Associated with these is a complete inquiry into the question of industrial fatigue in sub-tropical conditions, with special reference to the pressure of intensive labour as compared with lighter work for longer periods; the influence of malaria on physical efficiency and absenteeism; and the quality of the food supply. I am convinced that a great work which remains to be done is the establishment of the canteen system in Indian factories, securing to the worker a substantial meal in the middle of the day, and the advent of the entrepreneur, who will do for Indian cities what Lyons have accomplished in London in providing good and cheap food for all classes of society.

STANLEY REED.

AUTHOR'S PREFACE

THIS study was undertaken at the request of the Ratan Tata Foundation of the University of London, and claims to be the first attempt to make a fairly comprehensive survey of the life and labour of the industrial classes in an Indian city. The material collected is largely the result of personal inquiries or observation during the author's residence in Bombay (1916–19) and subsequent brief visits to that city. Where the information collected has been supplemented by extracts from official or unofficial publications, this is stated and the reference is given.

The writer has to acknowledge the very great kindness of the employers, employees and social workers who have lent assistance in making the survey as complete as possible. Those to whom he owes thanks are too numerous to mention individually, but he must especially express his indebtedness to the late Mr. C. B. Lalaye, Mr. S. K. Bole, Mr. J. P. Orr, Mr. N. M. Joshi, Mr. H. A. Talcherkar and Mr. G. K. Devadhar. His special thanks are also due to Miss M. E. Bulkley for her criticisms and valuable suggestions, to Miss Dorothy Wilford for preparing the map of Bombay City and Island, and to Miss W. G. Thompson for assistance in proof-reading. The photographs illustrating this work were taken by the author unless otherwise stated.

A. R. BURNETT-HURST.

LONDON, W.14.
June, 1924.

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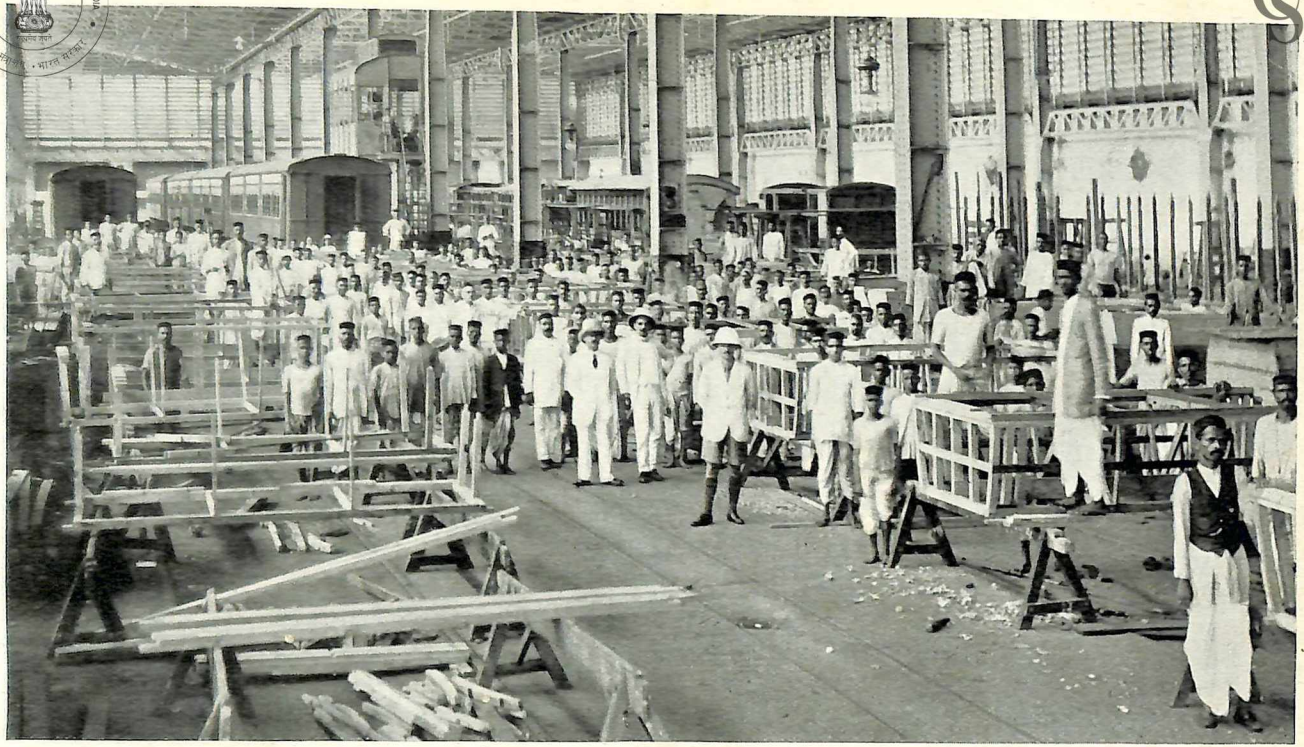

G.I.P. RAILWAY WORKS. CARRIAGE REPAIR SHOP.
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LABOUR AND HOUSING IN BOMBAY

CHAPTER I

GENERAL CHARACTERISTICS OF THE CITY OF BOMBAY

BOMBAY at one time consisted of seven separate islands which have by engineering skill and extensive reclamations of submerged areas been converted into the modern Island of Bombay. The island now comprises an area 11½ miles long and 3 to 4 miles wide over the greater part of its length. In shape it is commonly said to resemble " a withered leg with a very high heel (Malabar Hill) and pointed toe (Colaba)." Except for the broken ridges of low hills which flank the western and eastern sides, the island is low-lying. It lies N.NE. and S.SW. amid a group of islands off the coast of the Northern Konkan, Western India. Causeways at the northern end link it to the larger island of Salsette, which in its turn is connected by similar means with the mainland.

The city of Bombay, situated on the southern extremity of the island, is comparatively modern. Although in the early eighteenth century it became the seat of Government in Western India and subsequently an important centre of the Indian cotton trade, yet it was not until after 1850 that the great development of the city commenced. The construction of railways from the 'sixties onwards placed Bombay in close touch with the cotton tracts and distant parts of the country. The American Civil War and the

Lancashire Cotton Famine enabled Bombay cotton merchants to take advantage of the favourable situation, and a vast amount of wealth, estimated at 81 millions sterling, poured into the city. Much of this was squandered in the Share Mania, but, later, reaction set in, investors became cautious and only sound schemes were supported. Cotton factories were established and, since the 'seventies, industry and trade have rapidly developed. Hence we can say that the foundations of the modern Bombay were laid in the 'sixties. The expansion in industry and trade has been accompanied by considerable growth in population, earning for Bombay the second place among the cities of the British Empire. In 1921 it contained 1,176,000 inhabitants, as compared with 644,000 in 1872.

The density of Bombay City and Island was 78 persons per acre in 1921—not an exceptional figure for a large industrial centre. The area, however, includes all inland water, such as salt pans, dock basins, creeks, etc., in addition to cotton "greens," railway yards, etc. When an analysis is made of densities in the various wards and sections of the town, we find a considerable variation. In three sections the density per acre is 700 or more, and in five others it is over 500. If we exclude the sections with a density of less than 100 persons to the acre, it leaves us with an area of 2,734 acres and a population of over 687,000 persons, i.e., nearly 60 per cent. of the inhabitants reside in less than one-fifth of the total area, the average density being 250 persons per acre. This high density is largely due to the fact that the expansion of the city is only possible in one direction, viz., northwards.

Much rivalry exists between Calcutta and Bombay over the claim of each to be regarded as the greatest manufacturing centre in India. It is not our intention to enter this controversy. We shall merely content ourselves with a brief survey of the principal industries of Bombay. Chief of these is cotton-spinning and weaving, for which the city has exceptional facilities—humidity of atmosphere, a vast cotton hinterland, power from the Tata Hydro-Electric Works, ready means of marketing by railing "up-country"

KOLIS TWISTING STRING FOR THEIR NETS.

and shipment abroad, and, until recently, a cheap and fairly plentiful labour supply.

In 1921 there were in Bombay eighty-five cotton spinning and weaving factories, employing a daily average of 146,000 persons. The only other centre in India with a large concentration of cotton mills is Ahmedabad. The capital of Gujarat boasts sixty-eight cotton mills, but only 55,000 workers.

Railway workshops rank next in importance. There are six workshops employing nearly 18,000 men. The work largely consists of assembling parts of locomotives imported from England, the repair and rebuilding of rolling stock, the building and fitting of carriages and wagons, the carrying-out of general repairs and the manufacture of articles required for the "permanent way." During the War, large quantities of munitions were produced; ambulance wagons and armoured cars and trains were also built.

There are three constructional dockyards, i.e., the Royal Indian Marine, the British India Steam Navigation Co., and the Bombay Steam Navigation Co. The total number of persons employed in them is 10,000.

The following table shows the average daily number of persons engaged in different industries:

AVERAGE DAILY NUMBER (00's) OF PERSONS EMPLOYED IN FACTORIES, ETC.

	1914	1918	1921
Cotton Factories . . .	1,051	1,212	1,463
Railway Workshops . .	144	160	179
Government Dockyards .	15	49	43
Other Dockyards . . .	21	51	59
Printing Presses—Private .	32	30	37
Printing Presses—Government	8	6	7
Engineering Workshops—Govt.	18	13	20
Engineering Workshops—Private	11	14	13
Iron and Brass Foundries .	29	32	35
Dye Works	15	26	30
Motor Works . . .	3	6	19
Kerosene Tinning and Packing Works	13	15	20
Silk Mills	12	12	13
Mint	5	12	6

AVERAGE DAILY NUMBER (00's) OF PERSONS EMPLOYED IN FACTORIES, ETC. (*contd.*)—

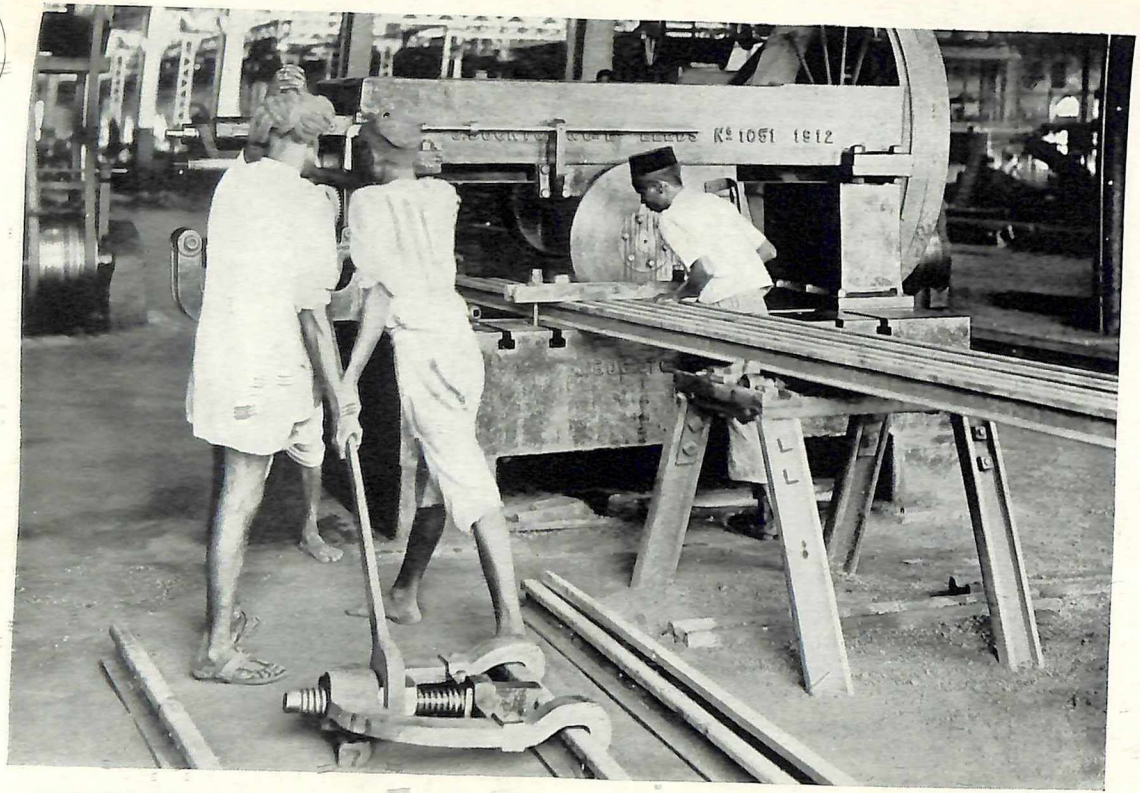
	1914	1918	1921
Tramway Works . . .	4	11	9
Gas Works	5	7	7
Flour Mills	6	7	7
Saw Mills	4	5	5
Municipal Works . . .	3	4	6
Woollen Mills . . .	7	13	3

The above figures relate only to those establishments to which the Factories Act applies. They do not include the large body of coolies [1] working in the Port Trust docks, railway employees (other than those in workshops) and persons engaged in small industrial establishments. Some interesting facts emerge from the table. During the seven years, the number of cotton operatives has risen by 40 per cent., and workers at the dockyards by nearly 200 per cent.; tramway employees show a large increase in number; there has also been a great development of motor-body building and repair work; while most of the other industries show an increased number of employees.[2] During the War most industries and trades of the city enjoyed a period of exceptional prosperity. Cotton mills, railway workshops, motor works, docks, etc., were largely engaged in meeting military requirements, while those industries which were not directly affected by Army contracts took advantage of the absence of foreign competition. The demand for labour greatly increased and the influx of population which followed was considerable.

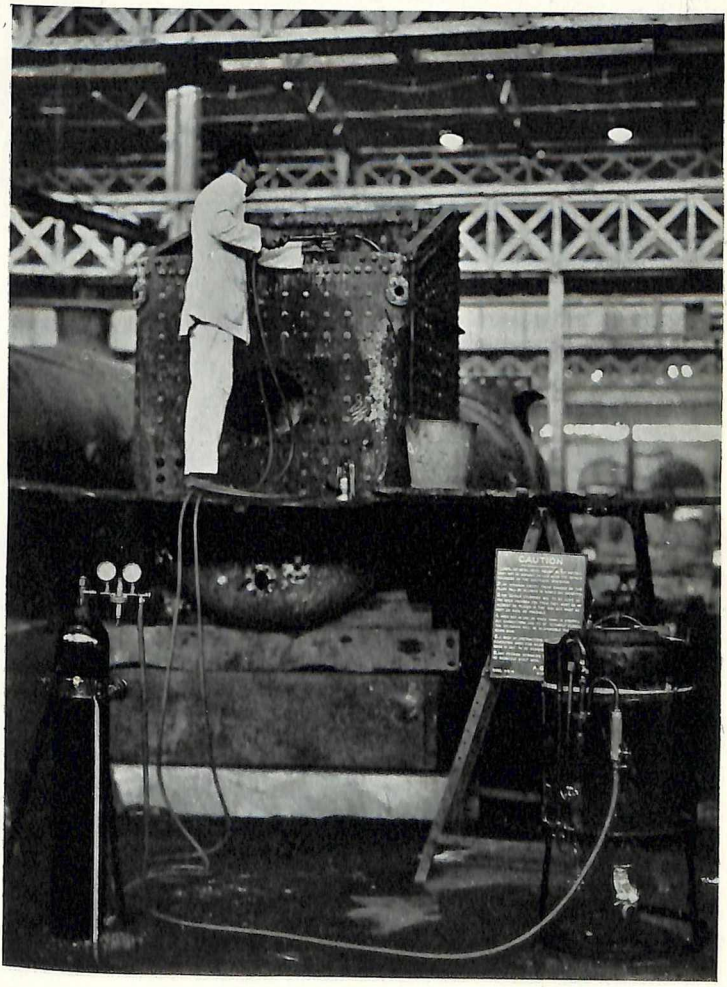
Its unique natural position, coupled with the activities of the Port Trust, has made Bombay the premier port of India. It is the natural gateway of foreign commerce with Western and Central India and, with the exception of

[1] Unskilled labourers. The term is said to be derived from "Koli" (fishermen)—the original inhabitants of the fishing hamlets of Mandvi, Koliwada, Warli, Sewri and Colaba, who were employed as labourers and on other unskilled work by the Bombay Government as early as 1717. They still follow the pursuit of fishing as well as engage in other occupations.

[2] The main exception is the woollen industry, which, though showing a temporary increase during the War, has since declined.



GHATI (ON LEFT) ASSISTING IN CUTTING "POINTS" AND "CROSSINGS" FOR RAILWAYS IN MESOPOTAMIA.
(By kind permission of the Agent, G.I.P. Railway.)



OXY-ACETYLENE WELDING—GOANESE AT WORK.

(By kind permission of the Agent, G.I.P. Railway.)

Karachi, it is nearer Europe, Mesopotamia and East Africa than any large Indian port. There are three docks (well equipped with sheds, warehouses, cranes, etc.), and a dry dock, capable of holding the largest liner in the Eastern trade. The amount of trade handled by the port can best be realized by comparing it with the total trade of India. In 1921–22, 41 per cent. of the imports into, and about 38 per cent. of the exports from, the country passed through the port.

Finally, there are nearly 20,000 railway employees in Bombay, as two important railways (the Great Indian Peninsular and the Bombay, Baroda and Central Indian Railways) have their termini in the city. These lines traverse large cotton tracts and through their connections with other railway systems link Bombay to the principal cities and commercial centres of the country.

Just as Bombay is the chief gateway of the foreign trade of India, it is also the gateway for the introduction of diseases into the land. Subject as it is to all the dangers to which ports are exposed, the congested condition of the city and the manner in which the majority of its inhabitants live make it an admirable centre for breeding and distributing disease throughout the country.

It was in Bombay that plague made its first appearance in India in 1896, and it still retains its hold on the city. Small-pox is seldom absent; during the last thirty years sixteen epidemics have occurred. From time to time there are outbreaks of cholera.[1] It was through Bombay that the influenza epidemic spread over India in 1918, and claimed between twelve and thirteen million victims, i.e., about 4 per cent. of the total population. A large part of the mortality occurred in the space of three or four months.[2]

However strict a watch may be maintained by the medical staff of the port authorities, there is the ever-present danger of stray cases developing after the arrival

[1] A particularly severe epidemic was raging in 1918–19 when the inquiry into the economic conditions of the wage-earning classes in the Parel Ward of Bombay was being conducted by the present writer (*see* Appendix I).

[2] *Census of India*, 1921, Volume I, Part I, p. 14.

of passengers, and in Bombay these cases find a ready means for multiplying and spreading. For these reasons, any steps taken to improve the housing and sanitation of the city should, in the course of time, be reflected in the improved health of the entire population of India. Closer trade relations with East Africa will expose the country to great risks of introduction of yellow fever, sleeping sickness, etc., and one necessary precaution to prevent such a calamity would be to take steps to ensure that Bombay no longer remains a breeding ground.

CHAPTER II

THE SUPPLY OF LABOUR

INDUSTRIAL centres in England depend for their labour supply upon the population resident in the town and its suburbs.

In the chief centres of industry in India, e.g., Bombay, Calcutta, Cawnpore, employers are compelled to depend upon a fluctuating labour population, consisting largely of semi-agriculturists, who migrate hundreds of miles and only reside in the towns for part of the year, returning to their villages when their labour is required for agricultural operations.[1] Seasonal and annual variations in the supply of labour, depending upon the condition of the harvests, introduce a factor of uncertainty and instability which is detrimental to the best interests of Indian industry.

We can measure the extent to which Bombay City depends upon other parts of India for its labour supply by analysing the statistics of the birthplaces of its inhabitants.[2] The following table shows the summary results of such an analysis:

BIRTHPLACES OF THE INHABITANTS OF BOMBAY CITY, 1911 AND 1921

Birthplace.	No. of persons (000's). 1911	1921
Bombay Presidency:		
Bombay City	192	188
Konkan:		
Ratnagiri	216	236
Kolaba	37	43
Thana and Bombay Suburban District	16	15

[1] S. H. Fremantle, *Report on the Supply of Labour in the United Provinces and in Bengal*, 1906.

[2] *Census of India*, 1921, Volume IX, Part I, pp. 16, 17.

BIRTHPLACES OF THE INHABITANTS OF BOMBAY CITY, 1911 AND 1921 (*contd.*)—

Birthplace.	No. of persons (000's). 1911	1921
Deccan :		
Poona	71	89
Satara	57	66
Ahmednagar	15	49
Nasik	10	25
Gujarat :		
Kathiawar (F.S.)[1]	51	72
Cutch (F.S.)	36	37
Surat	35	40
Ahmedabad	16	18
Karnatak :		
Kolhapur (F.S.)	9	9
Sind	2	7
Other Provinces and States :		
United Provinces	51	71
Rajputana Agency	12	20
Hyderabad State	9	20
Madras	8	15
Punjab	8	8
Ajmer-Merwara	7	2
Other Provinces and States	17	10
Portuguese and French Settlements	32	34
Foreign Countries	15	20

From the 1921 census it was ascertained that the birthplaces of 84 per cent. of the inhabitants were outside the city. The figures, however, relate to the total population and not the labouring classes alone,—it is not unlikely that if statistics for the latter could be supplied separately, they would show a greater dependence on imported labour.

Ratnagiri district is the chief source of Bombay's labour supply. In 1921 the native place of one-fifth of the inhabitants of the city was Ratnagiri; in fact the immigrants from this district outnumber the Bombay-born residents. The importance of the labouring population which Ratnagiri supplies to the industries of Bombay is acknowledged in the following passage, which appeared in the *Gazetteer* of the Presidency :

" The teeming population of Ratnagiri has been one of the

[1] Feudatory State.

chief factors in the development of the City of Bombay. Connected with it by a short and easy land journey and by a safe and cheap sea voyage, Ratnagiri is, much more than the districts round Bombay, the supplier of its labour market. It is estimated that in addition to many thousands partly settled in Bombay, over one hundred thousand workers pass every fair season from Ratnagiri to Bombay, returning at the beginning of the rains to till their fields."

Although this was written in 1880, it still remains true at the present time, except that the estimated number of migrants has greatly increased. Thousands annually obtain seasonal employment as cotton operatives, dock labourers, policemen, municipal sweepers, messengers, shopkeepers, and some even as clerks and teachers. The question may be asked, how is it possible for such large numbers to leave their fields unattended for several months each year? It is well known that Ratnagiri, being at the foot of the Ghats, receives heavy monsoon rains suitable for the growth of its chief crop, rice. During the remainder of the year, scarcity of rain prevents the raising of a second crop.[1] This leads to a slack season, during which the people engage in work in urban centres, as the yield from their lands alone is insufficient to meet their needs.[2] At the close of rice harvest, thousands of cultivators, chiefly men, make their way to the towns, the women and children generally remaining behind in the villages, where they live on the small store of grain left over from the harvest.[3] From time to time some of the more thrifty migrants make remittances to their families to assist in maintaining them during their absence. Statistics compiled by the Postmaster-

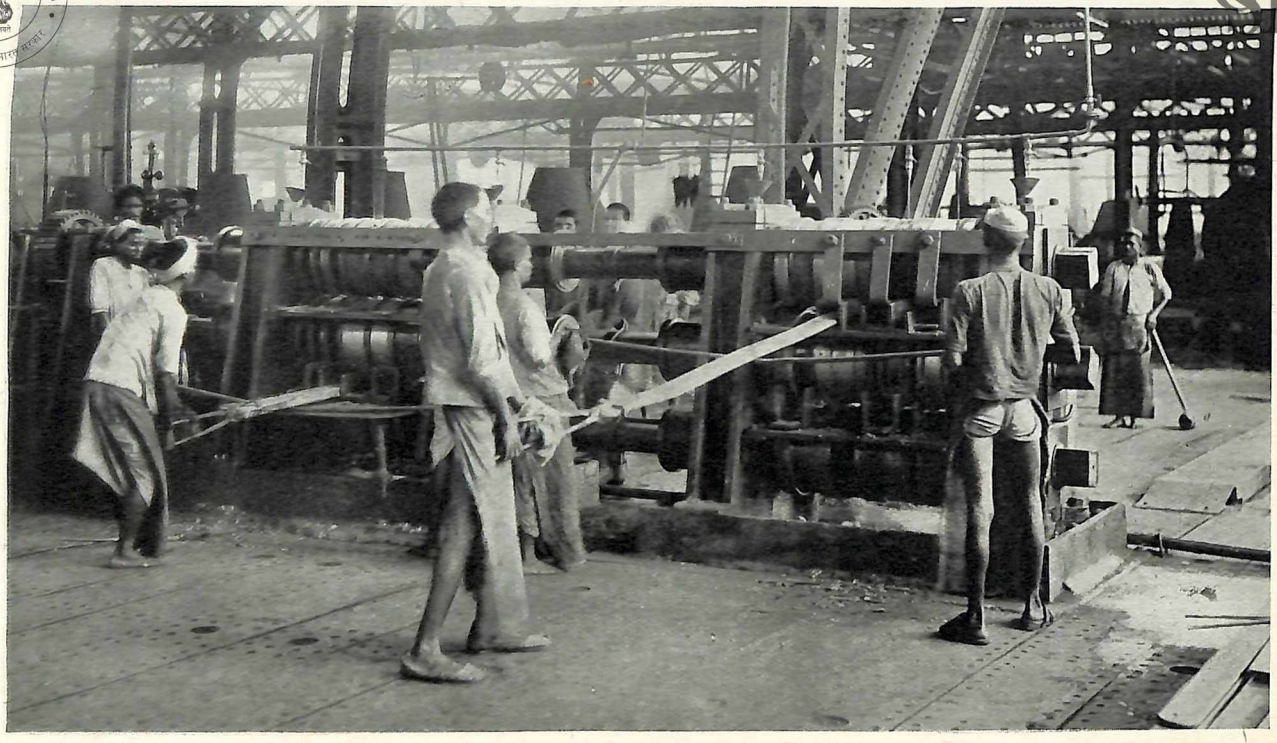
[1] Double-cropping is a normal feature of agricultural life throughout the greater part of India.

[2] "Nearly one man in every family of the working and cultivating classes and that the most competent member of the family, is away mostly in Bombay, in some cases in Karachi or Africa, for six to eight months of the year. The soil is so poor and the holdings are so small and scattered that agriculture is really a subsidiary industry with most of the cultivators, providing for subsistence of the family for not more than four months of the year." Konkan Co-operative Inquiry Committee's Report on the Ratnagiri District, 1923.

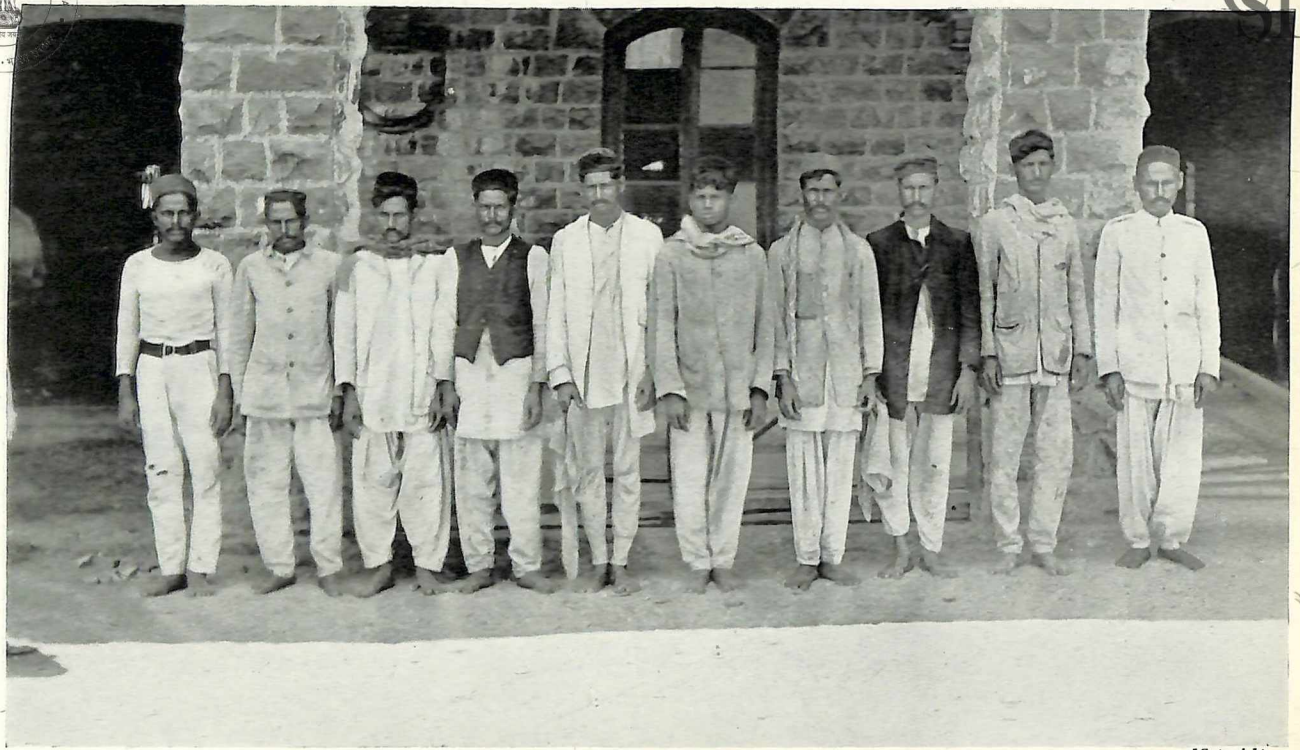
[3] When the wife and children accompany the head of the household and his adult sons to the city, the former generally contribute to the family exchequer by working in the reeling or winding rooms of cotton mills, as dock coolies, fruit and vegetable hawkers, etc.

General, Bombay Circle, show that from thirteen post-offices located in mill areas in Bombay City, 306,000 money-orders to the value of Rs. 71 lakhs were issued during 1921. "It can be safely assumed," states the Postmaster, "that the greater part of the business was from the workmen." Others allow their savings to accumulate and upon leaving Bombay they utilize the money in buying seed, implements, etc., in maintaining themselves and their families during the monsoon months, in meeting marriage and other special expenses, and frequently in buying ornaments or purchasing land.

Large numbers of Konkanis also settle permanently in Bombay. Some even go for work to Aden and places outside India, for it is difficult to obtain a livelihood in Ratnagiri owing to the poverty of the soil combined with the "over-population" of the district. When whole families migrate, they often settle down permanently. More frequently the migration is semi-permanent, i.e., the families maintain their connection with their village, paying occasional visits to it and returning to it eventually after they have been able to accumulate sufficient wealth. There can be no doubt that the intention of nearly all those who leave their homes in the Konkan is to get rich quickly and to return ultimately to their village. The streets of Bombay appear to be paved with gold, but those attracted by the high wages to be earned seldom realize until they reach the city that these high wages are accompanied by a high cost of living, and that, while a man by himself may be able to save a proportion of his earnings, when he is accompanied by his wife and family he more often falls into debt. Moreover, many a Konkani never lives to fulfil his hopes of returning to his village home, for the appalling conditions under which the working classes are compelled to live in Bombay produce a very high death-rate. The frequent outbreaks of plague, cholera, smallpox, etc., claim their victims very largely from amongst the workers. This is not surprising when the labouring classes of the city are to be found huddled together amidst highly insanitary surroundings in the human warehouses called "chawls."



PARDESHIS IN ROLLING MILLS.
(By kind permission of the Agent, G.I.P. Railway.)



KHARVAS EMPLOYED BY THE ROYAL INDIAN MARINE DOCKYARD.

The great pressure of population upon the soil, which is the chief factor in compelling the inhabitants of Ratnagiri to leave their villages, appears to play a prominent part in promoting migration also from other districts to Bombay.

IMMIGRATION TO BOMBAY CITY AND DENSITY OF POPULATION OF CHIEF DISTRICT OF ORIGIN

District or Province.	No. of Immigrants, Census, 1921. 000's.	Density of Population per square mile of cultivated area in 1921.
Ratnagiri	236	694
Poona	89	252
Kathiawar	72	Not available
United Provinces	71	,,
Satara	66	283
Ahmednagar	49	145
Kolaba	43	310
Surat	40	531
Cutch	37	Not available
Portugese and French possessions in India	34	,,
Nasik	24	211

The above table suggests that there is a tendency for districts with a high density of population to contribute a large number of persons to the flow of immigrants. Migration from the Feudatory States appears to have little or no relation to the density of population, political or other causes being probably of greater significance.

The Deccan stands next in importance to Ratnagiri as a source of labour for Bombay. The amount so recruited is about half that provided by the Konkan, but it is labour which the city could ill afford to lose. The "Ghati" (the name by which the Hindus of the Deccan are known) is an entirely different type to the Konkani, being more robust and more vigorous; he makes a cheerful and very efficient

worker. In some respects, he is one of the best types of labourer in India.[1]

In the Deccan as in the Konkan, labour can be released, for most of the field work is carried out during the rains—the traditional time for work. Whenever there is a short harvest, the Deccani leaves his village in search of employment. Even in the best of seasons Bombay attracts several thousands to its docks, mills, etc., for a few months in the year.

Kathiawar and Cutch are among the other main sources of Bombay's labour supply, but not so much in the matter of industrial labour. Both these regions provide large numbers of shopkeepers, domestic servants and clerks, though a feature of recent times has been the growing number of artisans. Surat mostly supplies domestic servants, while from other parts of Gujarat come artisans, shopkeepers, clerks and labourers.

The only other district which need be mentioned is the Portuguese settlement of Goa. The people of this region are largely Goanese—Christian descendants of Portuguese colonists who intermarried with the native population. They mostly work as cooks, butlers, etc., while a considerable number are artisans and clerks.

Before passing on to the areas outside the Presidency from which labour is obtained, it should be noted that an important class of worker, which is not included in the table given above, but is nevertheless recruited from the coastal population of the Presidency, is the lascar, who

[1] " Go where you will, you cannot escape the ubiquitous Ghati. Even the wandering European finds in him a guide, interpreter, philosopher and friend. Wherever he is employed he is always useful and his labour is fully worth the wages he receives. In the bandars, docks and great go-downs of the city his best qualities are seen. He manages heavy loads of bales, bags, machinery, timber, with the intelligence and skill of one to the manner born, and his physical powers of endurance during the hottest weather have often excited the wonder and admiration of his employers ; in physical power he gives a full measure of service for a scanty wage. He is not a master in the body politic, nor is he simply a consumer, for he returns by his labour two grains for the one he has eaten as his remuneration. He is docile and obedient and is not addicted to the worst vices of the European classes. His permanent motto, earned by years of honest toil, must be, ' The labourer is worthy of his hire.' " Mr. S. M. Edwardes in the *Gazetteer* of Bombay City and Island, 1909.

mans the vessels of the Royal Indian Marine and of the passenger lines serving the East. These men rendered admirable service during the War. Their number was estimated at 20,000 in 1911. They consist of two main classes: (*a*) deck hands, who are drawn chiefly from Cutch and Ratnagiri; and (*b*) firemen, who are usually Sidis, Afghans, or Punjabis.

In the United Provinces, the same cause, the pressure of population on the soil, leads to the migration of large numbers of the agricultural classes to the industrial regions of India. They are attracted chiefly to the coalfields, the tea estates and Calcutta, but increasing numbers seek employment in Bombay as weavers in the cotton mills, artisans in the engineering works and dockyards, coachmen, syces (grooms), coolies, etc. The competition of machine-made fabrics has adversely affected the hand-loom industry of the United Provinces, with the result that many Julahas, "the hereditary weavers of Jaunpur," have migrated semi-permanently to the cotton mills. The Mohammedan Julaha generally works in the weaving department only, his women folk as a rule being employed in the colour-winding branch of the reeling room. On the other hand, the Hindu from the United Provinces, who in Bombay is called a "Pardeshi Bhaya," is found in the carding department of cotton mills. Coachmen and syces are mostly Jaiswaras, Chamars and Koris from Jaunpur. The districts of the United Provinces from which Bombay mostly draws labour are Jaunpur, Allahabad, Azamgarh, Lucknow, Partabgarh, Rae Bareilly and Benares. The Pardeshi is of better physique and more muscular than the Konkani. Yet in the opinion of employers, he is inclined to be lazy and rather turbulent. If there is any industrial unrest, the Pardeshi is frequently found to be at the bottom of it.

The Punjab supplies Bombay with weavers, mechanics, blacksmiths and, above all, with that object of hatred and dread—the Pathan money-lender. The poor and ignorant who fall into the clutches of the last-named find themselves frequently molested and maltreated by these tall, powerful men who, armed with a heavy stick (*lathi*),

settle their accounts with their debtors and collect their dues by brute force.

There are three other aspects of the migration of labour to Bombay which should be studied before we leave the subject, viz.: (1) the caste of the worker-immigrants; (2) the extent to which they are accompanied by their wives and children; and (3) the relationship between the occupations which the migrants assume when they reach the city and the districts from which they come.

The principal castes which engage in industrial labour are: (*a*) Marathas, (*b*) Dheds and Mahars, (*c*) Chambhars and Mochis, and (*d*) Mohammedan Sheikhs. The Marathas are by far the most numerous. They are drawn chiefly from Poona, Satara and other districts of the Deccan, and from Ratnagiri. The Deccani Marathas, the Ghatis, have, as we have said, splendid physique and considerable powers of endurance; the Konkani Marathas are slimmer and weaker. Both are drawn from the agricultural classes, but the former work at the docks, in go-downs (warehouses), as bullock-cart drivers, etc., while the latter generally enter mills. Both will only eat food cooked either by themselves or their caste fellows. The Dheds, Mahars, Chambhars and Mochis all belong to the "untouchables" or "depressed" classes. They also come from the Konkan and Deccan, but they are persons of low caste who have filthy habits and live in squalor. The hereditary occupation of the Mahar is serving as a village menial,[1] while that of the Chambhar and Mochi is shoe-making and leather work. The Dheds and Mahars work in Bombay as labourers and scavengers. They eat fish, meat, the carcasses of cows, buffaloes, sheep and goats; also food that is left by other people. They drink strong liquor. Chambhars and Mochis work as mill operatives, in tanneries and other leather works. They are not of such a low caste as the Dheds and Mahars. They eat fish and meat and indulge in strong drink. The next important class are the Mohammedans from the Konkan and Deccan. Those from the Konkan generally become

[1] He performs "menial services such as crop-guarding, scavenging, and the carrying of messages for the village community." R. E. Enthoven, *The Tribes and Castes of Bombay*.

lascars (seamen), boatmen, policemen and office servants. The Deccanis enter domestic service or work as artisans, mill hands, etc.

The following table, compiled from the selective tables in the Census Report, 1921, shows the principal castes which are drawn from Bombay's chief sources of labour supply :—

District.	Castes. Nos. of persons (00's).									
	Maratha.		Kunbi.		Dhed or Mahar.		Chambhar or Mochi.		Sheikh.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Ratnagiri . .	485	155	64	13	79	19	21	12	53	2
Poona . . .	227	60	12	2	59	14	14	6	16	2
Satara . . .	183	31	6	1	69	12	19	7	5	1
Kolaba . . .	67	15	9	2	18	6	8	3	5	—
Ahmednagar . .	26	12	3	1	39	22	9	5	7	1
Nasik . . .	29	11	—	—	35	24	2	1	1	1
Kathiawar . .	5	—	3	—	18	11	6	1	15	1
Surat	5	1	2	—	27	1	6	—	6	1

According to the Census authorities, Marathas and Kunbis should be combined. A Kunbi of the Deccan frequently assumes the title "Maratha" on arrival in Bombay.

Other castes which do not figure in the above table, but are nevertheless prominent, are the Bhandaris, Kharvas, Sutars, Kolis, Agris, and Bhangis.[1]

[1] Particulars concerning these castes are summarized as follows :

Caste.	Chief districts from which they migrate to Bombay.	Traditional occupation.]	Occupation in Bombay.
Bhandari	Ratnagiri	Palm juice drawers and distillers	Carpenters, masons, tailors, etc.
Kharva .	Surat and Kathiawar	Seamen—said to be descendants of pirates	Boatmen, dock-yard hands
Sutar .	Ratnagiri, Kathiawar and Surat	Carpenters	Carpenters
Koli . .	Surat, Kolaba and Thana	Cultivators, hunters and fishermen	Fishermen
Agri . .	Kolaba	Saltworkers	Carpenters, bricklayers, etc.
Bhangi .	Ahmedabad and Kathiawar	Scavengers	Sweepers, scavengers, and night-soil carriers

The question as to how far immigrants bring their wives and children with them is to some extent answered by ascertaining the proportion of the sexes in each stream of immigrants. Such information is given in the *Census Report*, 1921, Vol. IX, Part 1. The table is reproduced below:

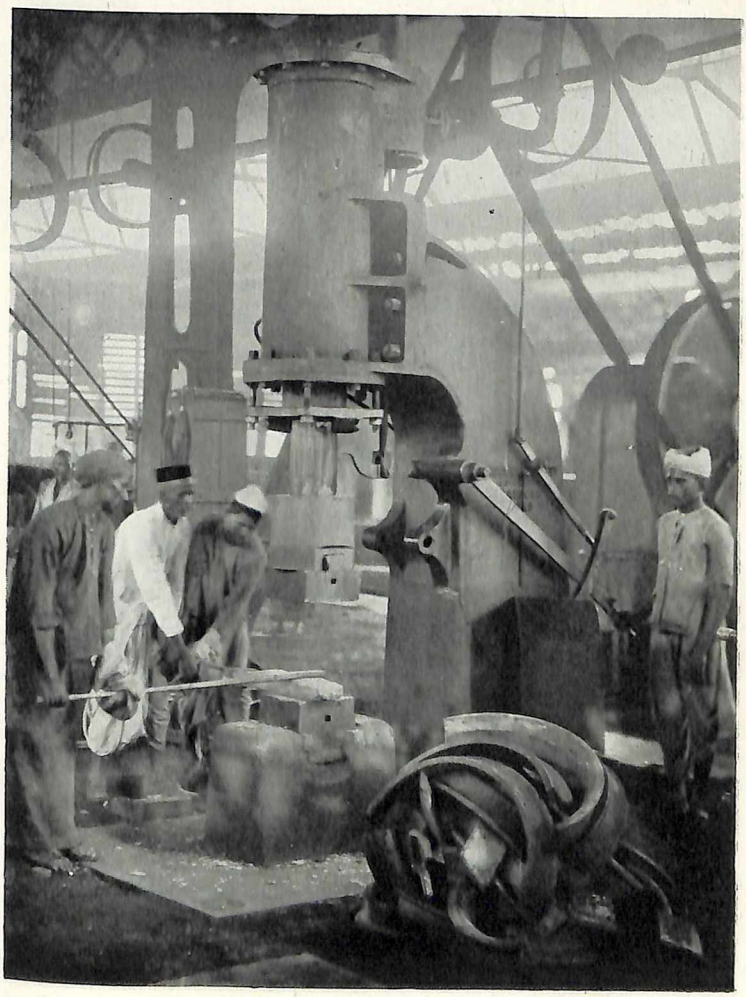
RATIO OF FEMALES TO 1,000 MALES IN EACH STREAM OF IMMIGRANTS FROM THE MORE IMPORTANT REGIONS OF BIRTH.

Bombay Population as a whole	525[1]
Birthplace.	
Konkan:	
Ratnagiri	526
Kolaba	600
Thana and Bombay Suburban District	535
Deccan:	
Poona	716
Satara	471
Ahmednagar	785
Nasik	765
Hyderabad	543
Gujarat:	
Kathiawar	532
Cutch	580
Surat	419
Other Provinces and States:	
United Provinces	167
Punjab, Delhi, and N.W.F. Province	199
Rajputana	154
French and Portuguese Settlements	411

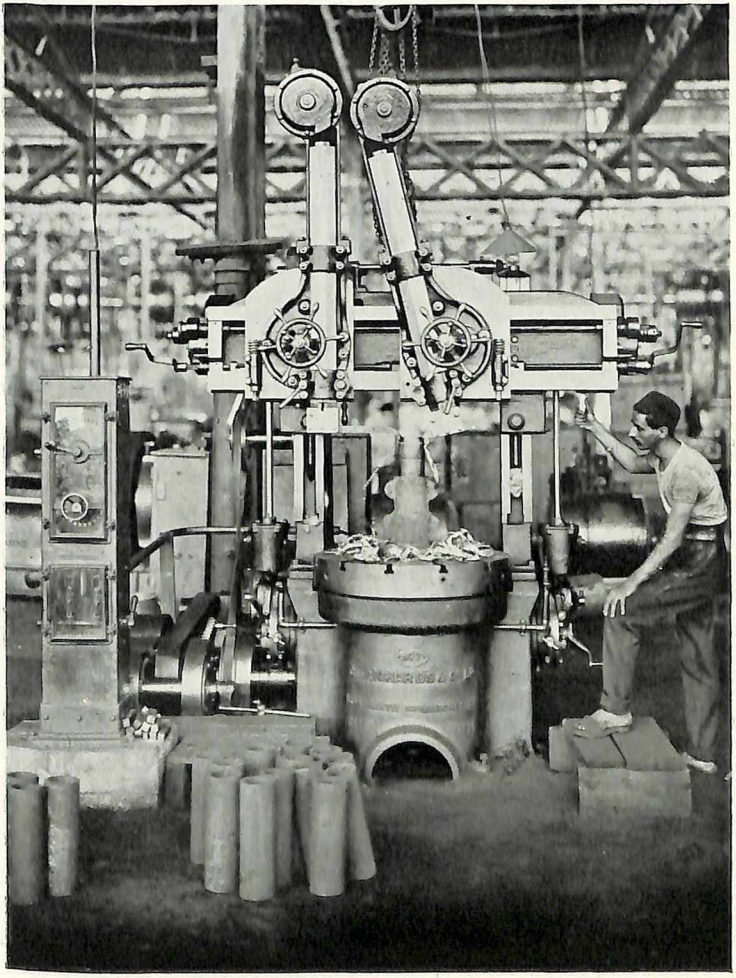
It would appear that the immigrants from the Deccan, and to a less extent from the Konkan and Gujarat, bring their wives and families with them, whereas those from North India leave them in their villages.

With regard to the relation of the occupation of the immigrant to the district of his birth, an interesting table can be compiled from the details given in the Census Report, 1911. Unfortunately it is not possible to compile a similar table from the 1921 Report as data are only given under a few main heads. The figures relating to 1911 are as follows:

[1] In the Bombay city-born population the ratio is 785.



STEAM HAMMER. GUJERATI AND PARDESHIS AT WORK.
(By kind permission of the Agent, G.I.P. Railway.)



PARSI " TURNING " SHELL CASES.
(By kind permission of the Agent, G.I.P. Railway.)

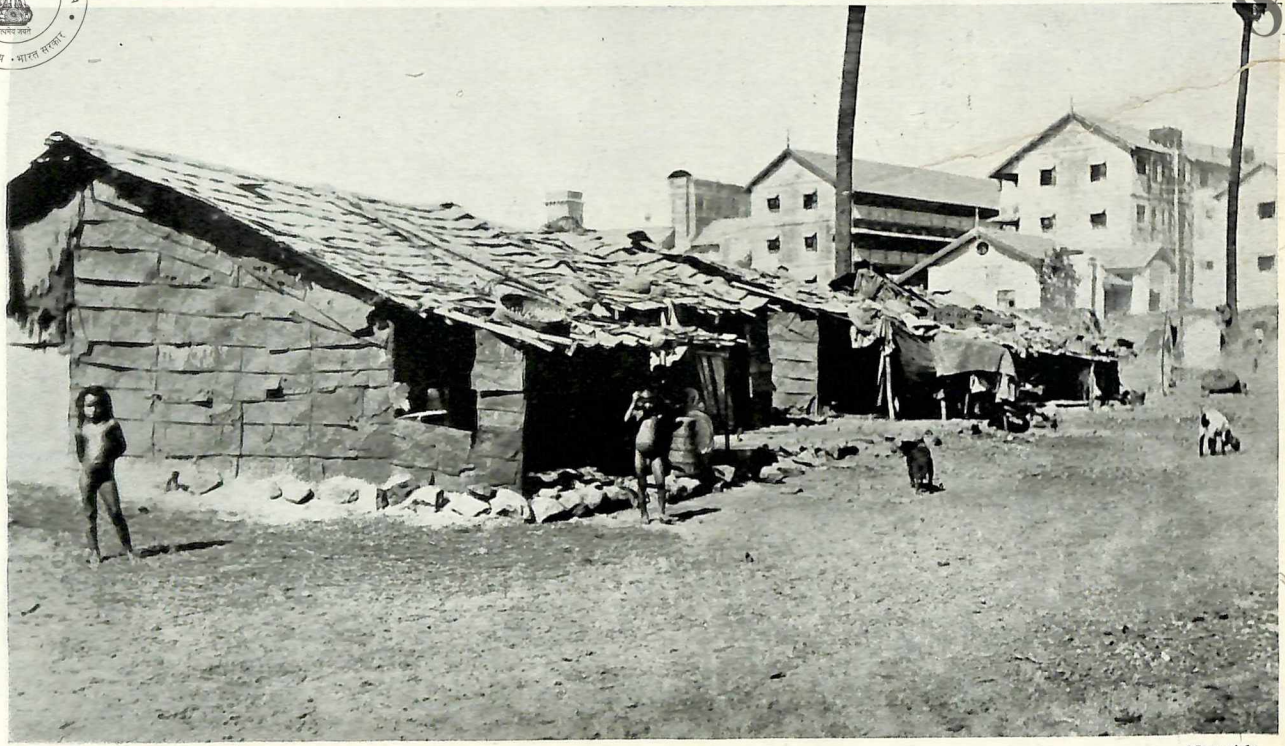
Birthplace in Relation to Occupation, Bombay City, 1911

(Numbers in hundreds)

Occupation.	Birthplace.									Total.
	Konkan.		Deccan.		Gujarat.				Goa.	
	Ratnagiri.	Kolaba.	Poona.	Satara.	Kathiawar.	Cutch.	Surat.	Ahmedabad.		
Mill-hands (Males) . . .	443	53	52	72	4	2	5	3	3	637
,, (Females) . .	139	20	15	14	1	0	0	0	1	190
Artisans (M.)	130	32	35	34	56	20	28	29	39	403
,, (F.)	11	2	7	3	3	2	2	0	1	31
Leather Workers (M.) . .	4	2	4	10	2	2	2	0	0	26
Cart Drivers (M.) . . .	17	5	47	21	5	1	8	5	1	110
Sweepers (M.)	7	2	4	5	13	0	1	6	0	38
,, (F.)	6	1	0	0	5	0	0	2	0	14
Labourers (M.)	169	37	113	138	9	18	25	5	5	519
,, (F.)	44	13	36	24	5	2	2	1	2	129
Domestic Servants (M.) . .	70	8	15	17	27	13	36	10	78	274
,, ,, (F.) . .	14	2	6	5	5	3	3	1	22	61
Shopkeepers (M.) . . .	71	10	31	19	109	119	24	18	6	407
,, (F.)	8	2	10	5	3	3	1	0	1	33
Clerks (M.)	35	10	10	5	27	9	18	8	17	139
Total	1,168	199	385	372	274	194	155	88	176	3,011

The salient features of the table are :—Mill-hands principally come from Ratnagiri, Satara, Kolaba and Poona ; artisans [1] from Ratnagiri, also from Kathiawar, Goa and most other districts ; leather workers from Satara, Ratnagiri and Poona ; cart drivers from the Deccan, and not a few from Ratnagiri ; scavengers from Kathiawar, Ratnagiri and Ahmedabad ; coolies from Ratnagiri and other districts of the Konkan, from the Deccan, Gujarat and Goa ; domestic servants from Goa, Ratnagiri, Surat and Kathiawar ; shopkeepers mainly from Cutch and Kathiawar, but also in considerable numbers from Ratnagiri ; and clerks from Ratnagiri, Kathiawar, Surat and Goa. In other words, the industrial labour of Bombay is drawn almost entirely from the Konkan and Deccan.

[1] A large number of artisans are Parsis, residents of Bombay.



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SHEDS MADE FROM FLATTENED-OUT KEROSENE TINS—CHAWLS IN BACKGROUND.

IMPROVEMENT TRUST CORRUGATED IRON SHEDS.

(From a photograph kindly lent by the late Chairman, Bombay Improvement Trust.)

CHAPTER III

HOUSING AND SANITATION

THE dwellings in which the wage-earning classes of Bombay are housed are of three main types: (*a*) "chawls," or buildings let in separate tenements; (*b*) sheds built of corrugated iron, empty kerosene tins, wood, etc.; and (*c*) "Zavli" sheds—huts constructed of dry leaves from the date or coco-nut palms.

The majority of the working classes are housed in chawls,[1] and we propose, therefore, to describe these in some detail. The second class of dwelling is often tenanted by municipal employees or by tenants evicted from insanitary dwellings by the Improvement Trust. The corrugated iron sheds erected by the Trust are of a semi-permanent character. Each line of sheds comprises about a dozen rooms of standard size (10 ft. by 10 ft.) with a 3-ft. veranda. The rooms become very hot during the day when the sun's rays strike the iron roof, but otherwise the sheds are as comfortable and satisfactory as such buildings can be.

The same cannot be said of many sheds built by private enterprise. Personal inspection of one of these leaves recollections which will not readily be forgotten. Entering the shed and passing down a dark narrow passage—so narrow that two persons could scarcely pass one another—

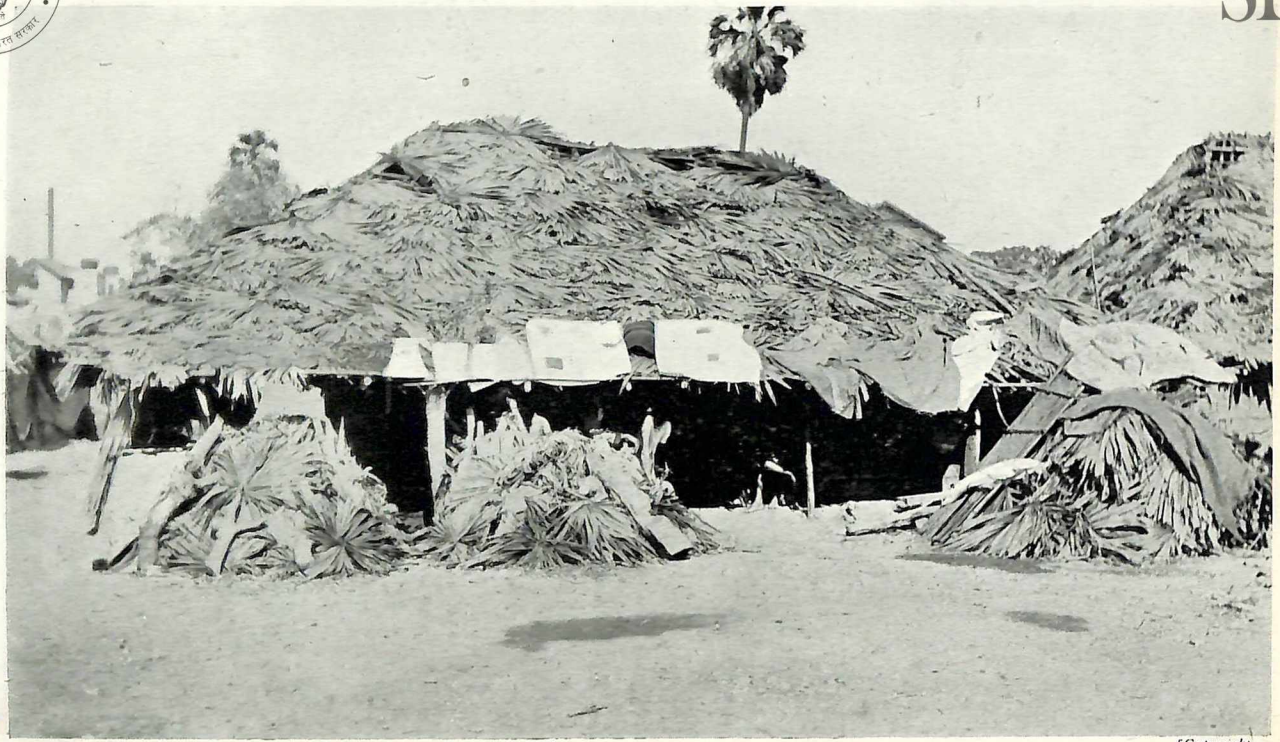
[1] No accurate statistics are available as to the number of the working-classes living in chawls. The figures published by the Census authorities are based on a narrow definition and are admitted by the Superintendent of Census Operations to be incomplete. In 1921 there were 18,535 buildings containing 20 persons and under, and 5,588 buildings with 21 to 40 persons each. If we assume that each of the 18,535 buildings was inhabited by 10 persons on the average and each of the 5,588 buildings with 30 persons on the average, and if we further assume that all buildings containing more than 40 persons are tenements, the calculation gives the proportion as seven-tenths living in chawls.

one had to grope one's way to the doorways of the rooms. Upon peering into these, it was impossible to ascertain whether they were occupied or not. Not a ray of light penetrated them, and this at noon on a bright, sunny day. It was only on striking a match that the rooms were found to be inhabited.

Persons of the "depressed" and "backward" classes (i.e., Mahars, Chambhars, and Dheds) frequently find great difficulty in obtaining accommodation, as no other community will live near them. When they cannot find room in the chawls set apart for them, they live in sheds or huts. Many of these sheds have roofs and walls made from flattened-out kerosene tins. There are no windows; holes in the rusty tin walls and roof provide the interior with a sufficiency of light and air. The floor is only about 3 inches from the ground. The sheds vary in size, some being sufficiently large to be divided into compartments each more spacious than the average room in a chawl. The rent paid in 1917–18 for a room in a "tin shed" was Rs.1.12 per month, but in addition to this Rs.10 to Rs.15 were required to be spent annually on replacing some of the tins, and, once in four years, thorough renewal is required.

The "Zavli sheds" are occupied chiefly by Ghati carters, who not infrequently share them with their domestic animals, cows and calves. As sanitary conveniences are absent, the ground in the vicinity of these structures is generally defæcated. Rs.6 per month was the ground rent paid in 1917–18, and the annual cost of renewing the leaves was about Rs.20.

The "chawls," or tenements, consist usually of single rooms, sometimes of double rooms or "gallas," but never of more than two rooms. These chawls, which differ considerably in appearance, construction and size, all have for their object the housing—one is almost tempted to use the expression "warehousing"—of large numbers of the labouring classes in as cheap a manner as possible. A few chawls are inhabited by persons who are all following the same occupation, e.g., policemen, sweepers, etc., but the tenants of most of them are engaged in diverse callings.



ZAVLI SHEDS.

The chawls may again be subdivided into three main groups.

(*A*) There are, first, the dwelling-houses which were originally built for one family, but which, owing to the increasing demand for accommodation, have from time to time been extended and converted into tenements. They are chiefly to be found in the most densely populated sections of the city—in Kumbharwada, Kamatipura and Second Nagpada—all of which had in 1921 a density of over 700 persons per acre. The owners of the property have by frequent extensions occupied every available inch of space to the sides and rear of the houses, and have then competed with one another in erecting additional floors, until the buildings have reached a height of four or five stories—a policy of "sweating" building sites. As a result, the houses have tall narrow frontages and excessive depths; many of the rooms, especially those in the centre and on the ground floor, lack sunshine and air. What makes the condition of these buildings worse is that large numbers of them are fitted with basket privies. Although Bombay possesses more sewers than any city in the East, there are many parts of it, especially the poorer quarters, where sewers are not laid, and consequently recourse is had to cesspits and privies. Narrow passages or gullies, from 1 to 5 ft. in width, give the "halalkhors" (sweepers) access to the baskets, and it is along these gullies that open drains are laid for carrying away the sullage. The gullies run along the side, or, more usually, the rear of the houses and not infrequently they are the only spaces which separate the row of houses in one street from that in another, or adjoining buildings from one another. The contents of the basket receptacles in the privy frequently overflow into the open drains and foul the gullies. The stench which fills the air as the overflow travels along the drain can be better imagined than described. At times the cesspits also overflow or the drains become choked. The sweepers who are supposed to remove and convey the excreta twice daily to the night-soil depôts [1] frequently

[1] In parts of Bombay early in the morning and in the afternoon sweepers (halalkhors) are frequently to be seen carrying baskets of excreta through public thoroughfares to the nearest depôt.

shirk their duties and empty the contents of the baskets into the open drains. Add to this the practice of throwing all kinds of household refuse and filth into the gullies by the people in the rooms overlooking them, and one can form some slight conception of the strength of the smell. Much of the refuse accumulates and becomes stagnant, and the liquid filth percolates into the soil when the drains or the passage are in a bad state of repair, as is frequently the case. Is it surprising, then, that the windows of rooms which overlook the gullies have to be kept closed to shut out the stench ? The conditions under which the occupants of these rooms have to cook, eat and sleep can well be imagined when it is remembered that the only sources of light and ventilation are from the window opening on to the gully and from the door by which they enter the room. The conclusion drawn from personal inspection of a large number of these tenements is that ground-floor rooms are invariably dark, dismal and unhealthy, and often permeated with obnoxious effluvia. Where the privies are not detached from the main building, the stench penetrates the whole structure. Frequently, on rounds of inspection, premises have been entered but the filth and smell have been so repulsive as to compel a hurried exit. A personal recollection may be pardoned. On the occasion of a visit to a slum area in the company of the late chairman of the Improvement Trust, entrance was gained to a private dwelling-house which had been converted into a set of one-room tenements. Here was a room with a floor space of 6 ft. by 9 ft., part of the space being occupied by the "chula" (fireplace). The sole window of the room overlooked a gully reeking with filth into which we had previously witnessed a basket of human excreta being emptied by a sweeper woman. The room was occupied by two adults, a boy of three years and an infant. The tenants had been paying Rs.2 per month for the room, but in 1918 the landlord demanded double the amount, finally agreeing to Rs.3.8— an increase of 75 per cent.[1]

[1] At the time (1918), despite the publication of a Government notification limiting the increase of rents of the houses of labourers to 10 per

SWEEPER'S GULLY BETWEEN TWO HOUSES.

(From a photograph kindly lent by the late Chairman, Bombay Improvement Trust.)

It is these converted dwelling-houses that are among the most insanitary buildings in the city. "Pestilential plague-spots" is by no means too strong an expression for them. No matter how graphic a pen-picture is drawn, how vivid a description is given of existing conditions, it is impossible to convey to the reader any true conception of the actual state of affairs.

(*B*) Little better are the tenement blocks built by private enterprise for commercial profit. The two-storied chawl is the type most frequently found. When it is situated on a main thoroughfare, the ground-floor rooms overlooking the road are invariably occupied by shopkeepers retailing articles usually consumed by the Bombay workman, e.g., "pan supari" (betelnut), chillies, "bidis" (country-made cigarettes), "mithai" (sweetmeats), vegetables, oil, firewood, etc. We also find the cloth merchant, the tailor, the goldsmith, the so-called "hotels" (restaurants kept by Iranis[1]), and last, but not least, the grain merchant and the money-lender—two persons who play an important part in the life of the labouring classes in India. Not infrequently the owner of the chawl maintains his own grain, cloth or toddy (country liquor) shops, which his tenants are expected (and in some cases forced) to patronize. Sometimes the room at the rear of the shop is occupied as the "living-room," the two rooms forming a "galla."

Access to the rooms on the upper floors is gained by a central or side staircase leading to verandas or central corridors running the length of the building. Where there is a veranda, rooms are back-to-back and "through ventilation" cannot be secured. These rooms, however, have more light and air than those which open on to a central corridor, which is almost always dark. Frequently the chawls are situated parallel to one another, and when

cent. on rents paid on January 1, 1915, tenants were frequently intimidated into paying increased rents. The landlord would raise the rent above standard rent, and, upon the tenants refusing to pay, summonses would be issued. The tenants were then informed that if they agreed to pay a rent higher than the standard rent, the summons would be withdrawn. Ignorant of the law and fearing the costs of an action, the tenants would be compelled to accept the "concession" and agree to being rack-rented.

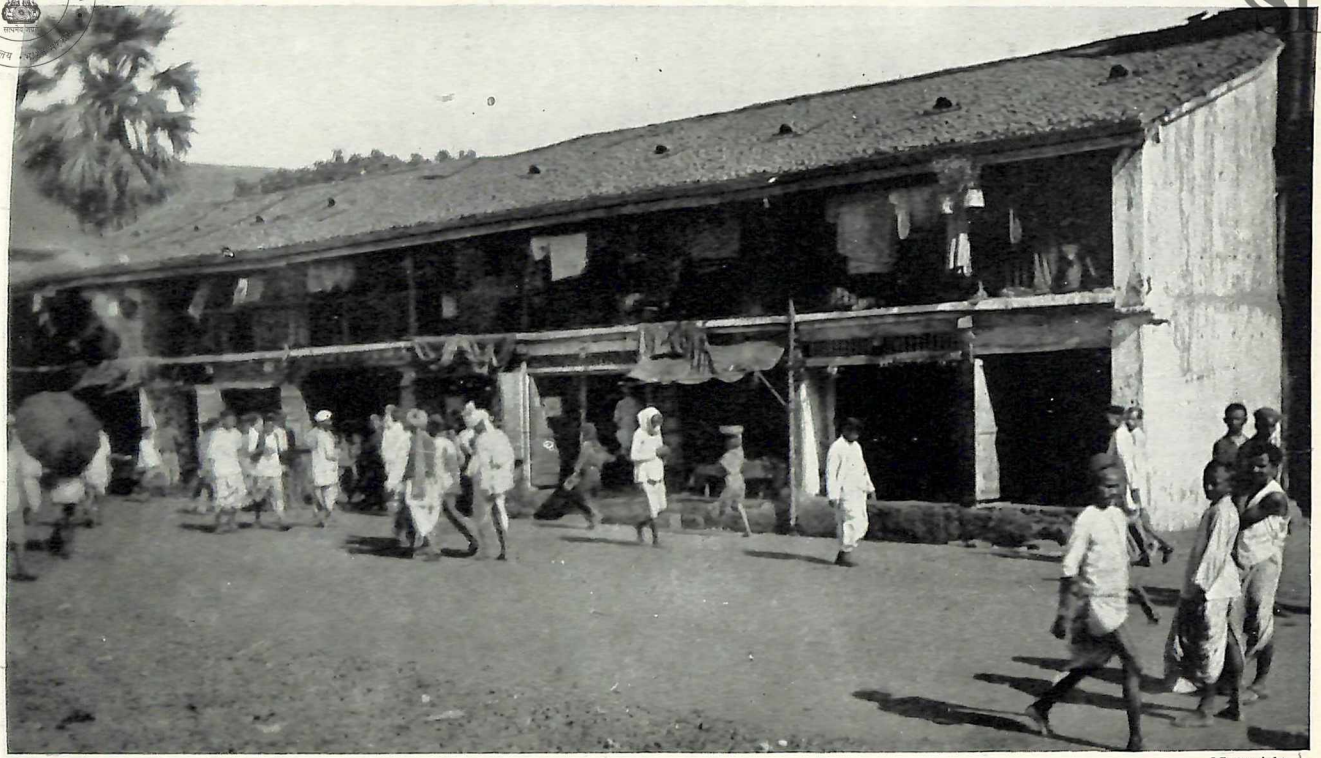
[1] Persian Zoroastrians.

they are in close proximity, as is generally the case, the rooms on the ground floor receive insufficient light and air. There is, as a rule, only one window (2 ft. by 3 ft.) to each room, but in some cases the rooms at the ends of a block possess two windows. A "chula" (fireplace for cooking purposes) and "nahani" (bathing place) are also provided. In chawls where there are central corridors, a small veranda is frequently attached to each room. Rooms vary in size, but are usually 10 ft. by 10 ft. by 10 ft. Many chawls are in a dilapidated condition and the floors in such a bad state of repair that they are a source of danger to the occupants. Some chawls have little or no plinth, the ground floor being almost on a level with the street; in such cases, the rooms are often flooded during the monsoon and are generally damp.

The approaches to the chawls abound with dirt and filth. "Kutchra," or household refuse, and even excreta, are thrown from the windows of the upper floors on to the street and into the compounds. The refuse cast on the streets is generally cleared away, but that thrown into the compound accumulates, as it seems to be nobody's business to remove it. The compound and the approaches to the chawls are usually "katcha" (which here means unpaved), and in the monsoon they soon become quagmires with pools of water. Long after the cessation of rain the pools of water remain, become stagnant and form excellent breeding-grounds for the malaria-carrying mosquito.

The chawls have common bathing places used by both sexes. Not only do the tenants bathe here, but they also wash their clothes and utensils and collect water for drinking and cooking purposes. Shortage of water[1] and an insufficiency of taps is a constant source of complaint, as it

[1] The city depends for its water supply upon three lakes, fifteen to sixty miles distant. When there is scarcity of rain, the people are placed on short supplies, and it is generally the poorer quarters of the city which suffer most. The consumption of water per head is much greater in an Indian than a European city, partly on account of the climate and partly owing to greater wastage among the working classes (taps are allowed to run freely while bathing, washing or cleaning is in progress). When the Tansa Completion Works are finished, they will give Bombay 90,000,000 gallons of water a day in years of normal rainfall.



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TWO-STORIED CHAWL WITH SHOPS ON GROUND FLOOR.

leads to considerable inconvenience and occasional scuffles during the "rush" hours in the early morning.

In some cases the sanitary conveniences adjoin or are in proximity to living-rooms. Sometimes they are situated in the centre of a block and *within* the building. Where there are privies in a building of several stories, they are placed one above the other and connected by a common shaft. It is through this shaft that the excreta of the scores of occupants are discharged and collected in the small basket receptacles on the ground-floor. The sides of the shaft get fouled and the stench which is created is abominable. The tenants complain that the halalkhors shirk their duties and do not remove the receptacles twice daily in accordance with the Health Department regulations.[1] Conditions are aggravated owing to the insufficient supply of conveniences. The municipal rules require one w.c. for every five tenements, but this by-law is by no means universally observed.

(*C*) The third type is the tenement building of modern structure erected by the Improvement Trust, Municipality, Port Trust, and other public bodies, for their employees or for the working classes generally. They have been constructed on sanitary lines and, as a rule, are well lighted and ventilated. They are mostly buildings of three, four and five stories. Personal inspection of these chawls has shown the great advance in methods of chawl construction during the last twenty years. Reinforced concrete has replaced stone and brick and lime masonry, being used not only for floors and latrines as formerly, but also for walls, pillars, beams, stairs, etc. The brickwork in the older chawls was affected by the weather and harboured vermin. The ugly sun-shades of matting or iron have given place to asbestos ones (as in the Grant Road, B.B. and C.I. Railway Chawls), which are neater and lighter and keep the verandas and rooms cooler. In all chawls erected by the Improvement Trust, the ground between the blocks

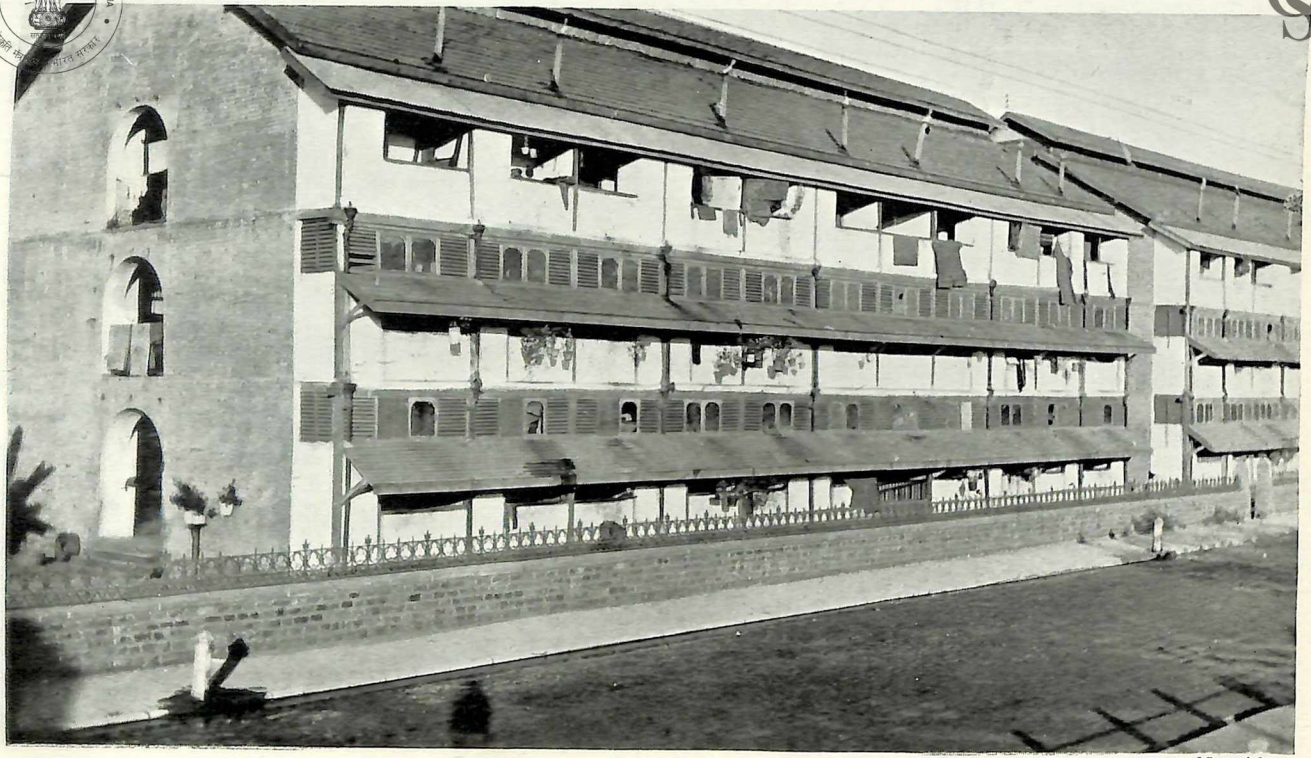
[1] The sweepers and mukadams take advantage of the ignorance of the tenants, who should report cases of neglect to the municipal authorities.

of buildings has been tar-paved and provides an excellent playground for the children of the occupants. The Mahar chawls are so constructed that they can be easily converted at small cost into tenements consisting of two rooms and two verandas.

A modern chawl generally consists of a series of units, each comprising a room (with a floor space of 10 ft. by 12 ft.) and a front veranda, 4 ft. 6 in. wide. The veranda, which is partially enclosed, contains a "nahani" and a "chula." Each room has two doorways, one giving access to the veranda and the other to the central corridor; in addition, the top of the wall between the room and the corridor is open and fitted with expanded metal to provide ventilation without affecting privacy. The rooms and verandas are provided with pegs and shelves of reinforced concrete for the storage of firewood and household goods. A central passage, 8 ft. in width, runs the full length of the building and ensures thorough ventilation. A set of sanitary conveniences is provided for each floor; these are cut off from the main building and are approached by a covered gangway. On each floor also there are separate washing places for men and women. Some of the chawls are provided with terrace roofs with a staircase leading up to them; the occupants can use them as drying areas or for sleeping out on fine nights. It will be seen that the modern chawl built from public funds is a great advance upon the tenement buildings erected by private enterprise. Their value is realized when we find that the death-rate in the Trust chawls is from one-third to one-quarter of that of the whole city.[1]

So far we have described the types of working-class dwellings and the abuses arising from their position and structural defects. But there is the other side to the problem of housing labour in sanitary dwellings, viz., the extent to which the tenants of the chawls create their own environment. An inspection of an improved sanitary dwelling before and after occupation clearly shows that the customs and habits of the people are largely responsible

[1] Annual Reports of the City of Bombay Improvement Trust.



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IMPROVEMENT TRUST CHAWL FOR POLICEMEN.

SPRING MILLS IMPROVEMENT TRUST CHAWL.

for the insanitary surroundings. The external appearance of the chawl may be neat and attractive, but an examination of the interior startles one. All sense of cleanliness appears to be absent. Spitting of pan and betelnut juice and other nuisances are committed everywhere, especially on the staircases, in the passages and corridors. These places also serve as the chief repositories for the sweepings of the rooms. Goats, fowls and other animals belonging to the tenants are often to be found in the corridors. It is in these surroundings that one sees babies crawling, children playing and mothers nursing their infants. The interiors of the rooms are little better than the rest of the building. Windows and sometimes verandas are closed with rags, gunny cloth, clothing hung out to dry, etc. Where woodwork and glass ventilators are provided (e.g., in the Improvement Trust Soparibag chawls), they are frequently blocked with firewood, etc. The verandas are fitted with cooking places, but tenants prefer to cook in their living-room, especially on a windy day. It is not surprising, then, that the walls and ceiling are blackened, as there is little escape for the smoke. The " nahanis " and corners of rooms are often misused, especially by children. The floors are daily " cleaned " with cow-dung—a practice common throughout India ; the occupants of the room eat their meals on the floor and sleep on it where space does not provide for " charpoys " (beds). Cooking and eating vessels are cleaned with earth, road scrapings and any kind of water which is procurable. The floors and walls of rooms are stained with the red marks of pan and betelnut expectorations. It is no exaggeration to say that the masses are utterly unacquainted with even elementary ideas of hygiene and sanitation, and little improvement can take place until they have been educated to a different standard of living. Living as the working classes do in these terrible slum dwellings, is it surprising that plague, cholera, etc., thrive in such excellent breeding grounds ? Nor can we wonder at high death-rates and excessive infant mortality, to which the practices of the people contribute in no small measure.

Rents.—In Appendix I, tables are given showing the

rents paid by households in the Parel ward in 1917–18. The "median" rent for one-room tenements was Rs.3.8 per month, and for about 64 per cent. of the tenements a rental of Rs.3 to Rs.3.8 was paid. In 1921–22, the predominant rents for single rooms tenanted by the working classes in Bombay ranged from Rs.3.8 to Rs.5.8, the most common rent being Rs.3.12 per month.[1] The rents charged in Improvement Trust chawls vary from Rs.3.8 to Rs.13.8 per room per month; they average Rs.4.8.6.[2]

Overcrowding.—It was found in 1917–18 that approximately 97 per cent. of the working-class households in Parel were living in single rooms [3]—a figure confirmed by the Budget inquiry conducted by the Bombay Labour Office in 1921—and over 60 per cent. of the households were overcrowded according to the English official standard.[4] Measured by the stricter test employed by Dr. Bowley in *Livelihood and Poverty*,[5] the percentage rises to 94 per cent. The average number of persons per room in Parel was 3·5. It should be noted that a single room is often occupied by several families.[6] According to the Census of 1921, there were in Bombay no less than 135 instances in which a single room was occupied by six families or more ![7]

[1] *Report on an Inquiry into Working Class Budgets in Bombay.* Published by the Labour Office, Bombay, 1923.

[2] *Annual Report of the City of Bombay Improvement Trust for the year 1921–22.*

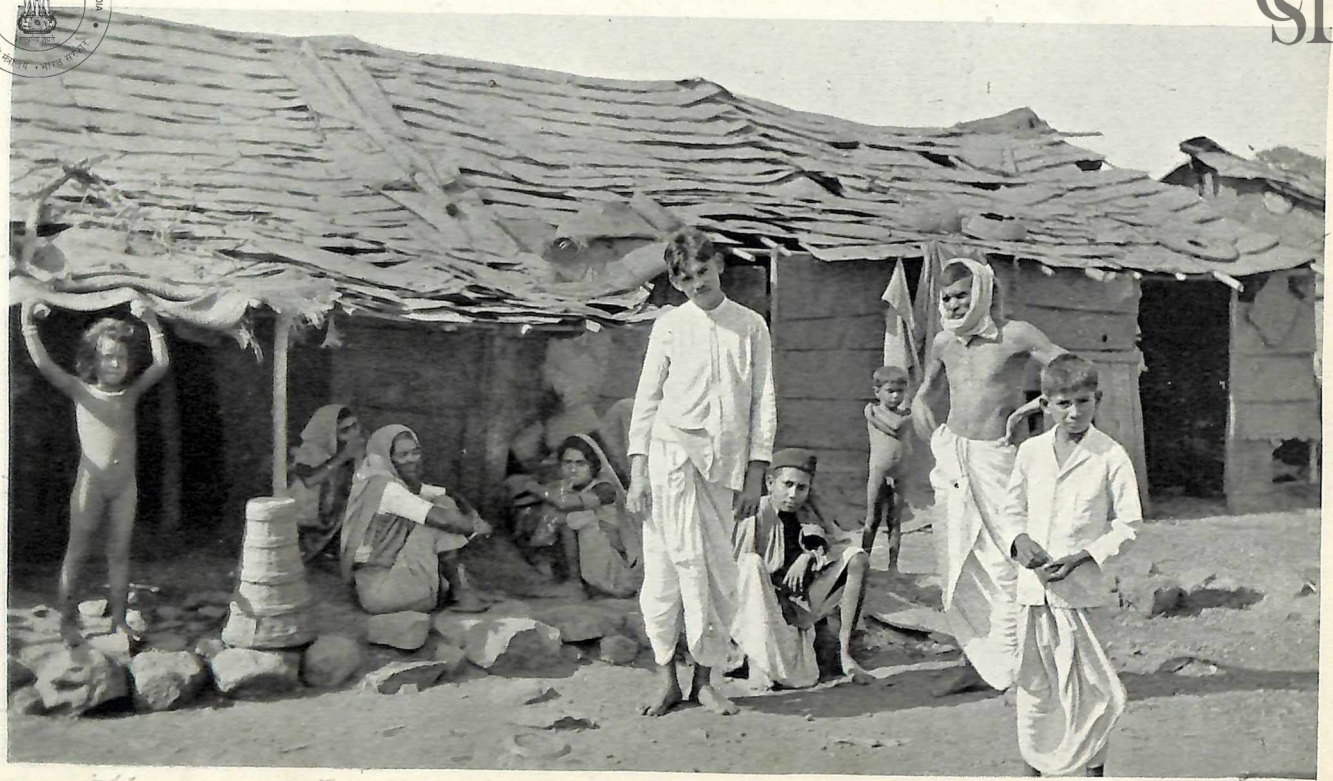
[3] See Appendix I.

[4] More than two persons to a room.

[5] The test was based on the number of "equivalent adults," i.e., overcrowding existed where there was more than one equivalent adult to a room. For an explanation of the term "equivalent adult," see Appendix I.

[6] In the hot weather many persons sleep out of doors.

[7] "In outside chawls I have several times verified the overcrowding of rooms. In one room, on the second floor of a chawl, measuring some 15 ft. × 12 ft., I found six families living. Six separate ovens on the floor proved this statement. On enquiry, I ascertained that the actual number of adults and children living in this room was 30. Bamboos hung from the ceiling, over which, at night, clothes and sacking were hung, helped to partition each family allotment. Three out of six of the women who lived in this room were shortly expecting to be delivered. All three said they would have the deliveries in Bombay. When I questioned the District Nurse, who accompanied me, as to how she would arrange for privacy in this room, I was shown a small space some 3 ft × 4 ft. which was usually screened off for the purpose. The atmosphere at night of that room filled with smoke from the six ovens, and other impurities, would certainly physically handicap any woman and infant, both



SWEEPER OCCUPANTS OF A TIN-SHED.

It may be asked: How far are the housing and sanitary conditions which have been described typical of Indian life? And what has been and is being done to ameliorate the conditions of the industrial proletariat in Bombay by providing decent and sanitary dwellings at a reasonable rent? The answer to the first of these questions can only be given in general terms. Statistics relating to the number of persons living in single rooms and the amount of overcrowding are not available for India as a whole. Housing statistics were specially collected by the Census authorities in 1921 for Bombay, Ahmedabad and Karachi. They throw a certain amount of light on housing conditions generally, but, as the figures apply to the whole population and not to the working-classes alone, they are indicative and not conclusive.

City.	Persons living in rooms each occupied by 6 persons and over.		Occupants of single-room tenements.		Average number of persons per room in single-roomed tenements.	No. of single-roomed tenements containing	
	No. (000's).	Percentage of total population.	No. (000's).	Percentage of total population.		2 to 5 Families.	6 Families and over.
Bombay .	384	*36*	706	*66*	4·0	2,991	135
Ahmedabad	40	*15*	133	*52*	3·4	Not available	
Karachi .	87½	*48*	107	*58*	3·5	659	

The agricultural population of India live in huts which, in different parts of the country, vary in design and material. These huts are, as a rule, more spacious than the single-roomed tenements in Bombay City. It is true that there is little, if any, sanitation, and that the people engage in the dirty practices described above. Nevertheless, there is plenty of sunshine and air, people are not living "on top of one another," and the danger to their health is reduced. In industrial areas (e.g., the coalfields, the Bengal jute mills,

before and after delivery. This was one of many such rooms I saw." (The Report of the Lady Doctor appointed by the Government of Bombay to investigate the conditions of women industrial workers in Bombay, 1922.)

etc.) workers are housed in "coolie lines" or "bustees."[1] Single-roomed dwellings are predominant and overcrowding is a feature of them just as in Bombay. But there are generally few, if any, tenement buildings of several stories. More land is available and the agents of the jute mills and coal-mines also give greater attention to the housing of their labour than do Bombay millowners.

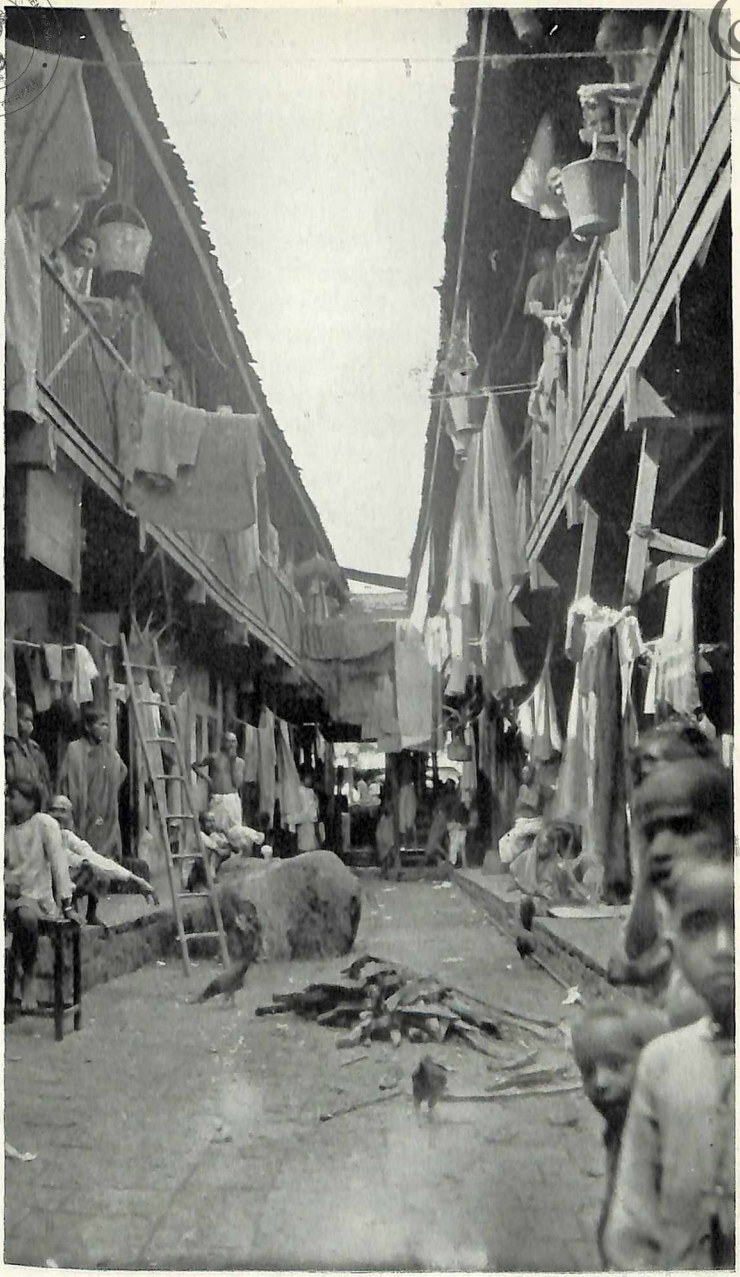
The second question can be answered more definitely. Attention has frequently been drawn to the imperative necessity of finding increased and improved accommodation for the growing population of Bombay. For decades, constant references have been made to the overcrowded and unhealthy conditions of parts of the city.[2] Successive Health Officers, from the 'seventies onwards,[3] have cried out against these "pestilence-breeding regions," and urged the pressing need for erecting artisans' and labourers' dwellings, but no steps were taken. Water supply, drainage and sanitation were improved, but practically nothing was done in the matter of clearing slum areas or providing workmen's dwellings. Had an energetic policy of improvement and development been undertaken at that time, the housing problem of to-day would not have reached its present dimensions. It needed something more powerful than the warnings of medical men and others to stir the people and the administration. It was provided by the terrible outbreak of bubonic plague in 1896. The overcrowded and insanitary areas of the city supplied an excellent

[1] Collections of huts.

[2] In September, 1866, the *Bombay Builder* stated that "coolies and other workmen were finding the greatest difficulty in housing themselves even in the most miserable and unwholesome lodgings. . . . Let anyone visit the purlieus of the Byculla Tanks and examine for himself the wretched rows of cadjan huts occupied by human beings, but only raised by a few inches above the fetid mud of the flats, and he will no longer be astonished to hear that 2 out of 3 coolies that come to Bombay for employment do not return to their homes, but are carried off by fever or other diseases."

In 1872, "Tardeo was beginning to attract so many people to its mills that a properly laid out village for mill-employees appeared desirable." (S. M. Edwardes, *Rise of Bombay : A Retrospect. Times of India* Press.)

[3] In 1872, for instance, the Health Officer wrote to the Municipal Commissioner: "I wish to bring to notice the desirability of erecting artisans' and labourers' dwellings. It is extremely difficult for European mechanics and others to get respectable lodgings at a reasonable rate ; and the filthy dens in which the labouring classes of the city live are among the chief causes of the very high death-rate."



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A TYPICAL SCENE IN WORKING-CLASS QUARTERS.

breeding-ground for the rapid spread of disease. Soon thousands of people fell victims to the scourge, while nearly a quarter of the inhabitants fled panic-stricken, bringing commerce and industry to a standstill. Then only was action taken. The Bombay City Improvement Trust was created in 1898 for "the work of making new streets, opening out crowded localities, reclaiming lands from the sea to provide room for the expansion of the City and constructing sanitary dwellings for the poor and the police."[1] The policy of the Trust was one of (*a*) indirect attack on slum areas by the development of residential estates and the construction of main arterial roads with a view to attracting people from the congested areas; (*b*) the erection of sanitary chawls for the working classes; and (*c*) direct attack on a few of the worst slum areas in the city.

The Trust soon became an unpopular body. The compulsory acquisition of property and the demolition of buildings were resented by both landlords and tenants. The Trust was also regarded as having usurped some of the duties of the Municipal Corporation. At the same time it found itself considerably handicapped. The Municipality continued to exercise control over the building by-laws and the general sanitary administration of the city. The Trust had limited powers and limited funds. Consequently it was compelled to resort to "slum-patching," the development of a few building sites, the construction of a few chawls, and the development of main thoroughfares. In the opinion of its many critics these results were not sufficiently startling to justify its continued existence and an agitation arose, about 1917, for the transference of the Trust to the Municipality. The Corporation charged the Trust with neglecting to deal with the overcrowded and insanitary areas of the city, while the latter retaliated by counter-charging the Municipality with neglect to amend the building by-laws and with failure to control building operations. Without entering into the merits of the two parties, it may be said that the policy of "slum-patching" generally proves

[1] J. P. Orr, *The Bombay City Improvement Trust from 1898 to 1909*. *Times* Press, Bombay, 1911.

unsuccessful, and Bombay was no exception to the rule. The people dishoused did not always avail themselves of the alternative accommodation, if any, provided by the Trust, but preferred to reside in the immediate vicinity of their former residence. This resulted in the formation of another congested zone around the original demolished area, and any attempt by the Trust to acquire the new congested region would be at values enhanced by its own policy. Still the Trust performed useful work. By 1920 it had provided 21,387 new tenements as against 24,428 tenements demolished. Probably its most valuable work was that which met with most criticism—the construction of broad thoroughfares. The city had suffered considerably from the want of main arterial roads. These were constructed by the Trust, and have been invaluable not only by furnishing easy and rapid means of communication, but also as main air channels for congested areas. Side by side with the work of the Trust, the Municipality passed orders for closing a number of rooms which were "U.H.H." (unfit for human habitation). When it was seen, however, that the persons evicted either found themselves homeless or added to the congestion, this vigorous policy was abandoned and action was confined to the worst cases. By 1920, the Municipality had also provided 2,900 tenements for its staff and had sanctioned the construction of another 2,200

The work both of the Trust and the Municipality thus failed to keep pace with the requirements of the city [1] and, despite the appeal of Government and the Press to millowners and other employers of labour to assist in providing better housing for their workpeople, little was done. It was left to His Excellency Sir George Lloyd and his Government to draw up a bold and comprehensive scheme for dealing with the problem.[2] Realizing that united action was essential if the problem was to be successfully solved, His Excellency in 1920 secured the support and

[1] The population of Bombay has increased from 776,000 inhabitants in 1901 to 1,176,000 in 1921.

[2] Details of the scheme are contained in a paper, on *The Development of Bombay*, read by Sir George Curtis, K.C.S.I., before the Royal Society of Arts, on June 10, 1921.

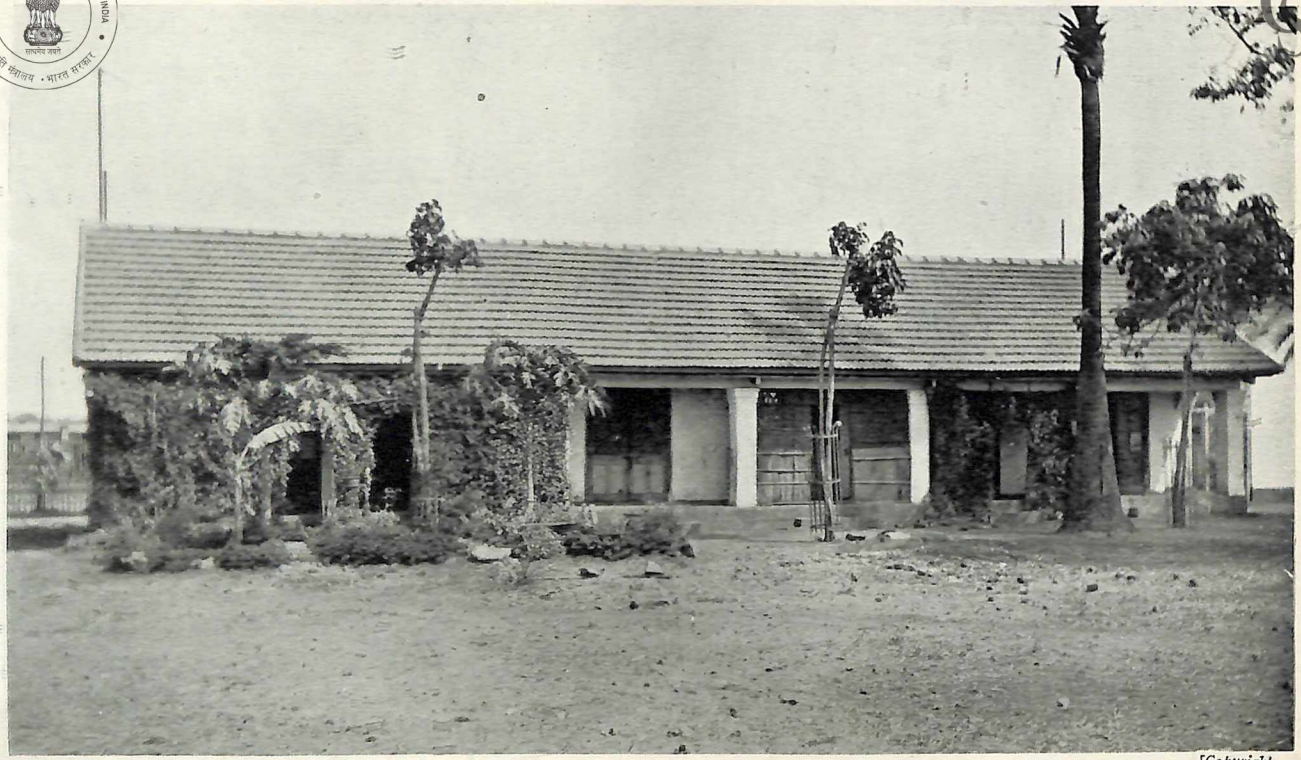
active co-operation of the Municipality, the Improvement Trust, the Port Trust and the public. The proceeds of a development loan and the duty on bales of cotton imported into the city are being utilized to finance the scheme, which consists in the ultimate provision of 50,000 one-roomed tenements for between 200,000 and 250,000 work-people, the reclamation of a portion of Back Bay and, with the co-operation of the above-mentioned local bodies, the development of the north of the island and Salsette. A special department, the Development Directorate, was formed in November, 1920, to co-ordinate the activities of the various bodies. The work already embarked on in connection with the housing scheme involves the construction of 212 chawls, or 16,960 rooms, to be completed by 1925. The position will then be reviewed in the light of the experience gained, and further schemes will only be undertaken if the demand for chawls continues. Fifty-six chawls, or 2,720 tenements, were completed by March 31, 1923; 2,300 of these tenements had been let by the end of the same year at monthly rents which varied from Rs.9.8 to Rs.11.8 per room (rents considerably lower than the economic rent), and about 85 per cent. of the rooms were tenanted by the working classes. It is regrettable that the high price of land necessitates the perpetuation of the chawl, but it is understood that the Directorate is investigating the possibilities of erecting cottages where cheaper land is available.

While the new chawls meet with the fairly general approval of the occupants, there has been much criticism of detail, e.g., the absence of verandas, nahanis and chimneys and the arrangement of the windows. The Director of Development, replying to his critics in a letter to the *Times of India* of May 15, 1923, stated that it was decided to throw the room and veranda into one, so as to give as much floor-space as possible (viz., 10 ft. by 16 ft. 6 in.), rather than follow the practice of the ordinary chawl tenement in Bombay by providing a room about 10 ft. by 12 ft. with a veranda 10 ft. by 4 ft. 6 in. The Directorate further decided against the provision of separate nahanis in each

room, as experience had shown that they were used as urinals. It was also on grounds of health and sanitation that expanded metal was fitted to the window openings in order to prevent the throwing of refuse from them and to encourage the occupants to use the receptacles for rubbish provided in the passages. However, in deference to the representations which the Directorate have received, all rooms are to be fitted with nahanis, and a shuttered type of window without a sunshade is to be adopted in the chawls to be constructed in future.

The Improvement Trust is also continuing its useful work. The six years' programme which it laid down in 1920 provides for the filling up and laying out as building sites of about 1,500 acres of land in the northern part of the island, and the construction of 5,000 tenements.

It must not be expected that with the provision of these dwellings the evils associated with Bombay housing and sanitation will entirely disappear. Tenants will have the benefit of sanitary structures and more light and air, but families will still be housed in one-room tenements. Moreover, it seems too much to hope that the habits of the people will change in their new surroundings. Nevertheless, the measures adopted by the Government of Bombay are a step in the right direction and should lead to a reduction of disease and mortality.



A BLOCK OF IMPROVED GROUND-FLOOR DWELLINGS, MATUNGA.

CHAPTER IV

INFANT MORTALITY

It is generally recognized that "infant mortality is the most sensitive index we possess of social welfare and of sanitary administration."[1] In Bombay the average infant mortality during the five years 1918–22 was 572 deaths per 1,000 births, while in 1921 the rate reached the high figure of 667.[2] In the special inquiries conducted by the medical officers of the English Local Government Board into the incidence and causes of infant and child mortality, the highest recorded infant death-rates among 245 provincial towns and twenty-nine metropolitan boroughs during the four years 1911–14 was 172 deaths per 1,000 births—a figure regarded as excessive in England. The statistics for Bombay appear incredible, and one is inclined to question their accuracy.

The registration of vital statistics in India is notoriously defective. In the Presidency towns of Calcutta and Bombay, however, the system of registration has reached a fairly high degree of efficiency. It is claimed that no death in Bombay can escape registration, although the cause of death is not always accurately given. There is little doubt, however, that the number of births registered does not represent the actual number of infants in the city. Apart from the omission of parents or relatives to register births through ignorance or neglect, it is a common custom for expectant mothers to go to their parents in the villages and return to their husbands after delivery; the births accordingly are recorded outside the city, but, in the event of

[1] Report by the Medical Officer of the Local Government Board, England and Wales, on Mortality during the first five years of life (Cd. 5263).
[2] Annual Reports of the Executive Health Officer for the City of Bombay.

the infant's death upon the mother's return to Bombay, it is registered in the city. This view is confirmed by Dr. Sandilands in his Annual Report for 1921:

"The number of births registered in the City," he writes, "probably understates by some 6,000 the average number of infant lives at risk during the year. If the infant lives at risk during the year be taken in round numbers at 25,000, that is to say, as equal to the estimated number of births, the recorded infantile death-rate would be reduced from 667 to 510 per 1,000 infants under 1 year or per 1,000 births."

But he states:

"The fact has to be faced that for the City as a whole, including as it does an unduly large proportion of the very poorest class, the infantile mortality cannot, after every allowance has been made for various sources of fallacy, be fairly estimated at less than 500, which means that one out of every two infants born has to die before reaching the age of 12 months." [1]

Accordingly Bombay must have the inglorious distinction of possessing probably the highest infant death-rate in the world.

Several questions may well be asked at this stage: Are high infant death-rates a normal feature of life in India? Is the infant mortality of other cotton-manufacturing centres of the Presidency as great as that of Bombay? If not, what are the causes of the excessive mortality in Bombay?

Bearing in mind what has been stated about the accuracy of vital statistics in India, let us compare the Bombay figures with those of other towns in the Presidency. A study of the Annual Report of the Sanitary Commissioner for the Government of Bombay reveals the fact that the Bombay rate is only exceeded by those of two other places, Pandharpur and Poona. The former is a place of pilgrimage, and the latter is an administrative centre. In both of these the vital statistics are probably very defective. The two cotton towns, Ahmedabad and Sholapur, have mortality rates which are little more than half that of Bombay. The actual figures are seen in the following table:[2]

[1] The Report of the Executive Health Officer, Bombay Municipality, for the year 1921.

[2] Compiled from the Annual Reports of the Sanitary Commissioner for the Government of Bombay. The figures for Bombay city are taken from the Reports of the Executive Health Officer, Bombay Muncipality.

City or Town.	Population in 1921. 000's.	Infant Mortality per 1,000 births registered.				
		1917.	1918.	1919.	1920.	1921.
Pandharpur	25	Not available		613	773	763
Poona (excluding cantonments)	133	,,	,,	610	574	876
Bombay	1,176	410	590	653	552	667
Ahmedabad	274	Not available		363	360	348
Sholapur	120	,,	,,	357	281	397
Average for Bombay Presidency	—	217	287	202	183	178

The Presidency rate (which includes urban as well as rural tracts) may appear high according to European standards; nevertheless it is only one-third of the Bombay figure. It would appear that there are some causes which are not at work in the Presidency generally or in the manufacturing centres of Ahmedabad and Sholapur, but which are special to Bombay and produce excessive mortality there.

It is not possible to make more than a brief general survey of some of the causes which are found to be associated with high infant death-rates,[1] and attempt to ascertain how far each of them contributes to the large loss of child life in the city.

Maternal Ignorance.—The Health Visitors of the Bombay Sanitary Association have found mothers engage in some very dangerous practices. It appears to be a habit to cover up their newly-born infants entirely with very heavy and dirty blankets or rags. Windows are generally blocked with gunny, rags, etc., and the doors are kept closed. Caste rules sometimes necessitate an infant being laid on the floor for five days with perhaps only a cotton sari (thin wrap) under it. Opium pills (or " balla

[1] The Medical Officers of the English Local Government Board have found that the following are among the chief environmental circumstances associated with excessive infant mortality: (*a*) Maternal ignorance, (*b*) lack of medical care and nursing, (*c*) intemperance of parents, (*d*) poverty and a relatively low standard of life, (*e*) overcrowding in cities, (*f*) bad housing conditions, (*g*) overcrowding in rooms, (*h*) defective sanitation, (*i*) industrial employment of married women, (*j*) large size of families.

golis") are frequently administered to fretful children. Mothers who are compelled to go to work and are unable to leave their infants in the care of others often resort to these poisonous pills to keep the little ones asleep until they return at midday or in the evening.[1] Besides being drugged, the children are deprived of food and nourishment. Such practices are not confined to Bombay, but are common throughout India. The average woman of the poorer classes in India has little idea how to rear a child, and is almost entirely ignorant of hygiene and sanitation.

Lack of Medical Care and Nursing.—There are more facilities for obtaining proper medical treatment and nursing in Bombay than in the other parts of the Presidency. In the villages of India, except where there are mission or civil hospitals, women have no alternative but to seek the aid of a "dai" (untrained midwife) for their confinement. Dirty midwifery results in tetanus and puerperal fever, and accounts for innumerable deaths of mothers and infants. But though the facilities exist in Bombay, the prejudice of the poorer classes against hospitals prevents many of them from taking advantage of them. Sixty per cent. of the confinements are unattended or attended by only unskilled women. The following table has been compiled

PERCENTAGE OF CONFINEMENTS ATTENDED AND UNATTENDED, 1918 TO 1921.

	1918.	1919.	1920.	1921.
In Hospital	24	22	22	24
Attended by Municipal Nurses	10	9	10	10
,, ,, other qualified Nurses	6	5	4	5
,, ,, unskilled women	56	59	61	57
Unattended	4	5	3	4
Total	100	100	100	100

[1] "Ninety-eight per cent. of the infants born to women industrial workers have opium administered to them." (Report of the Lady Doctor appointed to investigate the conditions of Women Industrial Workers, Bombay, 1922.)

from the annual reports of the Executive Health Officer, Bombay, and is based upon information supplied by the municipal and other nurses in attendance on confinements.

Child Marriage.—The early age of marriage is frequently held to be one of the factors responsible for excessive infant mortality. Although statistics relating to age are notoriously defective, as many people do not know their own age, the enumerator can generally make a close estimate in the case of children. Among the Hindu population of Bombay city we find that 7 per cent. (i.e., 12,000) of the married females were under 15 years of age. The corresponding figures for the Presidency are 869,000 married girls under 15 years, forming 17½ per cent. of the total married females. While early marriage may be a contributory cause, it is clearly not one of the factors which account for the excessive infant deaths of the city as compared with other districts.

Poverty and a Relatively Low Standard of Life.—As yet no inquiries have been undertaken to determine the relative amount of poverty existing in Bombay and other parts of the Presidency. The mere compilation of index numbers of "wages" and "cost of living" would be insufficient; detailed studies are required, and without these it is impossible to express a definite opinion. The ordinary observer of Indian life may infer that the fact that a man will leave his home and family and live in discomfort in an overcrowded city can only be ascribed to the greater wealth that he can accumulate in the town, or to his inability to earn a livelihood in his village.

Industrial Employment of Married Women.—No official statistics are available of the number of *married* women engaged in industry.[1] The Census Report, 1921, and the Factory Report for the same year respectively state the number of women employed (*a*) in "Industry" and "Trade" and (*b*) in factories, and these figures can

[1] In the inquiry into the economic condition of wage-earners in the Parel Ward (see Appendix I), it was found that one-third of the married women were industrially employed.

be expressed as percentages of the total female population for each of the three largest industrial centres of the Presidency.

	Bombay.		Ahmedabad.		Sholapur.	
	Nos. (000's).	Percentage of Population.	Nos. (000's).	Percentage of Population.	Nos. (000's).	Percentage of Population.
Female Population .	405	—	119	—	53·7	—
Women in "Industry" and "Trade" . .	45	*11*	12·9	*10·8*	10·2	*19*
Adult Females in Factories	31·6	*7·8*	9·3	*7·8*	4·6	*8·6*

Bombay shows no excessive employment of women in industry as compared with the other cotton towns.

Large Size of Families.—The average number of persons per family in Bombay is, according to the Labour Office, 4·2, and according to the inquiry in the Parel Ward, 3·6. From the classification of working-class households (Appendix I) it is seen that the number of large families is comparatively few. Workers in a large number of cases leave their wives and families "up-country."

It would appear that none of the factors so far examined account for the *excessive* mortality of Bombay as compared with the infant death-rates of the other cotton towns and of the Presidency generally. There remain "Overcrowding," "Bad Housing," "Defective Sanitation" and "Venereal Disease" as possible causes. A detailed survey of housing and sanitation in Ahmedabad and Sholapur cannot be undertaken here, but without occupying much space a summary of the chief facts relating to density of population, overcrowding, etc., can be given.

	Bombay.	Ahmedabad.
Persons per acre (1921) . .	78	38
Average population per inhabited building	34·5	7·2

	Bombay.	Ahmedabad.
No. of persons living in rooms each occupied by 6 or more persons	384,092	39,719
Percentage of persons living in rooms each occupied by 6 or more persons . . .	36 per cent.	15 per cent.
Percentage of 1-room tenements to total tenements . .	70 per cent.	55 per cent.

The density of population in Sholapur was 27 persons per acre in 1921.[1]

It is evident that there is greater overcrowding both of persons per acre and persons per room in Bombay than in Ahmedabad. In no ward or section of Ahmedabad does the density of population exceed 240 persons per acre, whereas there are sections of Bombay where the density exceeds 700 persons, and in nearly one-fifth of the area of Bombay City and Island, comprising close on 60 per cent. of the population, there is an average density of 250 persons per acre.

Statistics showing the association between one-room tenements and infant mortality have been compiled from the Annual Report of the Health Officer, Bombay, and are given below:

	Births in 1921.		Infant Deaths in 1921.		Infant Mortality per 1,000 births registered.			
	Nos. (00's).	Per cent.	Nos. (00's).	Per cent.	1918.	1919.	1920.	1921.
1 Room and under . .	150	76	94	87	767	831	631	828
2 Rooms	20	10	6	6	499	565	304	322
3 Rooms	4	2	1	1	375	358	295	191
4 or more Rooms . . .	3	1·5	1	1	239	189	289	133
Road-side	·25	·1	·1	·1	133	543	400	485
Hospitals	20	10	6	6	79	112	309	190

It will be seen that the proportion of deaths to births varies inversely as the number of rooms occupied by the parents. One would be inclined to infer that overcrowding

[1] Were further statistics available, they would doubtless show that overcrowding in dwellings, as in area, was much less than in Bombay.

in one-room tenements is one of the chief causes of excessive mortality. It is sometimes stated, however, that the high death-rate results from the ignorance and insanitary habits of the occupants of one-roomed tenements. It is improbable that there is any foundation for this statement, as the habits of the Bombay working classes do not differ from those of their fellow-workers in the other industrial centres of the Presidency.

While there is no statistical evidence to show that bad housing and defective sanitation are among the other chief causes, yet anyone who has seen the conditions in which the workers of Bombay live will readily associate them with the heavy death roll of infants. In Lancashire, a close association was found between excessive infant mortality and the prevalence of unsatisfactory methods of disposal of excrement and house refuse.[1] There is no reason to suppose that where conditions are much worse, the degree of association is any less.

It is extremely difficult to ascertain how far the prevalence of venereal disease is responsible for the excessive infant death-rate. In the opinion of medical men and social workers, there is no doubt that it is an important contributory factor.

It remains to mention some of the measures undertaken by municipal and voluntary associations for combating infantile mortality in the city. The Health Department employ twenty municipal nurses and midwives, whose duty it is to visit the homes of the poor, instruct mothers in domestic and personal hygiene and in the care and rearing of children, and advise prospective mothers to enter the free maternity homes and, if they refuse, attend them in their own homes and provide them with food and bedding. The nurses also report cases of sickness. They visit twenty to twenty-five thousand houses, chawls and huts, and attend over a thousand confinements annually. Their labours appear to be welcomed and appreciated. The work carried

[1] Forty-third Annual Report of the Local Government Board (England), 1913–14. Supplement containing a Third Report on Infant Mortality, dealing with Infant Mortality in Lancashire. Cd. 7511.

out by the Lady Willingdon scheme supplements that of the Corporation. A dozen lady health visitors (qualified midwives) have been appointed, three maternity homes, providing fifty-five beds in all, have been established since 1915–16, and lectures and classes for Indian "dais" are held. Milk depôts have been attached to each maternity home for the distribution of pure pasteurized milk, free or at a nominal price. Her Excellency, Lady Lloyd, has further interested herself in the work, and eight [1] Infant Welfare Centres have been opened since the year 1919. Each centre is in charge of a lady doctor, a trained nurse and midwife; health visitors (trained nurses) are also attached. Instruction and advice are given to mothers, medical treatment is given to infants, and milk and clothing are supplied. There is also a crèche at one of the centres.

If infant mortality is to be successfully combated, a vigorous campaign should be launched through the combined efforts of the Press, the public, the Municipality and Government. Educated public opinion should compel the Municipality to carry out the following measures of sanitary reform: (1) The conversion of privies into water-closets; (2) the adequate paving of compounds, yards, back streets and approaches to chawls; (3) the provision of dustbins or other movable receptacles for the storage of house refuse, and their systematic and frequent removal; and (4) the provision of an adequate water supply. In addition, by-laws embodying the following suggestions should be enacted and applied to tenement buildings: (*a*) Each room to be limited to four adults (two children under 12 years counting as one adult), the landlord through his representative, the "bhaya" (caretaker), being responsible for the enforcement of the by-law, and both the landlord and tenant being liable to fines in cases of breach; (*b*) the provision of one water-closet for every twenty persons; (*c*) the employment by the landlord of one or more sweepers according to the size of the building; (*d*) the provision of an adequate number of water taps and bathing places.

It is understood that the municipality propose to abolish

[1] Shortly to be increased to ten.

the privy system when the new Tansa water scheme is completed (in the course of three or four years) and a sufficient supply of water is available. They are also contemplating the provision of dustbins on each floor of tenement buildings. It remains for the public to see that these proposals are carried out, and that the other measures above enumerated are adopted with the least possible delay.

The excellent work which is being carried out by the Lady Willingdon and the Lady Lloyd schemes should receive greater support from the public than hitherto to enable the necessary extension of the work to be undertaken.

The public conscience should not be at rest until every effort has been made and the city's infant death roll has been reduced to normal proportions.

CHAPTER V

THE MILL-HAND

THERE were 242,000 cotton operatives in Bombay Presidency in 1921. Of these, approximately 60 per cent. were employed in Bombay, 23 per cent. in Ahmedabad and a little over 7 per cent. in Sholapur. The cotton-spinning and weaving mills of Bombay City and Island employed 146,000 workers,[1] i.e., 114,000 men, 30,000 women, and the remainder children.

Supply of Mill Labour to Bombay City.—Little over 10 per cent. of the mill-hands are city-born, the remainder come from "up-country." The districts and provinces which supply Bombay with most of her textile labour are Ratnagiri (41 per cent.), the United Provinces (11 per cent.), Satara (8 per cent.), Poona (7 per cent.), Kolaba (5 per cent.). Those who come from the Konkan and Deccan are chiefly Marathas and Kunbis, although there are a considerable number of Mahars, Dheds, Chambhars and Mochis—men of low caste. The "pardeshi" from the United Provinces (some 500 miles away) is usually a Rajput, Thakur, Brahmin or Ahir. The details are set out in the following table (see next page), which includes both domestic and factory workers (99 per cent. are cotton operatives):

[1] Annual Factory Report of the Presidency of Bombay, 1921. The Census Report of 1921 gives the number of textile workers in Bombay City as 134,000.

PRINCIPAL BIRTHPLACES AND CASTES OF MALE TEXTILE WORKERS, BOMBAY CITY, 1921. (00's.)

DISTRICT OR PROVINCE.	CASTE.					TOTAL (including other castes).
	Maratha.	Kunbi.	Dhed or Mahar.	Bhandari.	Chambhar or Mochi.	
Ratnagiri	154	27	21	20	13	381
Satara	41	1	22	—	1	142
Poona	45	1	3	—	3	63
Kolaba	29	2	4	1	2	50
Ahmednagar . . .	11	1	12	—	3	35
Hyderabad . . .	14	1	—	—	—	34
Kolhapur	13	—	1	—	—	24
Sholapur	4	—	1	—	2	13
Nasik	5	—	1	—	—	11

	Sheikh	Rajput.	Thakur.	Brahmin.	Ahir.	Memon.	
United Provinces .	27	14	8	7	5	5	139

(NOTE.—The above table is selective. The districts selected are those from which the bulk of the immigrants come, and the castes are those which are numerically the greatest amongst the immigrants.)

The supply of labour varies according to the season of the year. It is lowest from March to June, owing to the marriage season [1] and the general exodus of labour to till the fields on the approach of the monsoon.[2] The demand for labour is usually greater than the supply; this was particularly so during the War, when the increased activity of the mills necessitated a larger number of workers.[3]

Recruitment of Labour.—Each jobber (foreman of a department) is expected to find workers for his department. He realizes that failure to do so may result in his dismissal. Accordingly, he endeavours to acquire an influence over his friends and acquaintances who live in the same or in

[1] March, April and May are regarded as propitious months for marriages.
[2] Ferry steamers cease to ply in the month of June.
[3] According to the Annual Factory Report of Bombay Presidency, there has been an increase of over 40 per cent. in the number of cotton workers in Bombay City and Island during the period 1914 to 1921.

neighbouring chawls. He lends them money, advises them in family affairs and arbitrates in disputes. When labour is required, he uses the influence so gained and is generally successful in procuring hands. On occasions when he visits his village, he paints the life of a mill-worker in the brightest colours and endeavours to induce his relations and friends to leave their homes and fields for the more remunerative calling.

When a man first comes to Bombay, he generally comes alone. If he is married, his wife and family are left in his village until such time as he may decide to make a home for them in the city. Upon his arrival, he either stays with relations, village friends or caste fellows, boards with a private family who take in one or two lodgers, or joins a "khanavali" (boarding-house).[1] Sometimes he readily secures a temporary job in a mill through the services of a relation, friend or jobber acquaintance. More often, he has to wait a length of time and does not obtain a post without first bribing a jobber, "mukadam,"[2] timekeeper or clerk. He is then taken on as a temporary hand and acts as a "badli" or substitute when anyone is absent. His position and earnings are precarious until such time as he can secure a permanent post.

During the time a man is seeking a "job" or while he is in irregular employment, he has to maintain himself and pay his boarding charges. If he is a married man who has brought his family with him, he has to meet the landlord's claim immediately, as rent is always paid in advance. Moreover, assuming the most favourable circumstances, viz., that he secures a permanent post as soon as he arrives in Bombay, he has to wait at least six weeks from the time he first starts work before he can obtain his full month's wages.[3] As a rule he has little money with him when he

[1] The khanavali are quite a feature of working-class life in Bombay. Women, frequently widows, rent a room and take in several boarders. The boarders receive their morning and evening meals but make their own sleeping arrangements; they generally sleep in the street, on open spaces or in the verandas, corridors and compounds of chawls. A single man was usually charged Rs.6 or Rs.7 per mensem for board in 1917–18 (see Appendix I), but owing to the rise in the cost of living he has now (1923) to pay double this figure.

[2] Foreman of a gang of labourers.

[3] See below, p. 51.

first comes to the city. He is consequently compelled to borrow. He may have recourse to a money-lender, he may obtain inferior food from the "bunnia" (grain dealer) on credit, or sometimes he is befriended by a jobber. From whomever he may borrow, he can only secure the money or credit at a very high rate of interest and on terms that soon enslave the man to his benefactor. If he has left his village to evade the clutches of a "sowkar" (money-lender), he only succeeds in falling into the hands of another. In this way, many a man commences his mill life by getting into the clutches of money-lenders, jobbers and the like, who keep him in permanent bondage.

Classes and Types of Mill-Workers (Men).—In some of the mills, the manager and the masters and assistant-masters of the spinning, carding and weaving departments are Lancashire men. In others, these posts are filled by Parsis and other Indians. The next grade of labour are the "jobbers" or "foremen," recruited from the ranks of experienced mill-hands. Some jobbers are said to have spent over thirty years of their lives in mills—an unusually long time, as most mill-hands retire early to their native villages. Under the supervision of the jobbers [1] and assistant jobbers are the rank and file of mill-hands. There are several types: (*a*) There is the ordinary full-time worker, who is a good, steady, intelligent man, fairly regular in attendance. The bulk of the mill-hands are of this class. (*b*) Next is the "badliwallah" or substitute. There is a considerable amount of absenteeism of operatives through illness and other causes. The mills accordingly employ a number of substitutes to fill temporary vacancies. These are, as a rule, inefficient workers who shirk regular employment. A factory inspector stated that many of the accidents in mills are due to the employment of these "badlis." (*c*) The third type is the "athawada" or seven-day man, who works for a week and then takes a week's holiday. (*d*) Fourth comes the "mawali," who leads a gay life and works when it pleases him. He is inclined to vice. (*e*)

[1] Employers state that in recent years jobbers have lost much of the influence which they formerly had over their subordinates.

Finally, the " dada " or hooligan, who lives by intimidation. He is both lazy and dangerous and is often in the keep of a " naikin " (forewoman). Fortunately the number of these is few.

It has been found by experience that certain castes have special aptitude for particular branches of work. Ghatis work as " naoghanis " (skilled weight-lifters) in the mixing room, the baling and finishing departments, in the power-house and go-downs. The " pardeshi " from the United Provinces has an aptitude for carding, while the Konkani Mohammedans act as firemen and oilers in the power-house. The Marathas, who form the bulk of the operatives, are to be found wherever skill and intelligence are required.

Wages of Men Workers.—An inquiry into the wages and hours of labour in the cotton-mill industry of Bombay Presidency was conducted by the Labour Office in May, 1921. The more important results obtained relating to Bombay City and Island may be summarized as follows :

(*a*) Of the 132,500 mill-hands covered by the Wages Returns, 109,000 were full-timers and a little over sixteen hundred were children (half-timers). It would appear, then, that over 16 per cent. were substitutes, spare hands and other persons not working " full-time."

(*b*) About half the adult males were on piece-work.

(*c*) The average daily earnings (*exclusive* of overtime pay, annual bonus, etc.) of those men who worked *full-time* were Rs.1.5.6.[1] Nearly 90 per cent. earned between 12 annas and Rs.2.4.0 per diem.

(*d*) The average monthly earnings (*inclusive* of monthly bonus and allowances) were Rs.34.15.2—an increase of 90 per cent. on the corresponding figure for May, 1914.

The average daily earnings, etc., of each important class of skilled worker are given on page 50.

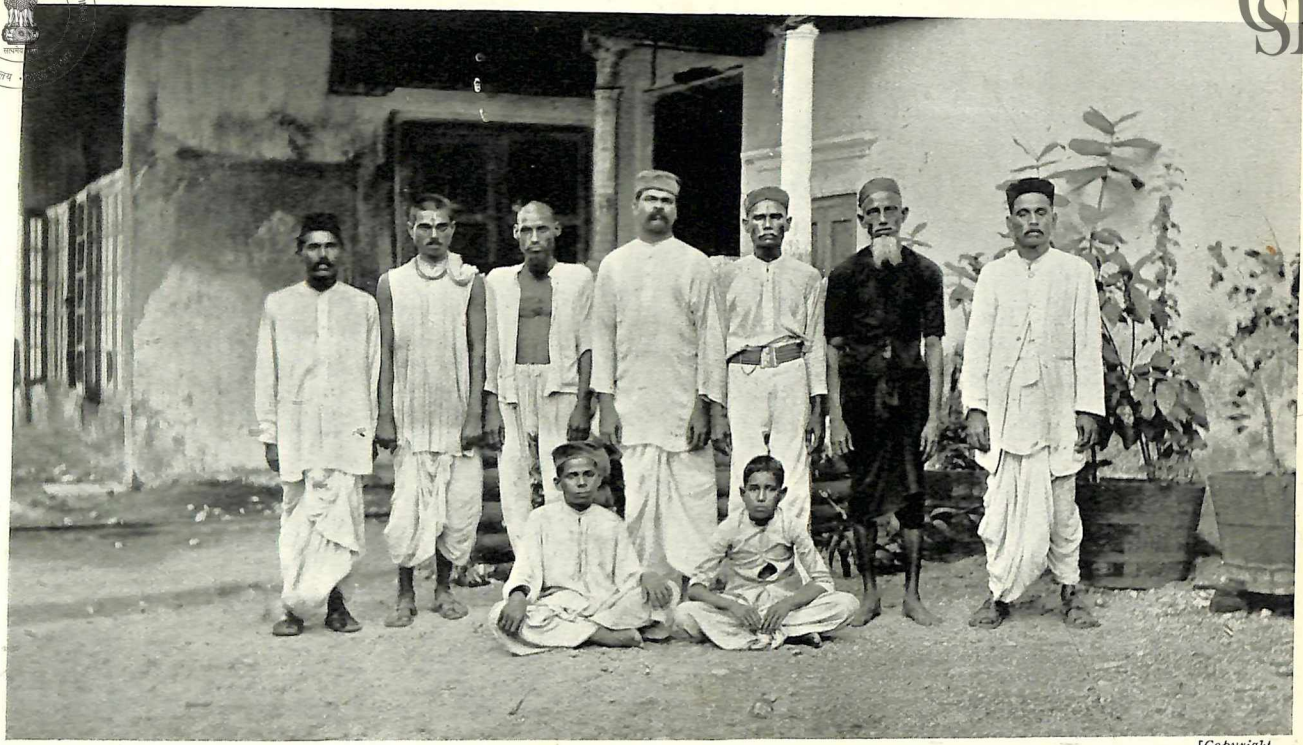
With regard to labourers, the earnings of mukadams varied considerably. Excluding those in the bleaching department, who earned Rs.2 to Rs.4 per diem, the average daily earnings of the mukadam were about Rs.1.10.

[1] The number of working days has been assumed to be twenty-six, the number of days actually worked during May, 1921.

AVERAGE DAILY EARNINGS OF SKILLED MALE OPERATIVES, MAY, 1921.

Whether Piece- or Time-worker.	Jobbers.		Frame Tenters.			Spinners.		Piecers.			Weavers. Two Looms.
			Intermediate.	Slubbing.	Roving.	Mule Spinning.		Ring Spinning.	Mule Spinning.		
	Piece.	Time.	Piece.	Piece.	Piece.	Piece.	Time.	Time.	Piece.	Time.	Piece.
	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.
Average	3 13 8	2 15 6	1 5 1	1 6 2	1 3 4	1 15 8	1 15 0	1 0 3	1 6 2	1 5 2	1 10 2
Lower Quartile	Not stated		1 3 0	1 5 0	1 2 0	1 14 0	1 11 5	15 0	Not stated		1 7 0
Median	,,	,,	1 5 3	1 6 0	1 3 0	1 15 0	1 13 0	1 0 0	,,	,,	1 9 0
Upper Quartile	,,	,,	1 6 0	1 7 9	1 4 5	2 1 0	2 1 0	1 1 0	,,	,,	1 12 0
Percentage of Piece-workers to Time-workers	48	—	99	99	99	84	—	—		—	100

Note.—The Report makes no mention of the "commission" which jobbers take from each man under their control.



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TYPES OF BOMBAY MILLHANDS. I.

(THE TWO MEN WITH BEARDS ARE MOHAMMEDANS.)

[Copyright.

TYPES OF BOMBAY MILLHANDS. II.

Nasghanis (skilled lifters) averaged about Rs.1.3, the majority earned Rs.1 to Rs.1.4. Coolies' earnings differ according to the department; the bulk of them received 14 annas to Rs.1.2 per day.

No mention is made in the Report as to the condition of the labour market in May, 1921, and whether that month can be regarded as typical. There is usually a scarcity of labour in May owing to the exodus of the workers to the villages, and wage-rates are consequently high. A census taken about December would probably show much lower rates. Apart from seasonal variations in wage-rates, there are considerable divergencies between the rates in mills owing to differences of working conditions. Side by side with many up-to-date mills there are others employing old machinery. The rates in certain occupations (artisans, coolies, naoghanis, etc.) also depend largely on the demand for labour in other industries.

Mill-hands are employed by the month and receive their wages monthly, a fortnight after they are due, i.e., their wages for January would not be paid until the middle of February. This system leads to considerable hardships and is frequently a source of complaint.[1]

In addition to their wages, all employees with three full months' service have since the year 1919 been granted an annual bonus, the amount of which varies according to the length of service and the nature of the work. For example, time-workers (both adults and children) who were on the muster rolls at the end of November, 1921, and had worked for nine months and over received one full month's wages; others with shorter service were granted a bonus *pro rata*. The Labour Office estimated that the increase to be added to earnings on account of the annual bonus in 1921 was 8·3 per cent. The Bombay Mill Owners' Association, however, decided to pay no annual bonus for 1923 owing to decreased profits as a result of the slump in the market. The decision was followed by a prolonged and unsuccessful strike.

[1] See below, page 57. After the plague exodus in 1897–8 daily payments were introduced, but a return to the monthly system was effected after an unsuccessful strike had taken place.

Hours of Labour.—Up till the end of June, 1922, the hours of mill labour were regulated by the Indian Factories Act, 1911, which restricted the hours of work for adult males to twelve per day. Mill owners were almost unanimously of opinion that, in the statutory twelve-hour day, owing to want of continuous and rigid application to duty, the hours actually worked were about eight. In 1920 the hours were reduced to ten per day [1]—a concession wrung from the mill owners after the great mill strike. Subsequently the Indian Factories Act was amended, and from July 1, 1922, the hours have been limited to eleven per day and sixty per week. The mills work a ten-hour day; the double shift system of eight hours [2] worked by a few mills was discontinued early in 1923 owing to slack trade and scarcity of labour.

Holidays.—Under Section 32 (1) of the Factories Act, 1911, work on Sundays was only permitted when the mill was closed for a whole day "on one of the three days immediately preceding or succeeding the Sunday." This enabled the operative to have one day of rest a week. The amended Act of 1922 continues the same provision. There were fifty-six holidays (including the weekly day of rest) in 1921. There are thus about twenty-six working days in a month; though, owing to the large amount of absenteeism, the actual number of working days is estimated at about twenty-two.[3]

Women Workers.—Women are employed in the waste room and in the ring spinning, reeling and winding departments of mills. In the inquiry made in the Parel Ward in 1917–18 it was found that the most usual wages received by waste pickers, reelers and winders were Rs.8 and Rs.7 per mensem. According to the Labour Office Wage Enquiry,

[1] "Nominally our working day is ten hours, but our labour does not actually toil this period by something like, I should say, 20 per cent., and is still very inefficient." (Mr. J. A. Kay, Chairman of the Bombay Mill Owners' Association, at the Annual Meeting, 1922.)

[2] Four mills worked as follows:
1st Shift—6 a.m. to 3 p.m., with a recess from 9 to 10 a.m.
2nd ,, —3 p.m. ,, 12 midnight ,, ,, 8 ,, 9 p.m.

[3] This was the estimate given by a factory inspector.

the average monthly *earnings* (including monthly bonus and allowances) was Rs.10.0.10 in May, 1914, and Rs.17.6.6 in May, 1921. These figures include the higher earnings of forewomen and piecers. Details of the earnings of the chief classes of women workers in May, 1921, are given in the following table:

AVERAGE DAILY EARNINGS OF WOMEN WORKERS, MAY, 1921.

	Waste Pickers.	Ring Spinners.			Winders.			Reelers.
		Piecers.	Followers.	Doffers.	Drum.	Cheese.	Pirn.	
Whether Piece or Time Work.	Time.	Time.	Time.	Time.	Piece.	Piece.	Piece.	Piece.
	As. p.	Rs. a. p.	As. p.	As. p.	As. p.	Rs. a. p.	As. p.	As. p.
Average . .	8 5	14 7	12 10	10 11	12 2	14 1	11 0	13 6
Lower Quartile	7 9	12 0	11 0	9 8	10 0	12 3	8 0	13 0
Median . .	8 0	15 0	13 0	10 5	12 0	14 6	12 0	14 0
Upper Quartile	9 0	1 0 11	13 9	12 0	14 0	1 0 0	12 0	14 9
Number of workers .	1,733	1,055	916	821	1,591	576	1,036	9,201

Ninety-six per cent. of the reelers and nearly all the winders are piece-workers.

The majority of the "naikins" or forewomen in the winding and reeling departments earned from Rs.1.8 to Rs.2 a day and on the average about Rs.1.12 per day in May, 1921. The Wage Enquiry Report omits to mention that naikins also receive "dastoori" (commission), usually 4 annas per month, from each worker under their control. The amounts so received are generally used for the purchase of jewellery. The naikins as a class are persons of low morals—some of them keep "dadas" (hooligan mill-hands), while others make use of their power over their subordinates to force them into prostitution. Even some of the clerks (especially those attached to the reeling department) and the jobbers take advantage of the helplessness and poverty of the women. Many a girl and woman-worker is exposed to danger from this source.

The hours of labour of women-workers, like those of men, are limited under the Indian Factories Act of 1922 to eleven per day and sixty per week. In actual practice, 32 per cent. were found to be on a ten-hour day, while the remainder worked less than ten hours.[1] The hours are generally from seven in the morning to five or six in the evening, with an interval of an hour at midday.

The life of the married woman-worker with young children is a hard one. She has to rise before daybreak, prepare the food of the household, give attention to the children, and sometimes wash the clothes of the family before she can go to her work. At midday she usually returns home, prepares another meal and nurses her infant. She resumes her duties at the mill in the afternoon and after several hours' hard work returns to her room in the evening only to face more household duties—to fetch water, cook the food and clean the utensils. There is no leisure for her, and even if there were she would be too fatigued to take advantage of it. Nevertheless, in the opinion of Dr. Barnes,[2] she is better off in the healthier and more hygienic surroundings of the mill, even though the air is fibre-laden, than in the impure atmosphere of the chawl.

Her children are neglected as she has little spare time to give them. Only three mills provide crèches ; consequently many a mother is compelled to leave her little ones in the care of elder children or neighbours. If the mother is unable to leave the mill to feed the infant, either it is brought to her at the risk of catching a chill, or it is fed on impure buffalo's milk.

Child Labour.—Children are encouraged both by their parents and by jobbers to work in the mills from an early age. Under the Indian Factories Act, 1911, children certified to be above the age of nine years were permitted to be employed in factories for seven hours daily, provided they were not at work before 5.30 a.m. or after 7 p.m.

[1] Report of an Enquiry into the Wages and Hours of Labour in the Cotton Mill Industry, Bombay Labour Office, 1923.

[2] Final Report of the Lady Doctor appointed by Government to investigate the conditions of Women Industrial Workers in Bombay, 1922.

They might not be employed full-time till they had attained the age of fourteen. In practice, the age limit was lowered owing to the difficulty of ascertaining the correct age of a child,[1] and to children obtaining certificates of age before they were entitled to them. Further, the law was frequently evaded, especially in "up-country" mills, by children working in a factory from 6 a.m. to 12 noon and then going to a neighbouring one where they would work in the afternoon. As they would be enrolled under different names, such malpractices were difficult to detect. Moreover, children were taught by the jobber to fear the factory inspector, so that when he entered a department they would run about screaming. If the inspector attempted to give chase, the children were likely to run into machinery. It was realized that the only method of checking the excessive employment of young children was to raise the age limits. Accordingly, under the new Act of 1922, children must be certified to be at least twelve years of age before they can be employed as half-timers, the age of full-timers being raised to fifteen. The hours of labour for half-timers have also been limited to six; in practice, since the Bombay mill strike of 1920, children have been working only five hours a day. It must be expected that the practice of false declarations of age will continue, but as the age limit has been raised, the results of evasions of the law are not so serious. Further, the Government of Bombay have appointed a whole-time certifying surgeon who is exercising a check on the improper employment of children. Attempts at double certification[2] still continue, and in 1921 nearly half the children presented for fresh certificates were found to have been previously certified.

Recent statistics published by the Chief Inspector of Factories show a decline in the number of half-timers—probably owing to the strict supervision of Dr. Bardi in issuing certificates of age and physical fitness. The number has declined from 5,306 in 1915 to 2,664 in 1921, and there

[1] There is practically no certification of births in India.

[2] Children frequently change their mill in the hope that the more frequently they appear before the certifying surgeon, the more likely they are to obtain a full-time certificate.

is reason to believe that under the new provisions of the Factories Act there will be a further decrease.

In 1921, there were 1,430 boys and 838 girls—a total of 2,268 children under fourteen years—in the cotton mills of Bombay City and Island. According to the Bombay Wage Enquiry of the same year they earned from 4 to 8 annas daily, averaging 6½ annas per diem. Most half-timers are employed in the spinning and roving departments. Lads and youths, fourteen to eighteen years of age, find employment as spinning boys, roving boys, piecers, creelers, reachers, etc. Their earnings in 1921 varied from 9 annas to over a rupee per day and averaged about 12 annas daily. Piecers make nearly a rupee a day. Very few youths and no children are piece-workers.

Free and compulsory education has not as yet been introduced in Bombay, although its early introduction is contemplated in wards "F" and "G"—mill areas. Special schools for half-timers have been established by a few mills.[1] Little interest, however, is taken in them by the mill agents.[2] They are, for the most part, staffed with unqualified teachers and, until recently, no inducement was offered to children to attend. Some of the mills are now paying small bonuses for regular attendance. In 1920–1 only about one-quarter of the half-timers received instruction.[3] The importance of educating the future mill-hand and making him self-reliant cannot be over-estimated, but it should be education in the right sense of the term and not merely instruction in the Three R's. Manual and physical training should also be given.

Several night schools have been established by the Social Service League for the benefit of mill-hands and other workers. In 1922 there were eighteen schools, with an average daily attendance of 545 persons.[4] Most of the

[1] There were seven mill-schools in 1919–20 and two classes attached to ordinary municipal Marathi schools for the benefit of half-timers.

[2] A characteristic feature of industrial and commercial organization in India is the presence of large agency firms which, besides participating in trade, finance and manage industrial concerns.

[3] Report of the Director of Public Instruction, Bombay Presidency, 1920–1.

[4] Eleventh Annual Report of the Social Service League, Bombay.

pupils were drawn from the backward Hindu communities, but there were also a large number of Mohammedans. The ages of pupils ranged from ten to fifty-five. Reports of the good work of the schools were confirmed by inspection.

The Mill-hands' Grievances.—The mill-hands complain that many of the customs and practices, rules and regulations of the factories are oppressive. The system of making wage payments monthly, a practice adopted throughout India in order to secure steadiness and continuity of service, results in hardship and indebtedness. It may be argued that more frequent payments would lead to greater disturbance and dislocation of labour owing to absenteeism after pay-day. Even so, although temporary dislocation may at first result, in the course of time labour would probably settle down to the new conditions. The alternative is the perpetual enslavement of the worker.

A direct consequence of the monthly engagement of labour is that it necessitates a month's notice in advance being given in writing when the worker desires to leave. Many ignorant new hands leave without notice and consequently forfeit their pay. Upon their claim for payment being refused, they are encouraged by a certain class of pleader to file a suit and waste their money. Even intelligent but illiterate workers have recourse to "notice-wallahs" (notice writers), or pleaders who charge from 12 annas to a rupee for writing a notice.[1] Sometimes the notices are not accepted although legally served. The mill-hand then goes to one of the so-called "mill-hand associations," which are composed entirely of notice writers and law touts, who launch the ignorant worker into useless litigation.

Much is heard from mill-hands and social workers regarding the fines that are levied by the mill for the enforcement of discipline and for maintaining a standard of work. Mill owners urge that the fines are introduced merely as a check to reduce the loss of material and depreciation. In the Bombay mills there is greater depreciation and damage of machinery and tools and a larger amount of bad workman-

[1] Sometimes a charge of Rs.5 is made for a "special" notice.

ship and waste than is found in Lancashire. This is attributed partly to irregular attendance, lack of interest on the part of the worker, the long hours of labour, the employment of inferior workmen (especially substitutes) and rough and careless handling. It is extremely difficult to ascertain the truth about fines. A factory inspector stated that it was exceptional for fines to be levied, and on the average they formed only 8 to 10 per cent. of the earnings—surely a high figure!

It may be interesting to cite as an example rules and regulations actually in force in a Bombay mill: "When any worker has given due notice and he is found to be irregular or absent during the currency of that notice, his notice will be null and void, and he will have to give a fresh notice. A day's notice without leave means forfeiture of double wages. Overtime work is compulsory, and a workman who fails to comply through unwillingness or unfitness for extra exertion is liable to punishment. A mill-hand about to leave service without notice, or absent from work for five days consecutively, renders himself liable to wholesale forfeiture of wages. Jobbers and mukadams must supply hands to mills, whenever required to do so, or face peremptory dismissal or a fine. Unclaimed wages will not be paid six months after the date on which the payment falls due."[1] Many of these rules act harshly and are one-sided. A man has to give a month's notice if he intends to leave work, but his employer can dismiss him instantly. We are informed that the rules are seldom enforced, but if that is so, is it necessary to have them at all?

It is stated that the amount of unclaimed and forfeited wages in the Bombay textile mills reach a high figure annually. In their petition to the Right Hon. E. Montagu, Secretary of State for India, in November, 1917, the Honorary Secretaries of the Kamgar Hitawardhak Sabha ("an association for watching the interests of Indian working-men") estimated that, assuming the amount of unclaimed and

[1] *Times of India*, January 11, 1917. Letter by Mr. H. A. Talcherkar, entitled "Mill-hands and Law Touts."

TYPES OF WOMEN MILLHANDS, I.

[Copyright.

TYPES OF WOMEN MILLHANDS. II.

(THE WOMAN IN THE CENTRE IS A WASTE PICKER. THE OTHER TWO WOMEN ARE NAIKINS.)

forfeited wages to be Rs.2,000 per mill per year, no less than Rs.174,000 would annually accrue from this source. It is urged that the sums which accumulate should be devoted to the welfare of the workers. On the other hand, mill owners state that some of the unclaimed wages arise through workers not waiting for their wages when they damage or break a machine, and that the money should be placed against depreciation of machinery.

The Mill-hands' Failings.—The mill owners also have their grievances. The attendance of the operatives is unsatisfactory, as there is always a large percentage of absentees, except near pay-day. Mr. Engels, Chief Inspector of Factories, estimated that about 20 per cent. of the regular staff were on the average absent every day. The Bombay *Labour Gazette* states that normally 15 to 20 per cent. of those on the wages book are away from work. The following statement of absenteeism in cotton mills has been compiled from the reports of the condition of the labour market which appear in the monthly issue of the *Gazette* :

Month ending—	Percentage of Absentees.
May 12, 1922	21·3
June 12, 1922	18·8
July 12, 1922	14·4
Aug. 12, 1922	14·1
Sept. 12, 1922	16·3
Month of Sept. 1922	15·9
Month of Oct. 1922	9·3
Month of Nov. 1922	8·3
Month ending—	
Jan. 15, 1923	8·2
Feb. 15, 1923	10·7
Mar. 15, 1923	25·4
Month ending—	
April 15, 1923	18·8
May 15, 1923	19·4
June 15, 1923	18·4
July 15, 1923	13·9
Aug. 15, 1923	12·7
Sept. 15, 1923	12·5
Oct. 12, 1923	14·5
Nov. 12, 1923	15·3
Dec. 12, 1923	11·1
Jan. 12, 1924	10·1
No returns for Feb. and Mar. 1924, owing to the strike.	

It will be seen that the percentage varies according to the season, and that it is highest from March to June and lowest in December and January. There is usually a considerable increase of absentees after the payment of the

annual bonus, as many workers leave then for their villages.[1] There is also an increase after a festival or long holidays, e.g., after the *Holi* holidays. In justice to the mill-hands, it must be said that the sickness rate[2] among them is considerably higher than among workers in European textile centres. The climate and the appalling conditions of their environment subject the Bombay workers to malaria and other fevers, phthisis, dysentery, in addition to the epidemics of plague, cholera and smallpox. Nevertheless, it is the experience of nearly all employers who have been questioned on the subject that the absentees are more numerous after increases of wages or payments of bonus.[3] The large proportion of absentees makes it necessary for employers to keep about 20 per cent. more names on the muster roll than are necessary, and they are compelled to employ "badliwallahs," or substitutes, who are less efficient workers.

Not only do the mill-hands absent themselves, but, when they come to work, they loiter and waste a great deal of time. The habit of loitering may have been fostered by the excessive number of hours which they formerly worked, viz., fourteen hours per day prior to the Indian Factories Act of 1911. Even though the working day has been reduced to ten hours, it is doubtful whether loitering will diminish, as the habit is now ingrained in them. The operatives leave their machines on the excuse of drinking water, visiting the lavatories, etc. On many a personal visit to mills, they have been found chatting and smoking in latrines or other places where they can conveniently hide. This practice is, of course, not unknown in England,

[1] Periodical visits of Bombay mill-hands to their up-country homes "has a beneficial effect upon their health as reflected by weight and counteracts to a very large extent the effects of working and living conditions in Bombay." The average weight of a mill operative is 99 lb.—a very low figure compared with other classes of labour. (Mr. T. Maloney, *Report on Humidification in Indian Cotton Mills.* Government Central Press, Delhi, 1923.)

[2] Mr. Maloney states that the sickness rate among mill-hands in Bombay is at its lowest in February, and then gradually rises until October, except for a small temporary fall in June corresponding with the advent of the monsoon. From October there is a rapid fall.

[3] It is said, however, that the Mohammedan weaver takes advantage of the higher wages to increase his earnings.

but in India it is far more prevalent; in fact, spare hands have always to be kept in idleness to tend the machines of the idlers. What really accounts for a considerable amount of loafing is that the mill worker is essentially an agriculturist. His heart is in the country and not in his work, and so long as he makes a certain wage he is indifferent as to what else happens.

One of the chief vices that beset the mill-hand is drink. It is extremely difficult to ascertain what proportion of the working classes consume intoxicating liquor.[1] Toddy [2] and the liquor shops are to be found scattered freely in the mill areas, and some chawl owners keep their own shops and encourage the tenants to patronize them. A hard and long day's work in the mill under the scorching humid heat of an Eastern sun is frequently relieved by a visit to one of these places. But it is in the Shimga holidays that drinking is carried to excess. Encouraging features of the situation are that as yet few women drink intoxicants and that the tea-drinking habit, already very popular, is rapidly extending.

Efficiency of the Mill-hand.—Comparisons are frequently instituted between the relative efficiency of Bombay and Lancashire textile operatives to the detriment of the former. Statistics of the number of hands per spindle or per loom and out-turn of yarn per worker, etc., are produced in support of the conclusions drawn. Such comparisons, however, are vitiated by the entirely different conditions under which the two types of operatives work. The hours of labour differ [3]—the longer the working day, the less efficient is the work; climatic conditions are in striking contrast; and the Lancashire mills possess more up-to-date machinery and the latest labour-saving contrivances. There is no denying the fact that the English

[1] Mr. J. P. Brander, Collector of Bombay, giving evidence before the Bombay Excise Committee, stated that "he was informed by the Excise staff that at least 70 per cent. of the Bombay working-men were drinkers. Excessive drinkers were less than 10 per cent." (*Times of India*, May 24, 1923.)

[2] Fermented juice of brab trees.

[3] Weekly hours of labour in Bombay are sixty and in Lancashire forty-eight.

operative is more efficient. Some factory inspectors place the relative efficiency of the Lancashire to the Bombay mill-hand at 5½ to 3. But it should be remembered that he is better housed, better fed and not a semi-agriculturist.

Housing.—The vast majority of the mill-hands live under the conditions described in Chapter III. A few mills[1] have provided accommodation for a small proportion of their workpeople. There is general complaint, however, that operatives do not take advantage of the facilities offered and that the rooms have to be let to "outsiders."[2] It appears that many mill-hands will not live in dwellings erected by their employer as they consider that it may result in loss of liberty of action and probable ejectment in the event of a strike. Large numbers also resent the enforcement of sanitary rules and discipline. The experiences of the few mills which house their workers and the difficulty of procuring land in the vicinity of the factories have deterred many mill agents from taking advantage of the Improvement Trust scheme, under which special facilities are granted to employers of labour who wish to provide accommodation for their workpeople. The Trust erects the chawls and the mill owners are allowed to repay the sums expended within fifty years. Since 1920, only three mills have applied to the Trust for the framing of schemes for accommodating their workers.

Furniture.—One cannot do better than quote in full the description of the furniture of a mill-hand as given by Mr. Edwardes in the *Gazetteer of Bombay City and Island*, 1909.

"The furniture consists of rough deal wood boxes with padlocks and iron-plate trunks, about half a dozen in all, littering the sides of the rooms. A few bamboo sticks suspended horizontally by cords at each end near the ceiling and in the veranda serve for hanging clothes, bedding and bundles of knick-knacks.

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[1] E.g., The Jacob Sassoon, Spring, Victoria, Petit, David, Swadeshi (Kurla), Textile and Colaba Mills.

[2] Mr. S. D. Saklatwala (Messrs. Tata, Sons & Co.) informed the members of the Industrial Disputes Committee in 1921 that "45 per cent. of the occupants of the premises built by the mills were outsiders."

The bedding is a mere blanket (ghongadi). The handy bamboo is further used for drying wet clothes. A worn-out mat of date leaves is spread on the floor for friends and visitors to sit upon. Sometimes the blanket covers the floor as a special mark of respect to the visitor. The richer mill-hand owns in addition a bench and a chair in a dilapidated condition. These are exhibited on the veranda. Cheap chromolithographs representing scenes from Hindu mythology decorate the walls. Food is cooked in brass pots, which are seldom if ever tinned, and is eaten from brass plates (pitli). The karanda, a small round brass basin fitted with a lid, is an indispensable adjunct of the mill-hand's life. In this the food is carried to the mill by the female relative, while the lid serves the purpose of a drinking-cup. The karanda is carried as a rule in a net bag (shike) which may be seen hanging from a peg in a workman's room. Each family also owns a few lotas and a few brass cups, and one or two low stools (pats), consisting of a piece of planking with a batten at either end, on which they sit when taking their meals at home. Earthen pots are used for storing grain, spices and salt fish, while water is stored in large copper basins (handa and ghagar). A curry-stone and a grain-mill are also items of household furniture. Rock-oil in open tin lamps is generally used for lighting purposes. The furniture of a Mohammedan mill-hand is very similar, but is usually more neatly arranged and includes a hookah."

Food.—The principal foods consumed by the Konkan mill-hand are rice, curry (generally made with salt fish, sometimes inferior fresh fish) and "patni" (coarse rice) bread. Sometimes cheap vegetable preparations are used in place of the curry and "dalpani" (dal-water) taken with the rice and bread. Other grains and pulses are used moderately. On holidays, mutton or chicken and strong drink are usually consumed. The usual meals of the poorer classes consist of boiled rice and boiled pulse water in the morning, bread or rice and vegetables at midday, and boiled rice and vegetables at night. "Bajri" bread is the chief food of the Deccani mill-hand, and his favourite dish on a holiday is "puranpoli" (a kind of tart filled with pulse mixed with jagry and with a crust of wheat flour). The "pardeshi," or Hindu from North India, eats only once a day, after leaving the mills in the evening; most other mill-hands usually have three meals a day. The pardeshi prefers "chappattis" (unleavened bread), "dal" and

"ghi" (clarified butter). All classes drink tea, and the Konkani especially smokes "bidis" (country cigarettes).

Apart from the nature of the food, the quality of it is important. The grain merchant encourages the mill-hand to make his purchases from him on credit and even lends him money. Once he has secured his hold on his customer, he proceeds to supply him with inferior and mixed grain and give him light measure. In fact, every one takes advantage of the poverty and lack of bargaining power of the worker. The "ghi" he purchases is adulterated. The milk is watered, and the conditions under which a large part of it is produced and handled are insanitary. During the War, owing to the disturbances of normal conditions, prices began to rise from the middle of 1917, and general complaints were received that exorbitant prices were being charged by retail shopkeepers for grain, salt, charcoal, etc. Government and a few mill owners opened grain shops. Grain was sold at the lowest prices possible, according to the full "pylee" (4 Bombay seers—nearly 3 lb. by weight), and not according to the smaller "maplee" measures used by retail dealers. Nevertheless, the majority of mill-hands and labourers were unable to make cash purchases, and the control which the grain merchants had obtained over them owing to their deep indebtedness forced many of them to continue to buy from the merchant. The mill grain stores still continue, but they are not as useful as might be expected. Both the mill shop and the retail dealer give credit, but the former holds the wages due as security, while the latter takes no security. With the "bunnia" or "marwari," part or total evasion of the debt is possible, but at the mills the debt is deducted from the month's pay.

Many of the single men who come to Bombay from up-country take their meals in so-called "hotels"—Irani refreshment-rooms—that cater for the poorer working classes. Most of these were found on personal inspection in 1917 to be filthy and highly insanitary. Eating-rooms were frequently in the vicinity of gullies and privies, and were used as sleeping apartments at night. Food was

generally served in a dirty and obnoxious manner. These eating-houses are now licensed and conditions are believed to have improved.

A similar state of affairs was found to exist in sweetmeat shops by Drs. Goldsmith and Hormasji in 1917. In a report to the Municipal Corporation, it was stated that of 505 shops examined,

"Forty-five were found quite unfit for the purpose of preparing articles for human consumption in, and twenty-one were described as filthy . . . in fifty instances, privies were found in dangerous proximity to the room used for manufacture of sweetmeats."

Further, the doctors reported,

"We have frequently seen sweetmeats stored in the immediate proximity of the privy. In the majority of cases, the floor forms the usual place of storage, preferably in some dark and dirty room . . . There is hardly any cleanliness in the making of the sweets. Everything is done on the bare floor. There are no proper tables or even benches. The sweets are exposed for sale in open trays to dust and dirt, and flies are allowed to swarm over them in large numbers."

When it is remembered that these Indian sweetmeats are consumed by all classes, the effect on the public health can be imagined.

Family Budgets.—The collection of family budgets, the data of which are *reliable* and *typical*, is extremely difficult. In the first place, typical families can hardly be said to exist, for the classification in Appendix I shows that there were 75 different groupings in 105 households in the "sample" inquiry in the Parel Ward. Besides the variations normally to be expected in the size of the family, the number and age of wage-earners, the number and age of dependents, all of which are factors which create differences both in earning power and spending power, further complexities are introduced in India by the diversities of creeds and castes. Castes differ in customs, habits, food consumption, etc. Any inquiry undertaken in India should accordingly be on a sufficiently large scale to allow

for such differences. Even then the difficulties of the task do not disappear. The most accurate method of recording family budgets is to persuade a large number of families to record daily for a period of several weeks, if not months, the details of their expenditure. But in England it has been found that just those families which have the time and ability to keep a budget satisfactorily are those which are living well, while those families about whom one desires information either cannot or will not collect and give it. In India, the standard of literacy is exceedingly low. It is estimated that not more than 5 per cent. of the operative class in Bombay are able to read and write their own vernaculars.[1] Hence, it is not possible for the majority of families to record their expenditure themselves. The alternative is to appoint investigators to question them—a much less satisfactory method, which gives rise to omissions, misstatements, discrepancies, etc. Again, the purchase of food, etc., on "credit," a feature of working-class life in Bombay, frequently results in the balance being on the wrong side, the expenditure being *greater* than the income. These were some of the difficulties which arose in collecting budgets for the inquiry in the Parel Ward, to which reference has already been made. It was decided not to adopt the plan of appointing investigators to question families owing to the inaccuracies that would result. A few social workers who were engaged in settlement work or lived in the vicinity of mills volunteered to visit the families daily and to keep a record of the expenditure of "selected" families. Some of the budgets collected by a settlement worker in 1918 are reproduced for what they are worth in Appendix II.

From May, 1921, to April, 1922, the Bombay Labour Office collected 3,000 working-class family budgets. Paid investigators, we are told, visited the homes of workers, not once but many times. The selection of the families to be dealt with was presumably left to the investigators. In the instructions issued to them, they were enjoined

[1] Report of the Industrial Disputes Committee, 1922.

to pay " special attention to cases of families living under ordinary conditions. The more ordinary the family the better." Had a " random " sample inquiry been conducted and the families not been selected, the results would have been more authoritative and useful. No classification by castes—which would enable us to ascertain the distribution of income according to different dietaries—is given. Further, the accuracy of the data collected rests on the assumption that the workers have been able to remember and to state accurately the expenditure of their income during the " most recent month " and that they did not overstate their expenditure on being informed that the inquiry was for their benefit (as did occur when budgets were collected for determining local allowances to Bombay Government menial employees in 1917). With these cautions, the chief results of the inquiry are given below :

PERCENTAGE EXPENDITURE OF ALL WORKERS ON MAIN GROUPS OF COMMODITIES, 1921–2

Percentage Expenditure on	Income Classes.					
	Below Rs.30 (excluding scavengers).	Rs.30 and below Rs.40.	Rs.40 and below Rs.50.	Rs.50 and below Rs.60.	Rs.60 and below Rs.70.	All Incomes.
Food	60·4	59·0	56·8	56·3	55·8	56·8
Fuel and Lighting . . .	9·1	8·0	7·9	7·5	6·8	7·4
Clothing	8·6	9·1	9·5	9·9	9·5	9·6
House-rent	10·9	8·6	7·3	8·3	7·4	7·7
Miscellaneous	11·0	15·3	18·5	18·0	20·5	18·5
Total	100·0	100·0	100·0	100·0	100·0	100·0
Percentage of families .	1·5	11·0	33·7	21·8	19·6	100·0

NOTE.—Half the budgets on which the above percentage distribution is based relate to mill workers.

Percentage Expenditure of Mill Workers on Main Groups of Commodities, 1921–2 [1]

Percentage Expenditure on	Spinners. Family Income.			Weavers. Family Income.		
	Rs.30 and below Rs.40.	Rs.40 and below Rs.50.	Rs.50 and below Rs.60.	Rs.40 and below Rs.50.	Rs.50 and below Rs.60.	Rs.60 and below Rs.70.
Food	59·3	57·3	55·8	56·6	54·3	53·0
Fuel and Lighting	8·4	8·0	7·7	8·3	8·1	7·9
Clothing	9·1	9·5	8·8	10·2	9·4	9·6
House-rent	9·9	9·5	8·8	9·3	9·4	9·4
Miscellaneous	13·3	15·7	18·9	15·6	18·8	20·1
Total	100·0	100·0	100·0	100·0	100·0	100·0
No. of Budgets	43	83	82	109	115	85

Percentage Expenditure based upon Representative Budgets for Single Men

Percentage Expenditure on	Spinners.		Weavers.		
	Rs.30 and below Rs.40.	Rs.40 and below Rs.50.	Rs.30 and below Rs.40.	Rs.40 and below Rs.50.	Rs.50 and below Rs.60.
Food	60·6	52·4	53·7	51·7	50·7
Lighting	—	·4	1·8	1·6	1·5
Clothing	7·1	6·3	6·0	8·2	7·9
House-rent	6·1	4·9	9·8	9·0	9·2
Miscellaneous [2]	26·2	36·0	28·7	29·5	30·7
Total	100·0	100·0	100·0	100·0	100·0
No. of Budgets	14	25	20	25	17

Amusements.—Mill-hands spend most of their spare time resting, marketing, and washing clothes. They have few, if any, amusements. Occasionally a group of them

[1] Based on so-called "representative" family budgets and on a standard sized family.

[2] Chiefly liquor, tobacco and betelnut.

will sit up until the early hours of the morning, singing to the accompaniment of tom-toms and the clashing of cymbals. Wrestling and gymnastics are popular forms of recreation, but as the gymnasiums were sometimes misused they now have to be licensed. The Social Service League has been endeavouring to encourage wrestling and healthy exercises among adults,[1] and the Scout movement, sports and Indian games among boys; sewing classes are held for women. Amateur theatricals are also organized at the Bombay Working Men's Institute.

Indebtedness.—We have seen how the mill-hand falls into the clutches of the money-lender soon after his arrival in the city.

In the Parel inquiry it was found that 62 out of 121 households, i.e., 51 per cent., were in debt.[2] The chief causes of indebtedness were ascribed to illness, marriage ceremonies, unemployment, repayment of debts, insufficient wages, etc. Only in one case was the debt incurred for productive purposes, the money having been borrowed to provide capital for vegetable hawking. The amounts borrowed varied from Rs.20 to over Rs.500; details are given below:

Amount of Indebtedness. Rs.	No. of Households.
30	3
30–40	6
40–50	8
50–60	6
60–70	7
70–80	1
80–90	1
90–100	2
100–200	16
200–300	8
300–400	2
400–500	1
500 and over	1
Total	62

[1] Five "akharas" (Indian gymnasia) are maintained by the Social Service League, and about 300 persons daily take advantage of them.

[2] In the Labour Office Budget Enquiry of 1921–2, 47 per cent. of the families were in debt.

The rate of interest charged in all but four instances was 1 anna per rupee per month, or 75 per cent. per annum. In the four cases, the rates were 9 per cent., 14 per cent., 19 per cent., and 37½ per cent. per annum. The money-lenders were mostly Bunnias and Marwaris.

As approximately 50 per cent. of the mill-hands are indebted to the extent of Rs.50 on the average at an interest of 75 per cent. per annum, a conservative estimate of the amount of interest paid annually by the adult mill-hands of Bombay City and Island would be Rs.27 lakhs.[1]

When a worker wants a loan he generally goes to the grain dealer, who not only gives him grain on "credit" but also advances money. Should the grain merchant refuse credit or a loan, then the Marwari is approached. He subsists wholly on money-lending. The methods of both the grain dealer and Marwari are much the same. Both, as a rule, require one or two sureties and take the borrower's thumb impression, or, if he is literate, his signature on the promissory note. The illiterate frequently find out subsequently that they have put their thumb impression to a note promising to repay several times the amount advanced. Even the literate are duped, as the borrower is sometimes induced to sign a blank undated receipt form which the money-lender proceeds to fill up fictitiously in the event of the debtor failing to meet his obligations. If the interest is not paid regularly, compound interest is charged. The ignorance of the borrower is further taken advantage of—he is shown the "hisab" (account) in the "Khata" book, but as he usually understands little, he is informed that he is indebted to a greater extent than is actually the case. Soon he finds himself so heavily involved that a large portion of his earnings have to meet his ever-increasing liabilities until he becomes a money-making slave of the lender, working for him night and day, and in the case of indebtedness to the grain merchant, receiving in return the bare necessaries of life.

The usual rate of interest is 75 per cent., but lower rates of interest are charged where articles of value are pledged.

[1] A lakh of rupees is Rs.100,000.

The Marwari charges 4 to 6 pies per rupee per month, i.e., 25 per cent. to 37½ per cent. Jobbers and mill clerks lend to mill-hands in their own mills at from 6 pies to one anna per rupee, as they consider their pay sufficient security.

Should a borrower lose credit to such an extent that he is unable to borrow from any of these sources, he often resorts to the Pathan. His rates are even higher than those of the Bunnia or Marwari, being as much as 2 annas per rupee per mensem, or 150 per cent. per annum. These tall, stalwart men, after ensnaring their victims, bully and assault them until they liquidate their debts.

Several co-operative credit societies have been started by the Social Service League and by a few mills in order to free the people from the clutches of the professional money-lender.

Before we close this chapter, we might be permitted to quote the opinion of the leading Bombay newspaper on the condition of the labouring classes, more particularly the mill-hands.

"When we survey the condition of the industrial proletariat in Bombay we are filled with shame and anger. . . . What is the constant complaint we hear from large employers of labour? It is the actual shortage and the unreliability of the labour force. Both those drawbacks arise directly from the abominable conditions in which our industrial proletariat lives. It is not a question of wages; on the whole the wages are quite sufficient to keep the operatives in health and decency, if the housing problem is solved. . . . All our labour difficulties arise from this one overwhelming fact—that we have not got, and we do not deserve to have, a permanent and reasonably contented labour force. Lacking it, we are driven to all sorts of shifts and expedients to mitigate the evil. Jobbers are left in almost uncontrolled mastery of the mill operatives, because that is the only way in which labour can be secured. Wages have to be kept in arrears, because that is the only way in which labour can be kept in steady work. In these and various other ways the labourer does not secure the benefit of the fair wages which he is actually paid. Nor will he until two great changes are effected. First we have to see that every workman has a chance of securing decent housing at a reasonable rent. . . . Next we have to secure, through the universal diffusion of primary education, that every adult is placed in a position of self-protection against the usurer

and the jobber . . . if we neglect our labour force, as we have neglected it, as we are continuing to neglect it, then we are deliberately and wilfully sapping the foundations of our future industrial greatness." [1]

[1] *Times of India*, April 5, 1917. Conditions have slightly improved since this date, but the description remains almost true to-day.

CHAPTER VI

THE DOCK LABOURER

THE docks extend for a distance of four miles along the eastern side of the island. They comprise the Princes, Victoria, Alexandra and Sassoon Docks administered by the Port Trust, the Government constructional dockyard for vessels of the Royal Indian Marine and the British Navy, and several privately owned dockyards for vessels of the Peninsular and Oriental, British India and other steamship lines. The bulk of the so-called " dock labour " is employed by the Port Trust and it is this class with which we are concerned.

The practice of the responsibility for unloading cargo varies from port to port. At some ports, the port authority undertakes the unloading entirely and conveys the cargo from the ship's hold to the warehouse. At other ports stevedores undertake the whole duty. In Bombay the practice is for the stevedores to load and unload the cargo from the ship to the quay and *vice versa*. The Port Trust labourers convey it to and from the warehouses. The Trust is not at present prepared to undertake the highly skilled work of loading vessels.[1]

Before the War and the opening of the Alexandra Docks (1914),the port authorities employed three to four thousand persons. During the War heavy calls were made upon the Trust to provide labour for handling the large quantities of military stores and supplies for shipment to Mesopotamia

[1] Cargo is frequently not homogeneous and varies in bulk, weight and nature of goods to be transported. The stevedores have to work out the method of storing cargo in a given space so as to maintain the vessel on an even keel. Moreover, certain commodities must not be stored in proximity to others, otherwise the pungent odour of the one would damage the other, e.g., tea and cardamoms must not be stored together.

and East Africa. The numbers of labourers employed in recent years are as follows:

DOCK LABOURERS EMPLOYED BY THE PORT TRUST,[1] 1917–8 to 1921-2

Year.	Average daily number.	Average number supplied to Govt.	Largest number of persons engaged on any day.
1917–18	8,542	5,153	13,153
1918–19	8,570	4,585	14,735
1919–20	7,079	2,307	9,974
1920–21	6,670	1,882	9,758
1921–22	4,906	1,134	6,777

Supply of Labour.—Like the cotton industry, the docks suffer from a shortage of labour during the monsoon. The shortage is not so much felt, since this is the "slack" season so far as trade is concerned. Nevertheless, large numbers of labourers are constantly employed during the monsoon to handle the traffic that can be dealt with at such a time—coal, manganese ore, etc., are not affected by rain and "case cargo" is not affected by slight showers. Besides, in the "rains" there is much additional work to be done, as everything has to be carried under cover. March to May are the busiest months, as upon the approach of the monsoon men leave for their villages. They also go in September and October to reap the crop. In April many go to their homes for the marriage season. Again, when the "market" is busy (i.e., when labour is required for work in the go-downs in the city) there is a slight shortage at the docks, because the "market" rate of wages is higher than the dock rate. When labour is scarce the shortage is made up by employing more boys and lads.

Method of Recruitment.—The Port Trust contract out the bulk of the labour to "tolliwallahs" or "gangmen." Only about 200 men are appointed by the Trust to their

[1] Compiled from the Annual Administration Reports of the Bombay Port Trust.

GHATI CARTER ENTERING THE DOCKS.

[Copyright,

"BOY LABOUR" UNLOADING BOXES.

permanent staff, and they are chiefly "mukadams," warehouse coolies, etc. The tolliwallah, it should be explained, is the self-appointed leader of a "tolli" or gang which usually consists of about twenty-five persons in the case of common coolies, of about eighteen in the case of skilled workers, and of eight men in the case of "baroots."[1] Almost the entire work at the docks is carried out by these gangs of workmen. The Port Trust have no direct dealings with the labourers, but only with the tolliwallahs, with whom contracts are made. The work of the tolli, however, is supervised by the Port Trust mukadams. If the gang is employed on piece work, one mukadam as a rule suffices for a ship, but where fragile cargo has to be handled, more supervisors are necessary.

The labourers assemble daily at 6.30 a.m. or 7 a.m. outside the "Hamallage" (Labour) Depôt at Carnac Bunder.[2] Here the Assistant Manager of Labour, who controls the entire labour supply, receives prior notice of the arrival of vessels and makes all arrangements for the unloading and loading of cargo in advance. He informs the tolliwallahs of the amount of labour he requires and allocates the gangs to different ships, endeavouring all the while to keep men employed regularly and for as continuous a period as possible. When the tolliwallah receives his orders at the depôt, he collects his men and musters them at the sheds in the docks.

Occasionally a vessel is delayed in entering port, but although this may mean the loss of a day's wages, yet the men do not appear to mind, for they know that once they are employed, it means a ten days' job.[3]

Under this system one does not find a large labour force hanging round the dock gates or moving from one dock to another—a feature of dock life in London. It is true that previous to 1914, the labourers knew that when the gates of the Victoria and Princes Docks (both tidal docks)

[1] Labour skilled in stacking cargo.

[2] Coal labour concentrates at the Clock Tower, Princes Dock.

[3] In the event of any stoppage of work caused through negligence on the part of the shipping authorities or their servants, labour receives a proportion of the full day's wages.

were closed after high tide, no more vessels could enter and labour would not be required. But, with the opening of the non-tidal Alexandra Dock, vessels can now enter at any time and more frequent calls are made for labourers. Hence the control exercised by the Labour Depôt is all the more essential. No greater supply of dock-hands is kept hanging around the gates than may normally be required. The depôt also endeavours to arrange that the same gang of workers is employed on the same ship or same work on successive days. This results in increased efficiency and saves time, as the men get to know their sections. Further, although there are always certain ships cancelling work, others frequently need extra hands. Without control, dislocation of labour would follow. The depôt, by insisting that all orders of cancellation and all demands for additional labour pass through the Carnac Bunder office, effects an economy of labour. Men dislike working on half-day jobs, and the Trust endeavours as far as possible to avoid short engagements. About 70 per cent. get work daily. Men who fail to obtain jobs endeavour to pick up stray work from individual consignees or merchants, or take up day labour in the city.

Types of Labour (Men).—The male labour employed can be grouped under four main heads:

(1) The "Matadis" or bag carriers. They carry bags containing rice, sugar, seeds, etc.—products which form a very considerable proportion of the exports from Bombay. At a steady run and with a crude, though fascinating, sing-song, they will pass to and from the ship's side loading and unloading the cargo. In the work of discharging bags of rice, for instance, they are practically kept on the run for five hours without stopping. Each bag weighs about 168 lb., and on the average a man will carry 150 bags a day. The work is very strenuous and demands strong, muscular, well-built men. These are found from among the Ghatis drawn from the villages in the Poona and Satara districts of the Deccan. By race they are Marathas—descendants of the warriors who fought in

Shivaji's famous army. About 1,500 Mahars are also employed on bag-carrying.

(2) The Baroots, a special class of labour from Cutch. They are Gujerati Hindus employed on the skilled work of stacking case cargo.

(3) Labourers engaged especially for handling offensive cargo, e.g., bone meal, blood manure, hides and skins, etc. Low-caste Mahars—one of the so-called "depressed classes"—are engaged for this work.

(4) Finally, the class known as "boy labour." The work is more or less unskilled and chiefly consists of "trucking" and handling case or box cargo, the transport of goods from the quay to the sheds and vice versa. Youths, "raw hands" from the villages, and even elderly men who do not possess the physique to undertake heavier and more skilled work, are found in this class. They are persons of all castes, mostly Hindus—Marathas from the Konkan, the weaker class of Ghati, and Mahars; about 5 per cent. are Mohammedans.

Hours of Labour.—The day shift is from 7.30 a.m. to 6 p.m., with a midday interval from 12.30 to 1.30 p.m. The night shift commences at 7.30 p.m. and extends to 3.30 a.m.; in cases of emergency, labour is retained until 6 a.m.

In the busy season it is said that the men work every day (including Sundays), and on the average they work fifteen nights and twenty-eight days per month. One informant stated that the docker usually works one night in three, sometimes more, and twenty-four or twenty-five days per month. During the War nearly every ship worked on Sundays. The labourer objects to Sunday work as he likes to have a day's rest for washing clothes, etc. If he works on a Sunday, he generally takes the Monday or Tuesday "off."

From the hours of work stated above, it must not be assumed that the workers are continuously employed. In a tolli of eighteen persons, three are probably always off work, having a little rest. When work is insufficient to

keep the whole gang employed, quite a number of them will sit down. Supervisors cannot interfere with them, especially if they are on piece-work, so long as they keep the work going.

As in the mills, the amount of absenteeism is considerable. The following table has been compiled from the notes on "employment" which appear monthly in the Bombay *Labour Gazette*.

Month ending—	Percentage of Absentees (all employees).
Sept. 12, 1922	22·9
Month of Sept., 1922	16·5
,, ,, Oct., 1922	22·1
,, ,, Nov., 1922	25·0
,, ,, Dec., 1922	19·3
Month ending—	
Jan. 15, 1923	15·6
Feb. 15, 1923	15·2
March 15, 1923	15·3
April 15, 1923	16·9
May 15, 1923	18·9
June 15, 1923	17·5
July 15, 1923	20·2
Aug. 15, 1923	15·8
Sept. 15, 1923	6·8
Oct. 12, 1923	11·5
Nov. 12, 1923	18·5
Dec. 12, 1923	18·0
Jan. 12, 1924	17·3
Feb. 12, 1924	17·3
March 12, 1924	16·3

The increase in absenteeism from September to November is partly due to the greater prevalence of illness in Bombay during these months, also to "labourers returning to their villages to attend to crops on the resumption of the coastal passenger service after the monsoon."

Wages of Men (1918–19).—The rates of wages vary according to the season and to fluctuations in the demand for and the supply of labour. They usually rise in the monsoon because there is a scarcity of labour. Most of the work is on a piece-rate basis as time-workers require supervision. The handling of bag cargo and bales, the unloading of carts, etc., are piece-work. For example, the rate for transporting Rangoon rice is 1 rupee per 100 bags of 168 lb. each. If a rice ship is discharging fast and well, a man fresh to the task can make Rs.1.7 or Rs.1.8 per day or per night, but he would not be able to continue at this rate for a week. On the whole, Matadis

make about a rupee a day and from Rs.20 to Rs.30 per mensem, sometimes as much as Rs.40; but from these sums the share of the tolliwallah has to be deducted. The stacking of case cargo by baroots [1] is piece-work and is paid at the rate of Rs.2.12 to Rs.3 per 100 cases, according to their size. Piece-work has to be certified by the shed supervisor, the labour inspector and the Assistant Manager of Labour before it is paid for, but it is difficult to prevent "leakages." Payment is generally made to the tolliwallah at the end of the ship's discharge or loading.

Time-workers are engaged on import cargo, i.e., "sundries." Skilled men receive a daily wage of 14 annas to Rs.1, and "boy labour" handling general cargo receives 10 annas or 11 annas daily. Other coolies receive about 10 annas per day. Time wages are paid daily by the Trust to the tolliwallah for the previous day's work of his gang; he in turn pays his men at his option. The tolliwallah, who does no work but merely procures the labour and supervises it, receives Rs.1 per day as his remuneration. In addition, he deducts a certain sum from each man's wages as "commission" for employing them. He is also said to cheat his men as they cannot keep accounts. Sometimes he gives them less than what he draws on the plea that he has to give "tips," etc. The men also complain that at times he withholds wages from them for a week, or even a fortnight, after he has been paid by the Port Trust. His answer to this charge is that were he not to keep some of their money in hand, he would be unable to get them to "turn up." It must be remembered that the tolliwallah is responsible for the men being present; sometimes they are absent when the audit men carry out their inspection, and occasionally they run away. He accordingly makes ample provision to guard against these risks.

Rates of pay for night work are the same as day work, but in addition a "bhatta" (food allowance) of 1 anna is given to each person. This "bhatta" is paid in advance

[1] The head of a gang is paid on piece-work, but he pays his men daily wages of about Rs.1 each.

and constitutes engagement for the night's work. Workers generally spend the anna on a light meal of "coor-moora" (parched rice mixed with gram), "channa" (pulse) or betelnut. Should the night work extend beyond 3.30 a.m. and continue until 6 a.m., each worker receives 2 annas extra. Wages of all workers were increased in 1920–21 owing to the enhanced cost of living in Bombay.

Fines.—The Port Trust is very lenient with the men in the matter of fines. In cases of very gross negligence, e.g., if a box or bag is dropped into the dock basin, the day's wages are cut down slightly, but this is seldom done.

Women's Labour.—A thousand to fifteen hundred women are employed daily for moving coal, manganese ore, firewood, bricks, light cases (weighing up to 100 lb.), etc. Two to three hundred of them are engaged in keeping the docks clear of grass. Mahars and Ghatis form the largest class of women's labour; the real Maratha woman (those from Satara district) will not work at the docks. These women also work in tollis of thirty persons with either a man or woman as their head. Both piece- and time-workers earn about 8 annas per day.

Bhangi women are also employed for shipping manganese ore. They are excellent workers because they are much stronger than the other women. They are recruited from amongst the municipal scavengers and to a large extent from rag and bone pickers. If engaged upon municipal scavenging, they dovetail the work. The municipality require their services from 5.30 a.m. to 10.30 or 11 a.m., and again at 3 p.m. for a couple of hours. They start work at the docks at 7.30 p.m. and work until 3.30 a.m., for which they receive 8 annas per head. The tolliwallah (a woman) receives Rs.1.

Boy Labour.—Boys are taken on at the docks from the age of twelve. They start on sundry jobs, e.g., collecting trucks, running errands, etc., and receive 7 annas per day. At the age of seventeen or eighteen, they are put

on to "trucking" bales of cotton, etc. They are kept on this continuously, and generally handle the work more intelligently than adults. As soon as they reach the age of eighteen or nineteen and find that they can carry heavy bags on the back of their necks, they endeavour to get employed by some mukadam as "bag carrier" or "matadi."

Mode of Living.—A large number of dock labourers board with a family, or stay at a boarding-house, as most of them do not bring their families with them to Bombay. In pre-war days a man paid Rs.6 per mensem for his board, but in 1919 he was usually charged Rs.10 to Rs.12. A Ghati has few wants and few belongings. All that he usually brings with him are his "chatti" (earthen water-pot), dish, and his wardrobe, which latter usually consists of a red turban, a couple of cotton jackets and two dhotars. He generally sleeps on a "chatai" (mat) on the floor and covers himself with a "ghongadi" (blanket or goat's rug). About 10 per cent. of the dock labourers are "homeless" —they belong to the "boy labour" class and are not matadis.

Most of the dock labourers live in Dongri. The Port Trust have provided five chawls for them at Wadi Bunder and a temporary chawl at Mazagon. Four of the chawls at Wadi Bunder are for Ghatis and one for Mahars, as these two castes will not live with one another. There are approximately 100 rooms for each chawl—the dimensions of each room are 12 ft. by 10 ft. with a 4 ft. veranda containing a "nahani" and "chula." Stairways and w.c.'s are electrically lighted. Dustbins are provided on each floor. The rooms are let at a monthly rent of Rs.5.

The Trust are also carrying out an elaborate housing scheme.[1] An area of 31 acres is being converted into a model village comprising 1,700 ground-floor units, shops, a meeting hall (to be used as an elementary school), a dispensary and post office. Already 468 units have been completed and occupied by 560 workers, and temporary

[1] Mirams (A. E.), "Report on the Proposed Development by the Bombay Port Trust of Antop Village." (Scottish Mission Industries Co., Poona, 1919.)

shops (to be replaced shortly by permanent ones) have been erected for the sale of necessaries of life. "Twenty-four of the buildings are brick-built with Mangalore tile roofs and each consists of four units of two rooms each. The remaining buildings are built of reinforced concrete. Each unit also comprises two rooms, one measuring 10 ft. by 10 ft. and the other 10 ft. by 7 ft." [1]

Daily Life and Habits.—Dockers are early risers, as they take their bath before having their morning meal at 6 a.m. Their meal usually consists of "bajri chapattis" (bajri bread). Some like to eat this bread with a mixture of adulterated milk and "jagri" (unrefined sugar). They then proceed to the docks at 6.30 a.m. or 7 a.m. Some take their food with them and eat it before they commence work. The midday meal, taken at 12.30 p.m., is usually brought to the docks by a member of the household or the boarding-house keeper. It generally consists of half a dozen bajri chapattis and chutney (made of chillies, garlic, salt and coco-nut) or raw onions. Some of the workers have pulse (gram dal, urid dal, or moong dal) boiled with chillies and salt instead of chutney. This meal is consumed with a large quantity of water. At 8 p.m. in the evening they take their evening meal of rice, dal and chutney. They eat but little fish.

On Sundays and holidays they subscribe among themselves and have a "burra-khana" (big dinner), which usually consists of a goat and "puran-poli." Ghi is sometimes eaten at "burra-khanas," but it seldom forms part of the dockers' daily diet, as they cannot afford it. In the mango season they drink "ambarus," made from the juice of the mango, mixed with jagri and water.

Dock labourers do not drink and gamble as much as mill-hands do. They eat more betelnut; each man must have his "pan supari." They are not regular smokers, nor do they drink much tea.

Amusements.—When the docker is not on night duty, he frequently goes to an Indian theatre from 9 p.m.

[1] Administration Report of the Bombay Port Trust, 1921–2.

[Copyright.

WOMEN DOCK LABOURERS.

(MOHAMMEDAN MUKADAM IN CENTRE.)

to 1 a.m. to watch a "tamasha" (entertainment, usually dancing, singing and music). On holidays, such as Shimga, the tamashas are generally held in the compound or passage of his chawl.

Dock labourers are very fond of witnessing wrestling matches. They are generally too tired to participate, but the boys frequently do so, and some form their own gymnasiums.

Education.—Unfortunately very few of the dockers are literate, and those who are not fall easy victims to the tolliwallah. The Port Trust have given two rooms rent free to a Maratha Education Society, which runs a night school for adults and boys. The vernacular (Marathi) and arithmetic are the subjects of instruction. In 1920–1, the Trust erected a building to be used as a vernacular day school for dock labourers' children.

Indebtedness.—The tolliwallah generally advances Rs.10 or Rs.15 to his men and so gets a "hold" on them. The dock labourer, however, is not indebted to bunnias and mahajans to the same extent as are mill-hands.

Efficiency of the Docker.—Docks are frequently referred to as "the sink-pot of all the failures of industry." This does not apply in the case of Bombay, and is certainly not true of the matadi. He is highly respected and admired by all who have seen him at work. He should not be confused with the other types of general labourer, the "helkari" and the "bigari." The "helkari" hangs about the bazaars, railway stations and other places for odd jobs, and leads a precarious existence. The "bigari" engages in miscellaneous work, especially in the building trade. He digs, carries, loads and unloads. Among labourers he is on the lowest rung of the ladder. As he develops in skill and intelligence he undertakes the duties of a "naoghani." The "naoghani" is found in mills, railways, timber yards, Government dockyards, and wherever a skilled workman experienced in lifting heavy loads (e.g., beams and rails) is required; he is also trained to manipulate pulleys and to

remove furniture. He may almost be said to rank on a higher plane even than the matadi.

Labour Organization.—Dock labour has been little affected by the great labour strikes in recent years. In 1896, when plague first visited Bombay, there was a strike due to the compulsory visitation of homes, but, as a rule, organized strikes seldom occur. There is no trade union among the dock labourers, but there is a strong fellow-feeling among them, and they are a very united body.

CHAPTER VII

LABOUR IN THE BUILDING TRADE

THERE were nearly 9,000 workers in the Bombay building industry in 1921: approximately 8,000 were males. These figures do not include "carpenters, turners and joiners," who have been separately classified by the census authorities; this group comprises nearly 20,000 workers, but as many of them are employed in mills and workshops and in the furniture trade, it is not possible to ascertain how many are engaged in building operations. Excluding this class, the details relating to the 9,000 workers, as given in the Census Report, are as follows:

Occupation.	No. of Workers.	
	Males.	Females.
Bricklayers and masons	3,560	106
Builders, painters, decorators, tilers, plumbers, etc.	1,825	81
Stone cutters and dressers	1,373	176
Excavators, earth workers and well sinkers	1,065	492
Lime burners, cement workers . . .	93	26
Total	7,916	881

The women workers are generally employed as "assistants" to the men, and for the most part "fetch and carry" material.

Condition of the Trade.—The Bombay building trade has been experiencing a period of exceptional prosperity during the last few years. During the War, despite the difficulties of getting supplies, the high prices of raw material and increased wages, building construction went on apace. The extensive building programme entered upon by public bodies before 1914 was carried out. The Royal Museum of Western India, the Royal College of Science, the Small Causes Court, the new Custom House and other buildings on the Ballard estate were completed. At the same time the additional wealth which the War brought to the city, coupled with the demand for houses from an ever-increasing population, stimulated private building construction, especially on the Improvement Trust estate at Gamdevi, and in the north of the island. "Never were such times experienced," were the words of a prominent architect in describing the situation. More recently the great development scheme for erecting 50,000 tenements has made activity in the trade more intense than ever.

Demand for Labour.—There has in consequence been unusual demands for labour. A well-known authority on builders' labour expressed the opinion that, "no man or woman in Bombay need starve at the present moment. Anyone who wanted work in the city during the last ten or fifteen years could get it."[1] He attributed the regularity of employment in the building trade entirely to the shortage of workers.

Supply of Labour.—The supply of labour in building, as in other trades and industries, is recruited very largely from outside the city. No statistics are available to prove this, but it is common knowledge that the workers are drawn from most parts of the Presidency. Certain classes of work are undertaken by natives of particular districts. For instance, while the Deccan Maratha is perhaps the most conspicuous figure in the trade, yet carpentering is chiefly undertaken by Gujeratis from Kathiawar and also by Jews

[1] Begging is chiefly confined to the professional beggar, the religious mendicant, the diseased or the cripple.

A CORNER OF THE MARKET AT PYDHONI.

residing locally. This results in a greater diversity of labour than is found in any other trade, with the exception of engineering and ship-repairing.

Seasonal Variations.—In Bombay, as in England, building is a seasonal trade; with this difference that, whereas the slack season in the city is during the monsoon, in England it is in the winter. Even in the monsoon, the men go to work when the weather is fine, but frequently heavy rains, lasting several days, mean entire loss of employment for that period. Many men take the opportunity of the slack season to visit their native places and prepare their fields for the next season's crop. In 1918, owing to the failure of the monsoon, this migration was not so marked, and trade was unusually active from July to September. Generally speaking, if the monsoon period is omitted, trade can be said to be active throughout the year, reaching a season of intense activity in May and June immediately prior to the advent of the "rains."

Local Labour Markets.—There is no organization in the industry. Labour generally drifts where there is work, or collects at one of the two markets for builders' labour—at Pydhoni and at Two Tanks—where workers assemble at 6 a.m. and take up their position on the roadside. Crowds of "jobbing" carpenters, painters and masons are to be seen every morning "squatting" on the kerbstone, some with paint pots and brushes, others with their bags of tools, awaiting those in search of labour. Large employers, however, usually procure their labour through their "maistries" (chargemen) and "mukadams." On receiving orders regarding a piece of work, a chargeman generally instructs his mukadam to secure the necessary labour from amongst his friends. He finds this course preferable as the men in the market are not only inferior workmen, but also resort to "bargaining," particularly if special rates have to be fixed or a large number of workers secured.

Wages (1917–19).—A lad starts work as a "helper"

to a skilled man and receives about two-thirds the wages of an adult male. As an unskilled labourer, he generally obtains adult wages at the age of eighteen years; but, in the case of skilled work, it is only when he has learnt the trade that he draws full pay.

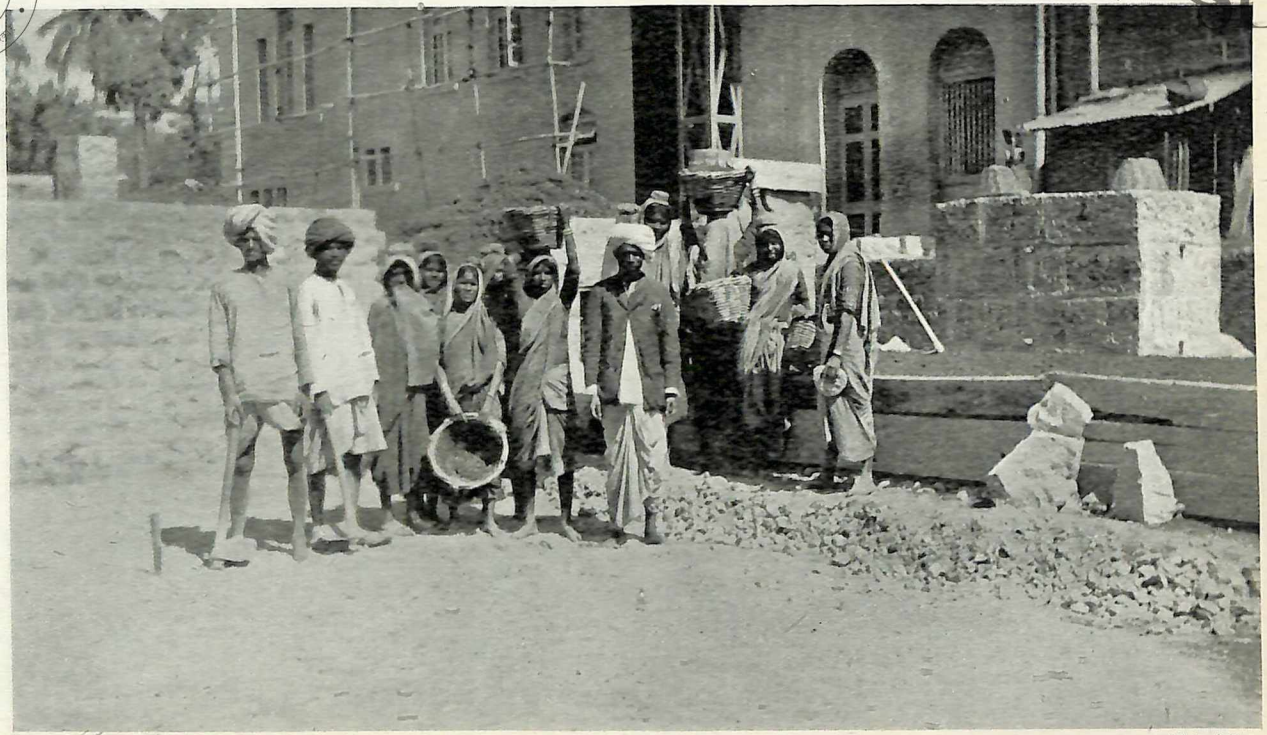
Very often a man will start in the building trade as a "bigari"—unskilled labourer engaged on miscellaneous work—and after gaining experience under a bricklayer or carpenter will undertake the full duties of a mason or carpenter. Sometimes he rises higher to the position of maistry (chargeman) and ultimately becomes a petty contractor.

Workers, with the exception of quite unskilled labour, are generally engaged on piece-work. The piece-work system of payment is thoroughly understood and appreciated. Unskilled labour is paid by the day, and a few skilled workmen are on daily engagements.

The following rates of wages have been supplied by a contractor as being typical of the different grades of labour in Bombay in 1917 and 1919:—

Class of Labour.	Monthly Wages (excluding overtime).					
	1917.			1919.		
	Hot weather	Mon-soon	Cold weather	Hot weather	Mon-soon	Cold weather
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Carpenter (Sutar) . .						
Mason	60	75	60	75	90	75
Stone cutter . . .						
Glazier						
Blacksmith	60	60	60	75	75	75
Bricklayer	50	60	50	62	75	62
Painter						
Wood Cutter . . .	40	50	40	50	62	50
Polishman						
Coolie (man) . . .	25	30	25	32	40	32
,, (woman) . .	12	15	12	15	20	15

Overtime is paid at the rate of one quarter of a day's work.



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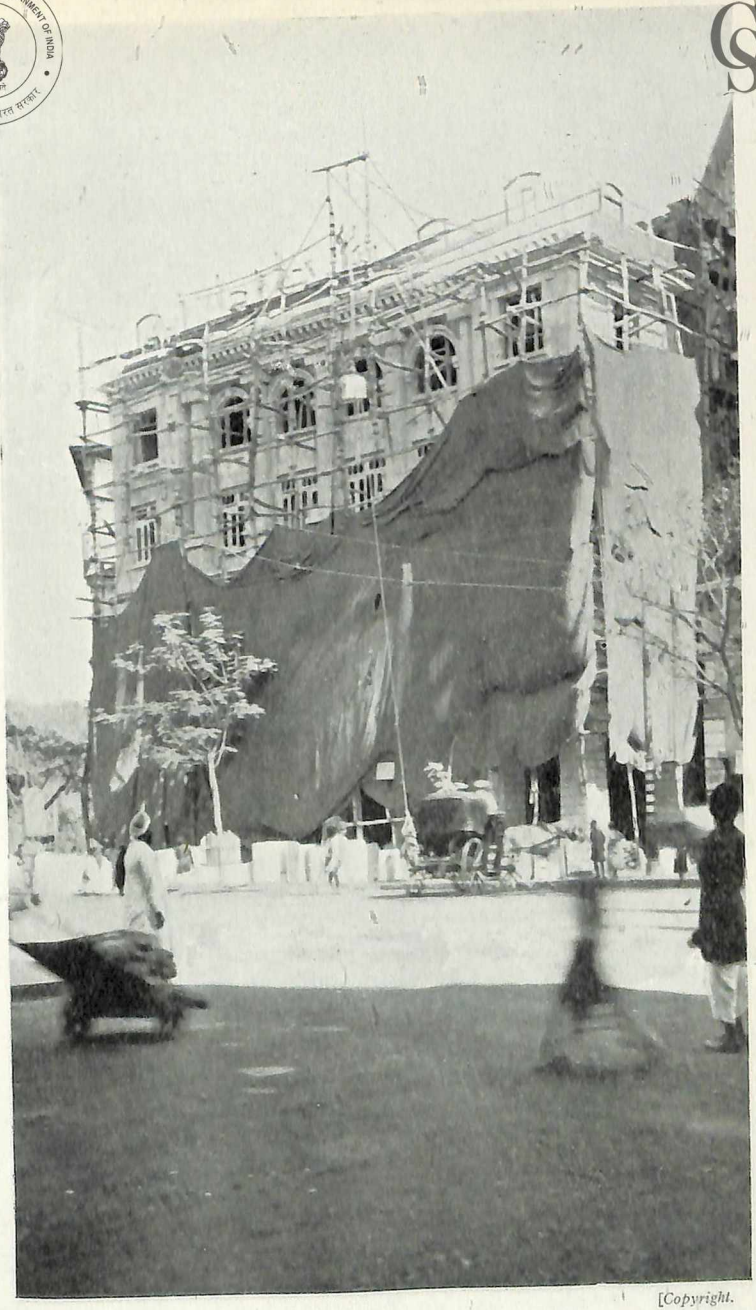
BUILDERS' LABOURERS.



A BLOCK OF STONE BEING RAISED BY HAND PULLEYS.

Carpenters are chiefly Gujeratis from Kathiawar and local Jews; also Konkanis from Ratnagiri, Mohammedans, Punjabis and Goanese.

Blacksmiths are Gujeratis and Marathas.

Bricklayers are generally Kamatis (local), Marwaris from Marwar and Mohammedans.

Glaziers are Boras (Mohammedans).

Stonemasons are recruited from Kathiawar and the Deccan.

Coolies are Mahars and Ghatis.

The other classes of labour (including women) are chiefly Maratha Ghatis from the Deccan.

The above table has certain outstanding features. "Hot weather" and "cold weather" [1] rates of wages are the same, although the hours are longer in the hot weather. In the monsoon, owing to the scarcity of labour, wages are 20 to 25 per cent. higher than during the remainder of the year. From 1917 to 1919, the percentage rise in wages varied between 20 and 30, according to the grade of labour.

It must be noted, however, that the wages given are for contractors' labour, which, as already pointed out, is a better class of labour than is usually obtainable in the market.

The following data are supplied from another source and are based upon the rates prevailing in Pydhoni or Two Tanks. For instance:

Carpenters receive Rs.1.8 to Rs.2 per day. The best carpenters are not to be found in the market as they are always engaged by established firms in Bombay, who pay them from Rs.2.8 to Rs.3 per day. They are frequently paid in advance in order that employers may have a lien on their services.

Bricklayers.—The ordinary bricklayer receives about Rs.1.8 per day. Better grades earn from Rs.1.12 to Rs.2.

[1] These terms are generally used in India for the seasons.

Coolies.—Men generally receive 12 annas per day, women 8 annas.

On the whole, the higher rates given here correspond closely, as they should do, to the figures of contractors' labour in the table above.

Working Days.—Building operations are carried on daily (including Sundays). Work is only stopped on Indian festival days and for weddings and funerals. It is said that many "jobbing" labourers do not work regularly every day but frequently take holidays and work on the average about twenty days in a month. Contractors' labourers, however, work regularly throughout the month.

Hours of Labour.—Work usually commences at 9 a.m. and continues until 1 p.m., when there is a break for an hour. In the short evenings the labourers finish their day's work at about 5 p.m., while in the hot weather it is 6 p.m. and sometimes 7 p.m. before they stop. On the average they work an eight-hour day. This means that the weekly hours in the "hot weather" are about fifty-six, while in the monsoon they are fifty-two hours, and in the "cold weather" about forty-eight.

Labour Organization and Strikes.—There are no labour organizations in the building trade, but there exists a close comradeship which on occasions finds expression in joint action. This may be partly due to their working in gangs under one leader (mukadam) and partly to the influence of caste. When any trouble or dispute arises, it is merely necessary for the mukadam to say the word and the men will come out on strike immediately. If they consider that any one of their fellow-workers is being badly treated or is suffering from what is, in their opinion, an injustice, they will "down tools" at once and strike to a man. These strikes are very "local" in their character and are not on any great scale. The nearest approach to a general strike was the unrest in the building trade which prevailed at the time of the mill strike, January, 1919. Three or four buildings only were affected and only for a short time.

One who has considerable experience of the Bombay building trade states that labour to-day is inferior and the work worse than it was twenty years ago. This is attributed to "undercutting" by contractors, who "undertake work on rates which are lower than the actual net cost of the materials required for first-class work," employ unskilled labour and obtain poor results. The workmanship, he states, in buildings such as the Victoria Terminus, Sailors' Home and Municipal Offices is of a different class from that of structures more recently erected. Many of the latter bear comparison with those of western cities, but "there is nevertheless a lack of finish about them and the actual construction is seldom first class, the workmanship being inferior throughout, even to the setting of masonry work and the laying of brickwork, and good carpenters and joiners are rather the exception than the rule." Nevertheless, to the "man-in-the-street" the buildings appear fine structures, and it is surprising what is accomplished with the crude methods and implements that are used—the bamboo scaffolding, the pulleys worked by manual labour instead of cranes, and the absence of any kind of machinery. The majority of Bombay builders are Indians who have not yet, as a class, appreciated the value of the use of modern appliances. One of the prime needs of Bombay is rapid building construction, and this can only be accomplished by better organization of the trade and by the adoption of modern methods of working. Some of the latest methods and appliances are, it is said, being employed by the Bombay Development Committee.

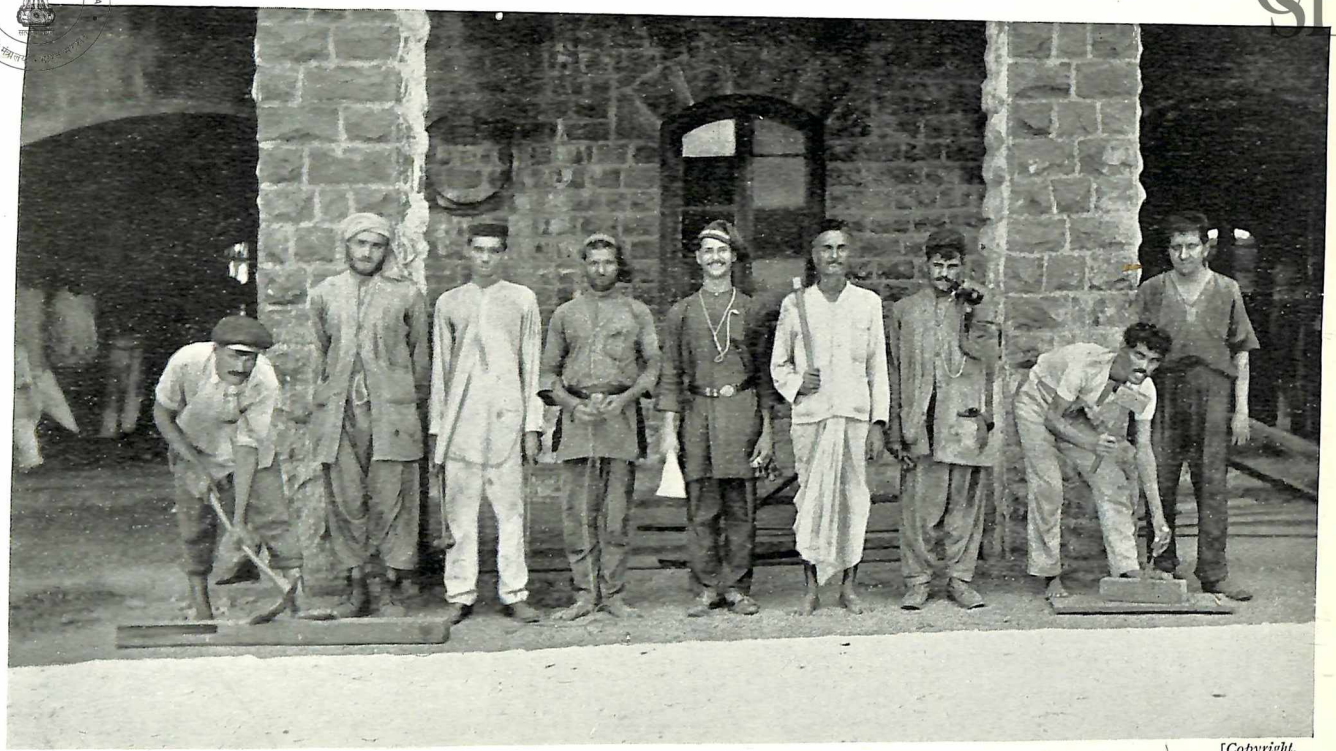
CHAPTER VIII

LABOUR IN DOCKYARDS AND RAILWAY WORKSHOPS

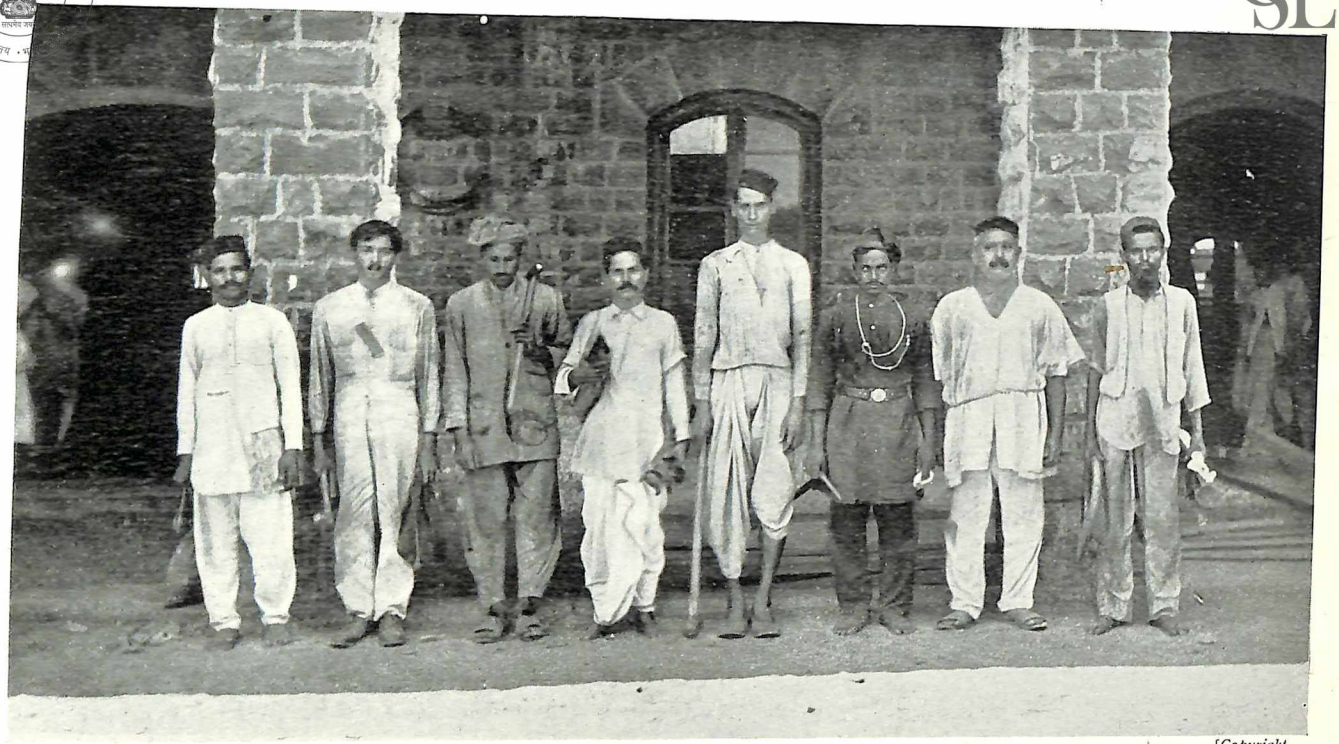
THE dockyards and the railway workshops employ a large proportion, probably two-thirds of the artisans and skilled workers in the city. Over 10,000 persons obtain employment in the dockyards, while the railway workshops engage nearly 18,000 hands. It would be impossible to give a full account of each large establishment in the course of a single chapter. We propose, therefore, to describe in detail the labour conditions in the Royal Indian Marine (Government) Dockyard, and to make a general survey of the railway workshops.

In 1921 the R.I.M. dockyard employed little over 4,000 workers, while the British India Steam Navigation Co. had more than 5,500 at work in their yards. The selection of the former for description has been made for two reasons. Firstly, the labour in both dockyards is drawn from the same classes, but the Government dockyards employ, in addition, certain types of labour which are absent in the other establishment. Secondly, the Government dockyard is the home of shipbuilding in India. It dates back as far as the early eighteenth century, when Lowji Nasarwanji Wadia migrated from Surat to Bombay with his workmen, and undertook the construction of wooden battleships and frigates for the British Navy.[1] The success achieved by this Parsi master-builder and members of his family is strikingly shown by the large number of vessels which were constructed for the East India Company, the Royal Navy and private firms.[2] With the advent of the steel ship the character of the work entirely changed, and, with the retirement of the last of the line of master-builders in 1885, Government took over the dockyard and appointed a Chief

[1] *Gazetteer of Bombay City and Island*, Vol. III, pp. 272–3. [2] *Ibid.*



R.I.M. DOCKYARD. TYPES OF LABOUR. I.



R.I.M. DOCKYARD. TYPES OF LABOUR. II.

Constructor and a staff of trained European officers. No longer are the large teakwood battleships constructed. The importation of the most modern mechanical appliances, similar to those in use in the dockyards of Britain, has resulted in the work being conducted almost on Western lines. This has necessitated the training of skilled mechanics and artificers—one of the most important duties of the European staff.

The works at present comprise five dry docks, a wet basin, a torpedo-boat dock, a steam factory for constructing the latest marine engines, foundries, "smithies," joiners' shops, boat slipways, etc. The construction of large steel ships is not undertaken, but 100-ton trawlers and boats are built. During the War, the chief work was the repair and fitting of gunboats, transports, etc.

Supply of Labour.—On the whole there has never been a shortage of labour. There is nearly always a crowd of workers outside the gates seeking employment. Numbers of the workers take leave during the "marriage season" and also before the break of the monsoon, when they return to the villages for agricultural work.

Many of the men who are at present employed in the dockyards are the direct descendants of some of the original workers who migrated from Surat. Some of them speak, however, of bringing up their sons to other callings as the change in the character of the work (i.e., the change from woodwork to iron- and steel-work) has demanded a different type of workman, and it is said that other employments are proving more remunerative and afford greater scope. The decline in the number of Parsis employed is attributed to this.

Skilled Labour.[1]—The largest class of skilled labour is that of the riveters and platers. They are chiefly Konkanis from Ratnagiri, Janjira and Malwan. By caste they are Agris, Bhandaris, etc. The Indian is far less efficient than the English workman. For instance, a group of Indian riveters, consisting of four men and two boys, would hammer

[1] All wage statements made in this and the following sections of this chapter relate to 1917–18, unless otherwise stated.

not more than 100 rivets a day, while in England a set of riveters, comprising three men and two boys, would hammer 600 a day. "Holders-up" and strikers were paid an average daily wage of Rs.1.6, plus a war bonus of 4 annas paid to all workmen, in 1917–18.

Most of the workers in the blacksmith's shop are Gujeratis, Konkanis, Mohammedans and a few Pathans. The chief castes among the Hindus are Lohars, Kunbis and Kumbhars. Pathans and "up-country" Mohammedans are engaged on the heavy work as hammermen (or strikers), while smiths (or holders) are chiefly Gujeratis. One of the hammermen, said to be the best in the shop, on being questioned about his wages, stated that he received Rs.2.12 per day and that his monthly earnings averaged Rs.80.

The majority of the workmen in the foundry are Hindus, although large numbers of Mohammedans, Indian Christians, etc., are also employed in order that there may be no intermission of work on Hindu holidays. The Hindus are mostly Kamatis and Bhandaris. Moulders received Rs.1.10 daily and the war allowance in 1917–18. They also made a great deal on overtime; on the whole, their overtime during the war amounted to "time-and-a-half." They were so keen to make the additional money that at times they had to be compelled to stop work. The earnings of some of them averaged as much as Rs.130 to Rs.140 per month.

The joiners' shop provides all the wooden fittings for vessels. The joiners are chiefly Bhavsars and Sutars from Surat, Bulsar, Damans and Navsari. Migration from these districts is said to have continued ever since the centre of the wooden shipbuilding industry was transferred from Surat to Bombay. Parsis and Konkanis are also to be found in this shop. The monthly wages of an average worker ranged from Rs.45 to Rs.50 in 1917–18.

Large numbers of Goanese are employed as shipwrights. Fewer Parsis engage in this work than formerly. The wages are almost as much as those of joiners, being about 2 to 4 rupees per month less.

The class of labour engaged in boat-building is similar to that found in the joiners' shop. It consists chiefly of

R.I.M. DOCKYARD—BOAT-BUILDING.

R.I.M. DOCKYARD—KOLI DIVER.

Bhavsars from Daman, Bilimoria and Surat, and Goanese from Bhaynder, Bassein and Virar, all three of which places are in proximity to Bombay. There are also Mohammedans and a few Parsis, but no Konkanis. Occasionally a few Chebahs (from Daman) are engaged when they visit Bombay, but they should be regarded more in the nature of "casuals." Boat-builders receive about the same rates of pay as ship-wrights.

There are a number of Kolis employed as oarsmen, and one of them works as a diver.

Unskilled Labour.—Two-thirds of the unskilled labourers are Kharvas from Kathiawar. They are said to be descendants of the Kharva pirates, at one time the terror of the west coast. Nowadays they mostly seek Government work. They are men of initiative who will undertake any kind of general work. They make excellent seamen, for they can swim, climb and carry out any of the duties of a "handyman." They correspond to the "rigger" or rough painter in an English dockyard.

Ghatis are also to be found in large numbers. Their chief work is carrying loads. Other unskilled labourers include Goanese and Mohammedans.

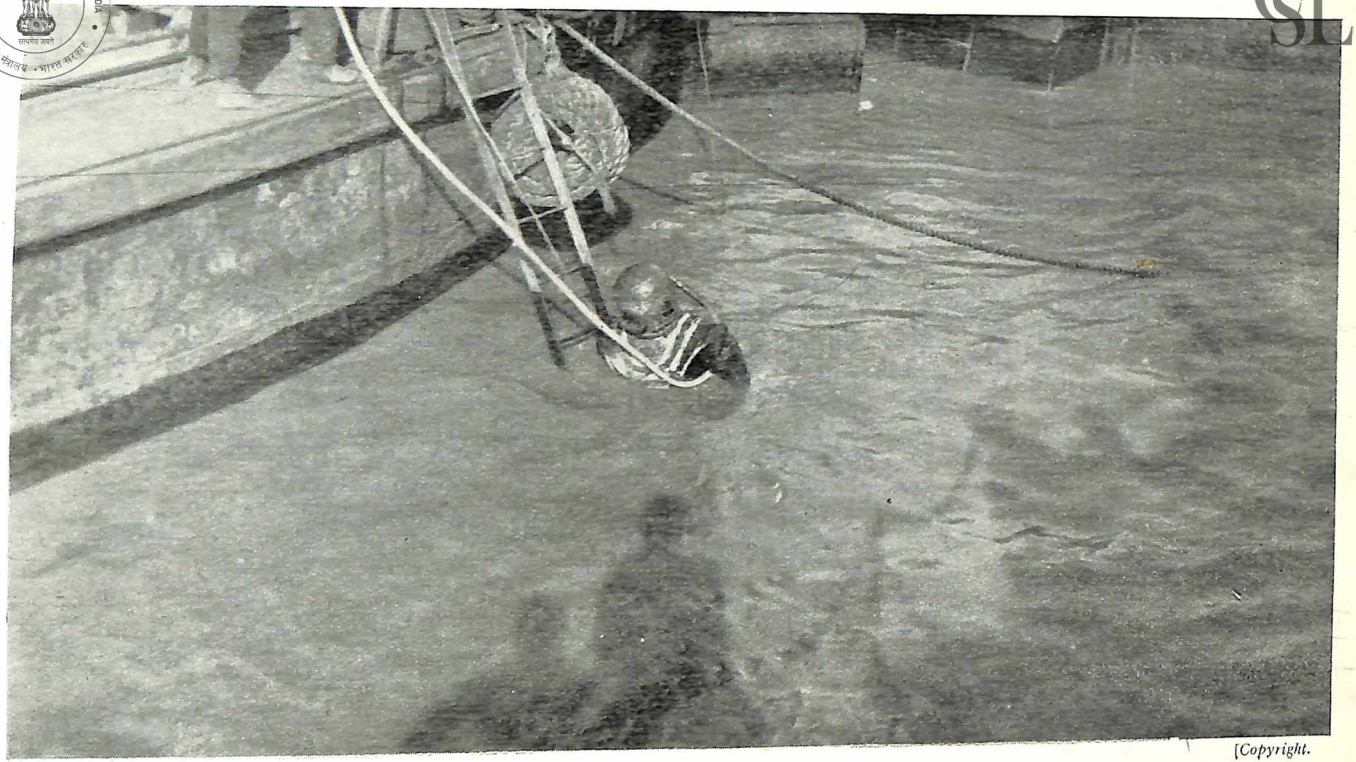
Maistries (or Chargemen).—Maistries are drawn from the ranks of the workers. Their pay varies according to the department in which they are engaged. In 1917–18, it was stated that the maistry in the foundry received Rs.4 to Rs.5 per day, while the chargeman in the joiners' shop earned about Rs.3 daily. Both received allowances and probably "commission" from the men working under them. Including the "extras," the maistry in the joiners' shop was said to earn about Rs.120 per month. Nearly all chargemen are also pensionable. High wages are received not only by the chargemen; many other workers make over Rs.150 per month (including overtime). In 1917–18, there were said to be about 100 earning this figure.

Boy Labour.—Boys enter the dockyard at the age of fourteen years, and are usually employed as carpenters' apprentices, rivet boys, etc. In 1917–18, the scale of wages was 4 annas per day during their first year, with annual

increments of 2 annas. It has been found that as soon as they are partially trained, and while they are still inefficient, they leave the dockyard for the small workshops, to which they are attracted by higher wages. In many cases they return again at the age of eighteen or twenty years, when the dockyard will pay them 12 annas to Rs.1 daily—a better wage than can be obtained elsewhere for similar work.

Wages.—The following table gives the average daily wages of the different classes of worker :

Occupation.	No. of Men. November.		Average daily rate of Pay. November.	
	1913.	1917.	1913.	1917.
			Rs. a. p.	Rs. a. p.
Factory Branch :				
Fitters	112	213	1 6 10	1 8 4
Machinists	66	100	1 9 5	1 9 7
Boilermakers	109	272	1 4 6	1 5 2
Electric Light Fitters	36	255	1 7 8	1 4 3
Smiths	52	45	1 0 11	1 3 7
Foundrymen	20	46	1 7 3	1 6 2
Miscellaneous (skilled)	52	101	1 6 6	1 8 0
Labourers	131	494	10 5	9 10
TOTAL	578	1,526		
Assistant Contractor's Branch :				
Shipwrights	152	741	1 4 3	1 2 3
Caulkers	21	37	1 6 1	1 6 0
Boat-builders	127	99	1 2 11	1 3 10
Ship Fitters	155	444	1 7 2	1 5 6
Joiners	67	193	1 6 10	1 5 5
Smiths	72	191	15 10	1 0 6
Riveters	551	902	15 8	1 0 6
Saw Mill Workers	26	51	15 7	15 0
Painters	64	348	1 0 0	15 8
Miscellaneous (skilled)	56	138	1 7 11	1 6 10
Labourers	224	1,074	10 4	12 3
Total	1,515	4,218		



DIVER DESCENDING.

ELECTRIC SHOP. GOANESE IN CENTRE.
(By kind permission of the Agent, G.I.P. Railway.)

In addition, every man received in 1917 a war bonus of 4 annas per day and also overtime pay.

Overtime.—The yard was never closed for Sundays and other holidays during the War. For the first two hours' overtime, ordinary rates of wages were paid, but for every additional three-quarters of an hour, an hour's pay was given.

Hours of Labour.—Daily hours of labour in 1917–18 were from 8.30 a.m. to 5 p.m., with a half-hour interval at 1.30 p.m. The hours on Saturday were 8.30 a.m. to 1.30 p.m., but the men received a full day's pay.

Absenteeism.—Twenty per cent. of the workers were stated to be absent daily. On the average the men work twenty out of the twenty-six working days per month. Pathans are the worst offenders in this respect; they work only ten or twelve days per month.

THE RAILWAY WORKSHOPS

In 1921, the G.I.P. Railway Locomotive Works employed about 5,000, and their Carriage and Wagon Works 6,000 men and boys. The B.B. and C.I. Railway Locomotive and Carriage Works employed about 5,000.

Locomotives are imported from Great Britain, but repairs and rebuildings are carried out in the workshops. Both railways make their own boilers and cylinders, and they undertake the entire construction of carriages even to the under frames.

Supply of Labour.—Shortage of labour was complained of in 1919, particularly at Parel. It was reported at one of the works that the men only stay from two to two and a half years, being attracted to the mills by the higher wages there paid to mechanics.

When the men first come to the workshops, they generally do not possess any knowledge of skilled work, and act as coolies. The bulk of them remain unskilled. The more intelligent are appointed to help the machine-men, etc., and eventually they may become assistant machine-men

and sometimes even machine-men themselves. A European foreman stated, however, that none are mechanics in the true sense of the term ; they have no knowledge of mechanics and they carry out their duties in a perfunctory manner. So long as the man is confined to the particular task to which he is accustomed and which he has been trained to perform, so long will he carry out his work. He has not the ability, however, to apply his knowledge. Further, the men possess little ambition and take no pride in their work. These remarks, which in any case are largely a matter of opinion, apply only to the rank and file of the mechanics. There are a large number—for instance, most Parsis and many Goanese workers—who attain a fairly high level of skill and efficiency.

Types of Labour.—In the machine shops, Parsis are generally placed on the more difficult machines. The machinists are mostly Ratnagiri Marathas, although others come from Malwa, Surat, etc. There are also Punjabi Mohammedans from Lahore ; they are said by some to be the best workers.

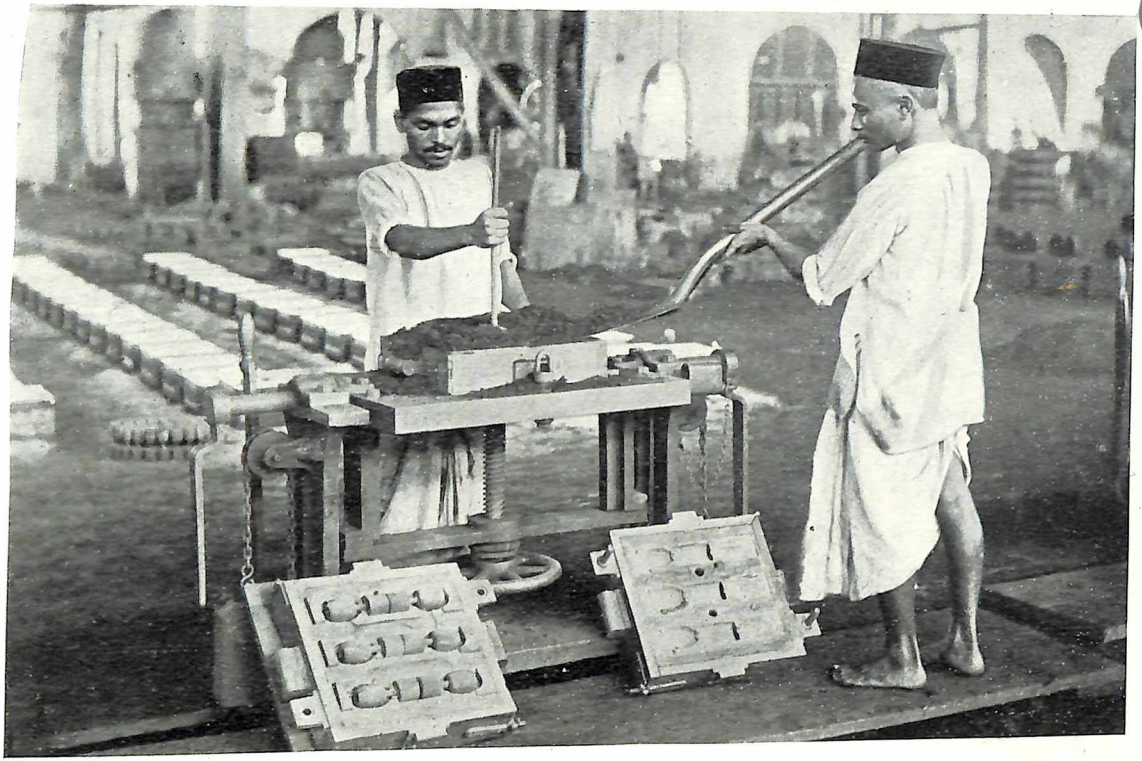
Moulders are chiefly Kamatis from Hyderabad, and, in a few cases, Mohammedans.

Tin smiths are largely Mohammedan Boris.

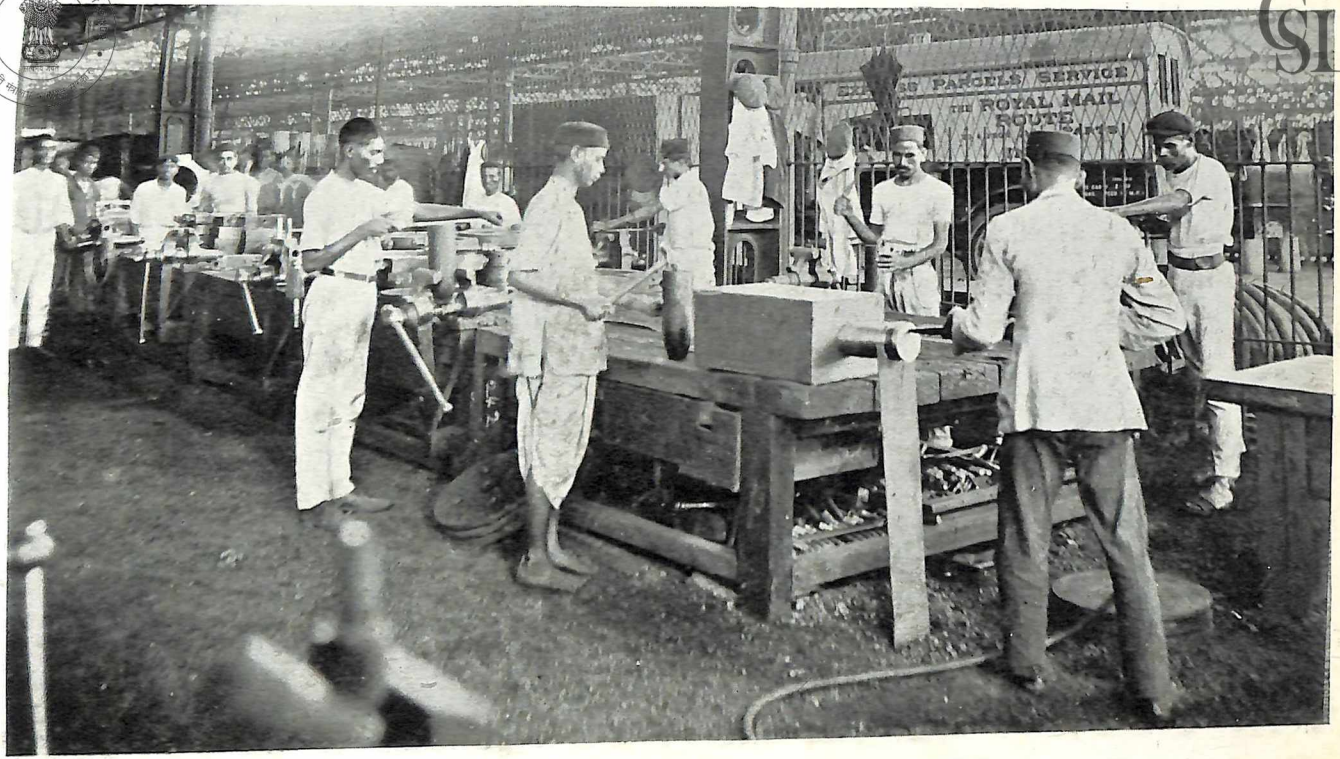
In the wheel shops, the smiths are mostly Lohars from Gujerat. Strikers and tyre shrinkers are nearly always Pardeshis. The latter also work in the rolling mills and as watchmen, and provide about half the unskilled labour. In some works they are regarded as good workmen, while in others they are considered lazy. When Pardeshis have a grievance there is generally trouble, as they "hang together" more than the other castes.

The majority of the workers in the brass foundry are Marathas, and in the signal shop they are Panchkalshis, who are residents of Bombay. Carpenters and upholsterers nearly all come from Gujerat, while painters are chiefly Konkanis and Pardeshis.

European foremen are employed, and the chargemen are chiefly Goanese, Parsis, and Anglo-Indians.



G.I.P. RAILWAY WORKS. MOULDING HAND GRENADES.
(By kind permission of the Agent, G.I.P. Railway.)



G.I.P. RAILWAY WORKS. MUNITION MAKING DURING THE WAR.
(By kind permission of the Agent, G.I.P. Railway.)

Boy Labour.—Boys generally come to the works when they are sixteen or seventeen years of age. They start as apprentices on screwing machines, or "tapping" small holes, drilling machines, etc. They receive adult wages after five years.

Wages.[1]—Nearly all the work is carried out on a time basis as the men object to piece-rates. When the men were engaged on munition work during the War they worked on a bonus system with excellent results; the production of some men was three times as great as on time-work.

Hours of Labour (1919).—Daily hours of labour were from 8 a.m. to 5.30 p.m., with an interval of one hour at midday. On Saturdays work finishes at 12.30 p.m.

Absenteeism.—The percentage of daily absentees varies from twenty to thirty. Absenteeism has increased since the grant of higher wages. The following statistics, supplied by the G.I.P. Railway Locomotive Works, support this:

AVERAGE DAILY ABSENTEES

	1917	
March	764 out of 6,300 workers	
April	765	,, ,, ,, ,,
May	740	,, ,, ,, ,,
	1919	
March	1,070 out of 6,327 workers	
April	1,393	,, ,, ,, ,,

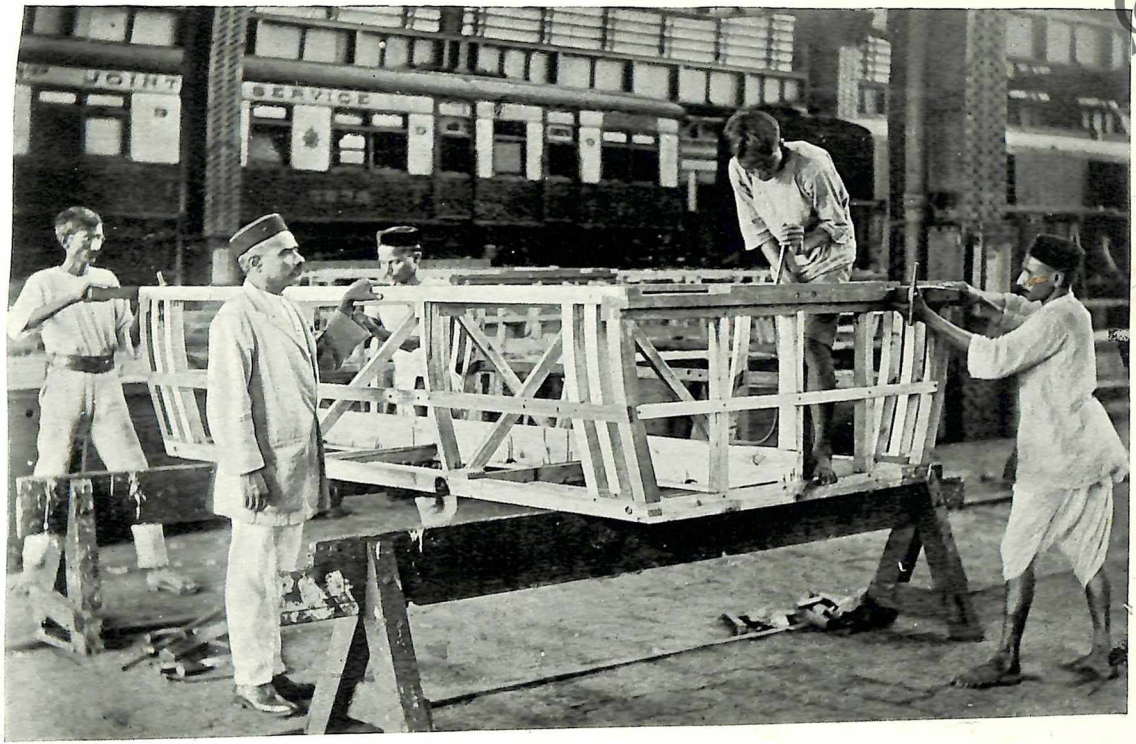
On the average, men work only twenty to twenty-one days per month. It is stated that, owing to absenteeism, 15 per cent. more machinery has to be maintained than would otherwise be required.

Loitering.—There are frequent complaints of loitering on the part of the workers. This is very difficult to check in some shops (e.g., in the erecting shop, the boiler shop) as the men can easily hide themselves. For this reason a greater amount of supervision is required in Bombay

[1] Statements of wages were supplied, but these gave only the *maximum* and not the average wage.

workshops than in England; even so, the men are said to "work only about half the time."

Efficiency of Labour.—Opinions as to the efficiency of the workman vary according to the nature of the work on which he is engaged. On light cabinet work the Indian, after proper training, is reported to be almost as efficient as the European. In the foundry the European is estimated to be seven times as efficient. In the workshops as a whole, it is said that the Indian is not one-third as efficient as the European mechanic.



A MAISTRY SUPERVISING PONTOON CONSTRUCTION.
(By kind permission of the Agent, G.I.P. Railway.)

CHAPTER IX

TRADE UNIONS

THE industrial unrest which commenced in 1917 brought into existence a number of labour organizations, chiefly formed by politicians, lawyers, and persons unconnected with industry. All types of associations were started, e.g., "unions" of motor-car drivers, of oil-workers, of gas-workers, etc., but they were, for the most part, "temporary organizations" which existed only so long as the grievances of their members were not remedied. Upon the achievement of their object, viz., the increase of wages and, frequently, other demands, the interest of members and even of promoters diminished, and in a short space of time the "unions" ceased to exist. The majority of these organizations had no constitution, no rules, no membership forms, etc., and were "little more than strike committees consisting of a few officers and perhaps a few paying members."[1] Nominally there existed, early in 1922, forty-eight unions with close upon 80,000 members in Bombay.[2] At present (March, 1924) there are five labour unions with a nominal membership of 9,850. Of these only three are industrial unions, i.e., the G.I.P. Railway Workmen's Union, the B.B. and C.I. Railway Union and the Port Trust Workshop Union. The other two are the Bombay Presidency Postmen's Union and the Bombay Telegraph Workmen's Union. All the unions are organized by the same persons, viz., Mr. F. J. Ginwalla, a solicitor, and Mr. S. H. Jhabvala, B.A. The latter acts as Secretary and the former as President or Vice-President of the Managing Committees. Accordingly

[1] Report of the Industrial Disputes Committee, Bombay, 1922.
[2] *Ibid.*

we find the objects, rules, regulations and activities of the different unions almost identical.

Objects.—The objects of all the unions are stated to be the following :

" (*a*) To promote friendly feeling and to foster a spirit of brotherhood and co-operation among the workmen in Bombay ; (*b*) to consider the question of their various disabilities with regard to their work and wages and to try to bring about their removal by all lawful and constitution (*sic*) means ; (*c*) to promote friendly and harmonious relations between the workmen and their superior authorities ; (*d*) to maintain funds for the relief of members when sick or in distress, and for the relief of dependents of the deceased member ; (*e*) to improve the condition of the workmen by initiating schemes of benefit insurance, provident funds, co-operative credit society, medical relief and such other kindred benefits ; (*f*) generally to ameliorate the social, educational and economic condition of the workmen and their dependents."

Management.—The size of the Managing Committee varies from eighteen to twenty-five members. The Committee generally includes, besides the honorary secretary and treasurer, three other honorary office-bearers, the solicitor, the doctor and the auditor. It will be seen that these honorary officials, who are " outsiders," are numerous enough to exercise powerful influence over the general policy of the union. A further disadvantage is that the committees are too large for efficient work.

Finance.—In the railway unions each member pays an admission fee of Rs.1, and a monthly subscription, varying from 1 to 8 annas, according to his pay. The rate of subscription of the Port Trust Workshop Union is 4 or 8 annas, according to pay. The Postmen's Union have three classes of members, paying respectively 4 annas, 8 annas, and Rs.1 ; the privileges enjoyed by the members vary according to the class which they join. The accounts of the three principal unions are as follows [1] :—

[1] Prepared from the Annual Reports of the Unions.

Year	G.I.P. Railway Union. (Founded September, 1917.)			B.B. and C.I. Railway Union. (Founded August, 1920.)			Bombay Presidency Postmen's Union. (Founded April, 1918.)		
	Income.	Expend.	Surplus.	Income.	Expend.	Surplus.	Income.	Expend.	Surplus.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1918–19	—	—	—	—	—	—	3,957	1,537	2,419
1919–20	4,082	391	3,691	—	—	—	3,770	1,573	2,196
1920–21	14,130	5,842	8,287	9,347	3,702	5,645	4,644	3,775	869
1921–22	6,870	3,866	3,004	5,943	2,739	3,204			
1922–23	4,075	1,544	2,531	3,750	1,385	2,365	4,011	1,271	2,740

The accounts are audited, printed and published annually.

Rules.—All the unions have printed rules. None of these call for comment, except those of the Postmen's Union relating to strikes. It is laid down that :

"A strike shall not be declared unless 95 per cent. of the votes shall be in favour of a strike.

"In case of the decision to strike, an Executive Committee, consisting of fifteen persons, five office bearers and ten of its members, shall be appointed immediately by the consent of majority at the very meeting.

"By the order of the Executive Committee all members connected with strike shall strike work, having duly given their charge at the date and time appointed, and they shall obey the Committee to the end.

"During strike no member shall depend for monetary aid upon the union or an individual or any institution."

There is no mention in the rules of powers being granted to the union officers to make agreements binding upon the men ; herein lies the weakness of the associations.

Recognition.—It is not surprising, then, that many employers hesitate to recognize unions which may be unable to enforce discipline among their members. Up to the present time only three unions have been recognized, the Postmen's and Telegraph Workers' Unions, both of which consist of Government employees, and the Port Trust Railway Employees' Union (now defunct). On September 17, 1922, the Tramway Employees' Union struck for recogni-

tion. The strike failed, and " about 1,300 members of the union were dismissed from the company's service."[1]

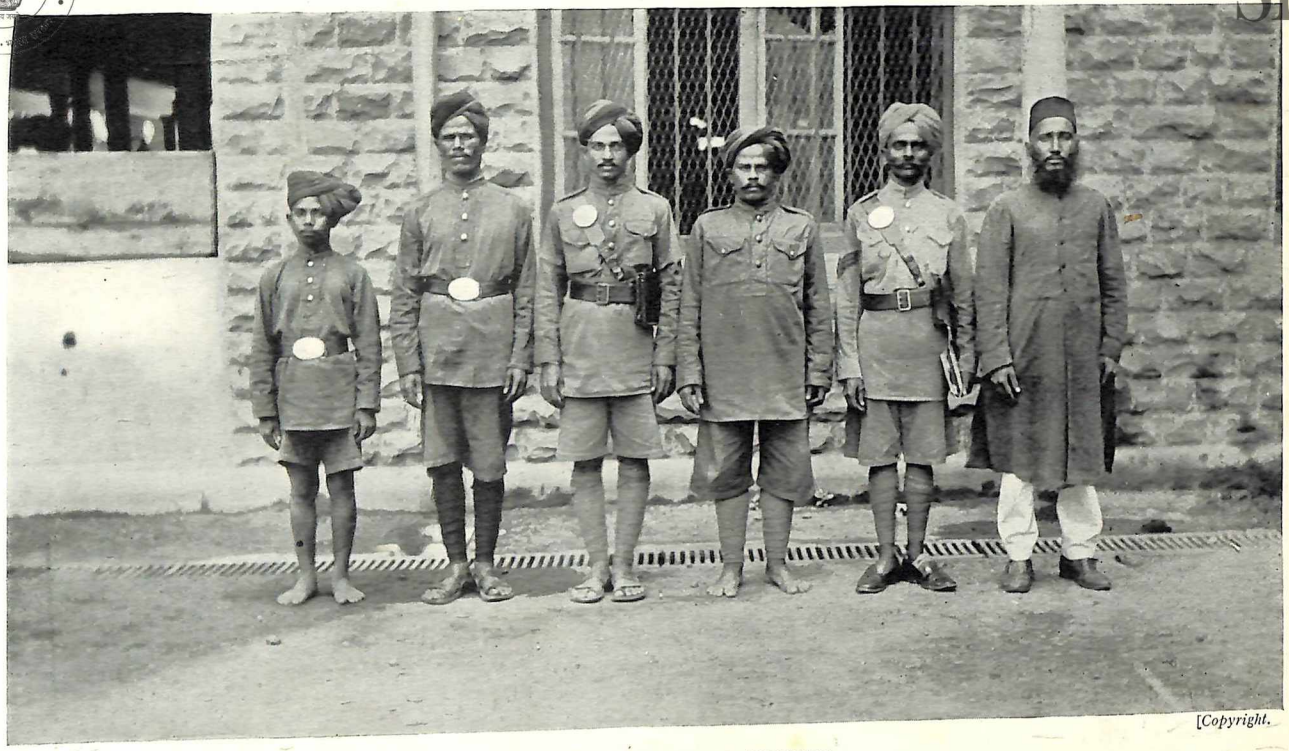
Activities.—The activities of the unions include the grant of medical relief to members at reduced rates, the establishment of Death and Retirement Benefit Funds, and the opening of reading rooms and libraries. The railway unions have also started a joint co-operative credit society. The Postmen's Union holds night classes for instruction in languages and publishes a monthly bulletin reporting its activities.

All the unions showed considerable activity and were well supported in the early years of their existence, but recently they report difficulties in securing payment of subscriptions and lack of support: this is especially true of the railway unions. The smallest and financially weakest union is the Telegraph Workmen's Union, established in July, 1922. The best organized union is probably the Postmen's Union. It had the advantage of securing the services of a Cambridge graduate, Mr. V. G. Dalvi, barrister-at-law, as its first honorary secretary. Mr. Dalvi's knowledge of economics and his legal experience was a valuable asset to the union. It is not surprising that its rules and regulations should have served as the model for several other organizations.

Messrs. Ginwalla and Jhabvala, besides conducting the affairs of the five unions, have organized a " Bombay Central Labour Board," [2] a federation of labour unions in Bombay. The aims and objects of the Central Labour Board are: The carrying on of propaganda work for the welfare of labour; the opening of schools, libraries and such other educational institutions for the benefit of labourers; the collection of statistics in order to form a correct idea of the condition of workers; the protection of the rights of unionists; the organization of new unions in different industries, and the

[1] *Labour Gazette*, November, 1922.

[2] This should not be confused with the Bombay Central Labour Federation, a branch of the All-India Trade Union Congress. The last named is an offshoot of the great political organization, the Indian National Congress. Both the Federation and the Trade Union Congress appear to be inactive.



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TYPES OF BOMBAY POSTAL WORKERS.

strengthening of the existing unions; the study of labour questions; the co-ordination of the efforts of different unions; and the promotion of the moral status of the working classes by temperance and other similar movements.

In the quarterly list of unions given in the *Labour Gazette* are mentioned five other labour organizations which, as they are either largely composed of clerks or else not strictly trade unions, have been excluded from the above account: The G.I.P. Railway Staff Union (founded April, 1920), the Clerks' Union (April, 1918), the Indian Seamen's Union (April, 1921), the Victoria Owners' and Drivers' Union (March, 1924), the Saloon, Hamamkhana Owners' and Barbers' Association (January, 1924).

The G.I.P. Railway Staff Union draws its membership chiefly from the clerical and administrative staff of the railway. At the beginning of the year 1923 it altered its rules to permit the inclusion of the running and traffic staff, and also Europeans and Anglo-Indians. It is now seeking amalgamation with the G.I.P. Railway Union. The association is an active body, organized and conducted by the members themselves. It has a constitution and by-laws. The union has applied for recognition, but without success. It publishes a fortnightly *Herald* and a fortnightly vernacular paper. The bulk of its members are not resident in Bombay, but belong to out-stations on the G.I.P. Railway.

The Clerks' Union is what its name signifies, and as such does not concern us.

The Victoria Owners' Union and the Barbers' Association cannot be classed among Trade or Labour unions: they are more strictly associations of petty proprietors. The first named was formed with the immediate object of urging the modification of the existing licence regulations for victorias, while the latter was formed for the purpose of protesting against the new regulations framed by the municipality for the licensing and control of all hair-cutting saloons.

The Indian Seamen's Union primarily served as an employment bureau for Indian seamen, and did not carry

on the functions of a trade union. Since the middle of 1923, a new board of management, consisting entirely of members of the union, has been appointed, and the work of the employment bureau has been suspended. The union consists entirely of members of the saloon crews of the Peninsular and Oriental, British India and other navigation companies. At one time it was financially the strongest association of workers in Bombay, but, owing to unemployment among its members and the consequent decrease in subscriptions, it has been forced to encroach considerably on its reserve fund.

Brief reference only need be made to two other labour associations, the " Kamgar Hitavardhak Sabha " [1] and the Amalgamated Society of Railway Servants. The former is composed mainly of textile operatives in the city. It has frequently ventilated the grievances of mill-hands and at the same time carried on useful social work among them. The Amalgamated Society of Railway Servants, which was established in the 'nineties, is a limited company conducted for the benefit of railway servants throughout India and Burma. It is a friendly society rather than a trade union.

Membership of Unions.—The membership, as reported quarterly in the *Labour Gazette*, is as shown on opposite page.

The Indian Seamen's Union, which, as we have said, is an employment bureau, not a trade union, has maintained the same membership of 10,000 persons during the whole period.

A striking feature of the following table is the regularity of the figures. They appear too smooth to be true, especially when we are informed by some of the unions that membership has been fluctuating. It would seem that the figures do not represent the *real* membership. This is confirmed by the statement in the *Labour Gazette* that, in the case of railway unions, the paying members number only 700 in each union. If statistics of actual (i.e., paying) members could be accurately ascertained they would doubtless show a much greater decline in membership. Even if the figures

[1] " An association for watching the interests of Indian working-men."

NUMBER OF MEMBERS (00's)

Union.	1922.			1923.				1924.
	2nd Qr.	3rd Qr.	4th Qr.	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	1st Qr.
G.I.P. Railway Union .	45	25	25	25	25	20	20	30
B.B. and C.I. Railway Union	45	20	20	20	20	20	20	20
Port Trust Workshop Union	—	35	35	35	35	35	35	35
Bombay Presidency Postmen's Union .	9	9	10	10	10	10	10	10
Bombay Telegraph Workmen's Union .	—	3·5	3·5	3·5	3·5	3·5	3·5	3·5
Total—Existing Labour Unions	99	92·5	93·5	93·5	93·5	88·5	88·5	98·5
Defunct Labour Unions :—								
Bombay Tramway Union	15	20	De-funct	—	—	—	—	—
Port Trust Railway Employees' Union.	3·5	3·5	3·5	3·5	De-funct	—	—	—
Total—Labour Unions .	117·5	116·0	97·0	97·0	93·5	88·5	88·5	98·5
Clerical Unions :								
G.I.P. Railway Staff Union	20	30	35	40	45	41	42	42
Clerks' Union . .	4·25	5	8	8	9·5	9·5	9·5	9·5
Total—Clerical Unions.	24·25	35	43	48	54·5	50·5	51·5	51·5

are taken at their face value, they show a decline in membership of labour unions of nearly 25 per cent. until the end of the year 1923, and a recovery in the first quarter of the year 1924. The clerical unions, on the other hand, have doubled their membership.

Most of the labour unions in Bombay are provincial, i.e., they have branches in other parts of the Presidency, although the majority of members belong to Bombay. The only local union is the Port Trust Workshop Union. Trade unionism in Bombay appears to be most successful among clerical labour and artisans. There are no unions amongst textile operatives, dock labourers, or workers in the building trade. Three reasons can be advanced for

this. In the first place, the workers are semi-agriculturists who are migratory in habits; this applies also, of course, to artisans, but to a much less extent. Secondly, they are illiterate and cannot appreciate the value of unions. Thirdly, organization is more difficult to achieve as the labour is scattered.

There is no doubt that the existing unions have been "effective" in securing concessions and better conditions of employment which would not have been secured had there been no collective bargaining; this is particularly true of the Postmen's Union until the disastrous strike of September, 1920. The more important question is: how far will they continue to remain effective? Subscriptions are not regularly paid and the membership is declining. The unions cannot expect to thrive unless they can offer their members some substantial benefit in return for their support. If greater attention were given to "friendly society" activities, the confidence of the members might be regained.

CHAPTER X

WELFARE WORK

EMPLOYERS gave little thought to the improvement of the well-being of their workpeople until the recent industrial unrest, when the Press and the Social Service League persistently drew their attention to the evils which had arisen from neglect of their responsibilities to the workers. It was then that two enlightened mill-agencies approached the League and offered to finance schemes of "welfare work"[1] in their mills if that body would undertake the work of administration. It is to the credit of the League that they possessed both the staff and the organization to accept the offer, and before the close of the year 1918 two Workmen's Institutes were established for the benefit of operatives working in the mills under the agencies of Messrs. Currimbhoy Ebrahim & Sons, Ltd.,[2] and of Messrs. Tata Sons, Ltd.[3] The account of the work at present being carried on in Bombay is largely a record of the achievements of the two institutes. No other employers of labour have attempted schemes on the same scale, though a few have started one or two welfare activities amongst their workpeople.

Medical Relief and First Aid.—Most large employers of labour provide a dispensary for their workpeople and grant them free treatment. A "compounder" is usually in attendance at the dispensary throughout the day. Some

[1] "Welfare work consists of voluntary efforts on the part of employers to improve, within the existing industrial system, the conditions of employment in their own factories."—E. D. Proud, *Welfare Work* (G. Bell & Sons, Ltd., 1916).

[2] The Pearl, the Currimbhoy, the Pabaney, the Fazalbhoy, the Crescent, and the Indian Bleaching and Dyeing Mills.

[3] The Tata, the Standard, the David and the Swadeshi Mills.

by women workers varies considerably, i.e., from six days to one year.

In the Tata and Currimbhoy groups of mills, maternity allowances are provided for the women-workers. The scheme introduced by these mills is as follows: Women with at least eleven months' service are eligible for benefit. They have to sign a declaration (in the case of the Currimbhoy Mills), or produce a certificate from the lady doctor (in the case of the Tata Mills), that they are fully eight months pregnant, and that they undertake not to engage in any other industrial work during the two months in which they receive the allowance. Two months' wages are given as allowance (one month before and one month after confinement). According to the quarterly statistics issued by Messrs. Tata Sons, Ltd., on the average 120 of their women operatives receive a total sum of Rs.2,300 per quarter, i.e., about Rs.6.8 per beneficiary per month.

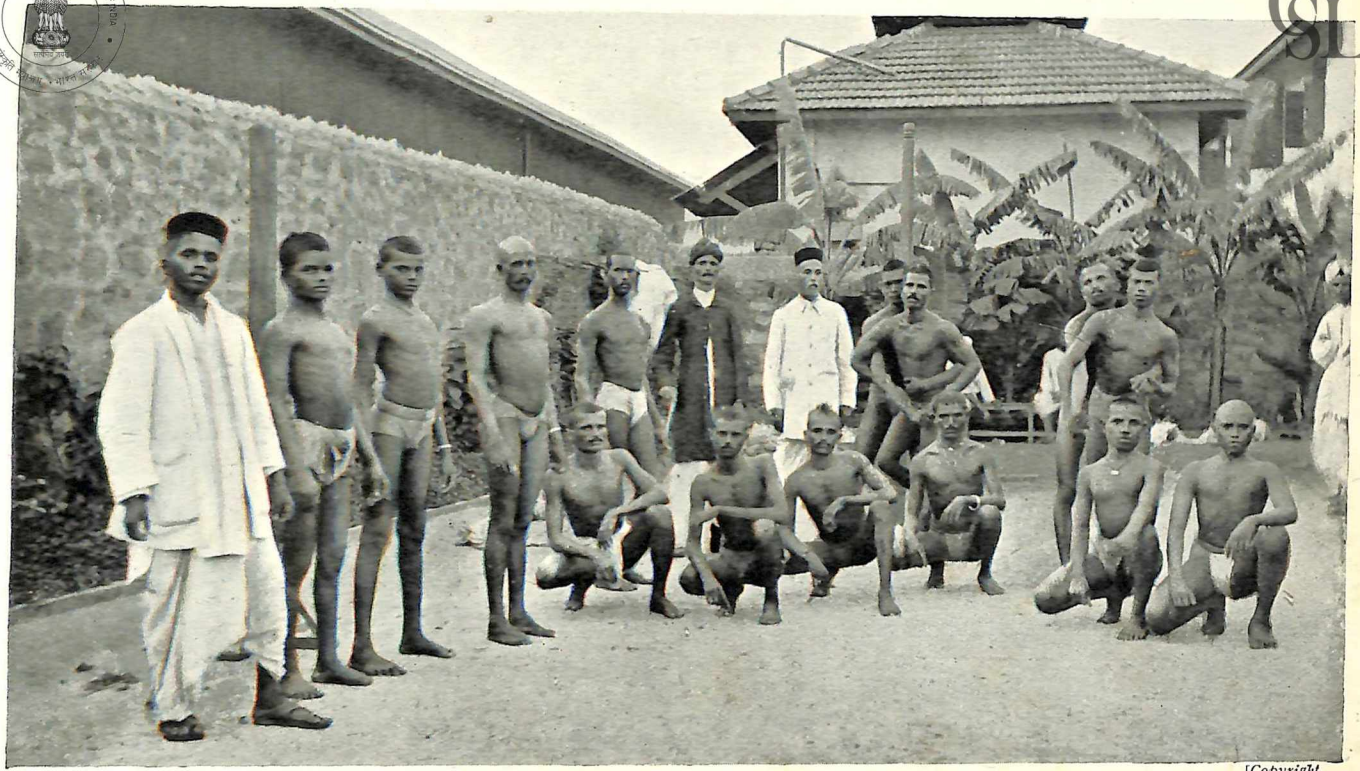
The Tata Mills have also introduced compensation in cases of accident, a Voluntary Sick Benefit Fund and a Provident Fund. The *Times of India* Press also have a Provident Fund.

Crèches.—Three mills make provision for the care of the young children of their women employees. At the David Mills, the crèche is in charge of a matron and is visited regularly by a lady doctor.

"Milk, sugar and biscuits are supplied free to the children, who are also provided with clothes during the time they are in the crèche. On the Diwali day each child was presented with a new frock for home use. For such children as are too young to take nourishment otherwise, feeding bottles are also provided. The clothes given for use in the crèche are daily washed and are also sent to a laundry from time to time. . . . All the children are weighed monthly, and a regular register of their weights is kept at the crèche for the use of the lady doctor." [1]

The crèche at the Fazalbhoy Mills is managed on similar lines, and is furnished with swinging cradles, beds and a variety of toys. The third crèche is conducted by the Infant Welfare Society for the benefit of employees at the

[1] Fourth Annual Report of the Tata Sons Workmen's Institute, 1923.



MILL HANDS AT GYMNASTICS.

(THE LATE MR. C. B. LALAYE, SOCIAL SERVICE LEAGUE, IS SEEN IN THE BACKGROUND WEARING A BLACK COAT.)

Manockjee Petit Mills. Here bigger children as well as infants are received and are given a free midday meal consisting of rice and vegetables.

At first much prejudice existed against crèches. Women regarded them as hospitals and it was with great difficulty that a few were persuaded to leave their children. While considerable progress has been made,[1] many mothers still do not appreciate the benefits to be derived from them, while they dread the risk the child runs of contracting diseases through mixing with the other children in the nursery. Hence, if the confidence of women workers is to be secured, it is essential that great care should be exercised in selecting the person in charge and only fully qualified nurses should be appointed. Besides proving a boon to many a mother, crèches have tended to a greater stabilization of labour by keeping married women at their work.[2]

Recreation.—Following the example of many factories in Great Britain in which Welfare work is undertaken, the Tata and Currimbhoy Institutes have organized various forms of recreation for their employees. Successful gymnasiums have been established and occasional wrestling and weight-lifting tournaments are held. A "lathi" (stick fencing) club, conducted by the Tata Institute, is also popular. The students of one of the Institute's night schools organized a cricket club in 1920; matches have been played regularly every season. Both the David Mills and the Currimbhoy Institute have amateur dramatic societies (composed of clerks and workmen), which have produced several plays. A small portable cinematograph was purchased for use at the Tata Swadeshi Mills in 1922. The educational and humorous films which were shown proved a great attraction, and the fifty shows are said to have been witnessed by over 10,000 persons. Fresh air excursions and athletic sports are organized periodically for the benefit of half-timers. Boy Scout troops have been formed by

[1] During 1922, the average daily attendance of children at the David and Fazalbhoy Mill crèches was seventy-six.

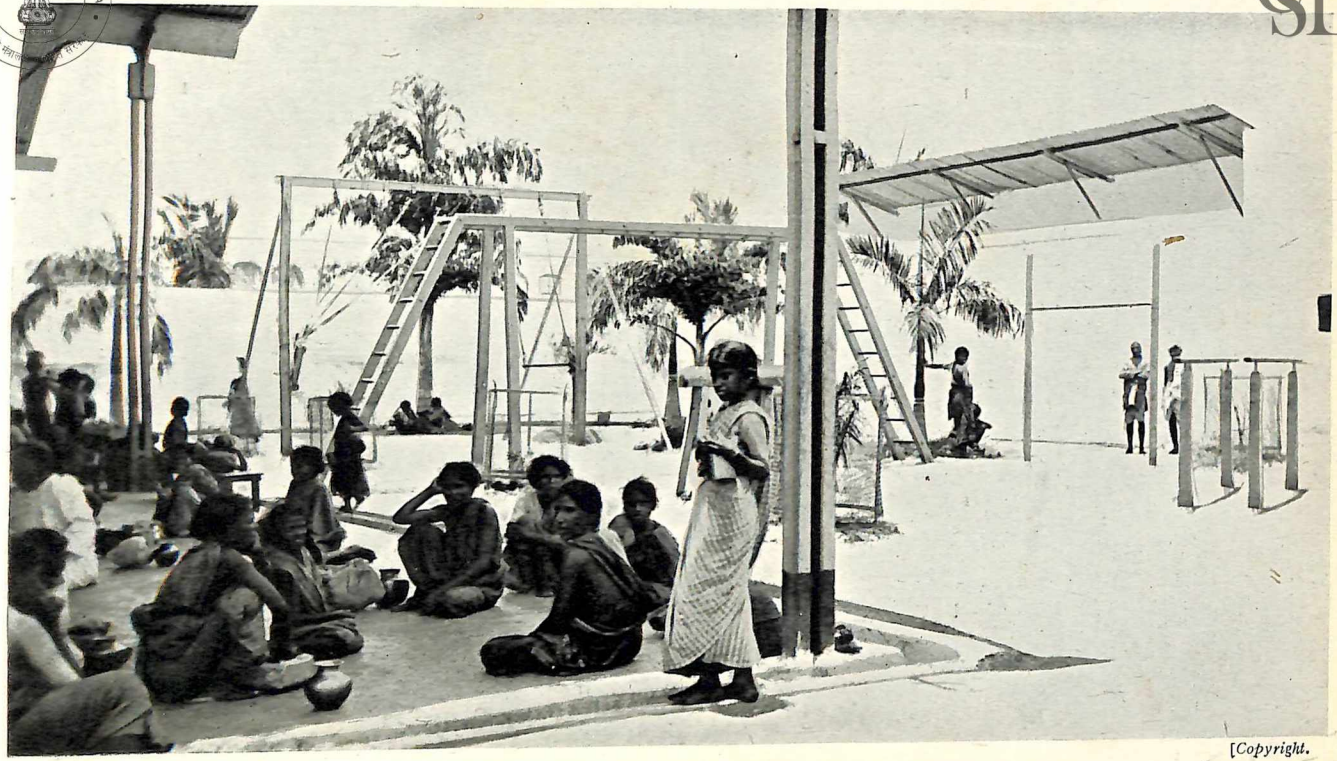
[2] In some mills mothers are given passes and allowed leave at intervals during the day, to nurse their infants.

both institutes; each troop is composed of forty scouts.

Apart from the work of the institutes, no attention is given by employers in Bombay to the recreation of their workers. In the past the mill-hand, working a twelve-hour day, had no time for recreation. With shorter hours he has more opportunities for availing himself of any facilities which may be offered. In Madras, the Buckingham and Carnatic Mills have provided an asphalted playground, fitted with horizontal bars, parallel bars, vaulting horse, swings, etc. In many a Bombay mill a portion of the compound could easily be set apart for the benefit of the operatives, old go-downs could be converted into gymnasiums, etc., if only mill owners would take more interest in the welfare of their hands. Open spaces in Bombay are scarce. Nevertheless, they are also scarce in the heart of industrial centres in England, yet firms acquire or rent land for playgrounds for their employees. With the development of Salsette, land could be acquired by Bombay mills and converted into recreation grounds. Transit facilities would have to be provided, but the mill lorries could be used for this purpose. Sports and recreation clubs could be fostered, Indian as well as European games being encouraged. Inter-departmental matches and also tournaments with other mills could be arranged. Occasional motor excursions to places in the vicinity of Bombay might also be organized.

Food.—Facilities for obtaining good wholesome food at moderate prices form part of most welfare schemes in England. They are specially needed in Bombay, as there are many "single men" who are compelled either to join a "khana-vali" or obtain their meals at a third-rate restaurant. The conditions under which food is prepared in the latter have already been described.[1] Yet no factories have undertaken catering on any scale. Some of the mills have tea-shops and at the Currimbhoy Institute light refreshments are also sold. At most mills workers who require food have to purchase it from vendors sitting outside the factory gates.

[1] See Chapter V, p. 64.



[Copyright.

OPEN AIR GYMNASIUM, BUCKINGHAM AND CARNATIC MILLS, MADRAS.

Closely connected with the above subject is the provision of mess-rooms. Many workmen who live at a distance from the factory have their meals brought to them by their womenfolk, but, as no facilities exist in the form of mess-rooms, they have to eat wherever they can. When the midday syren is sounded, it is a common sight to find operatives seated in the mill compound, on the stairs, in the corridors or by their machines, having their meals. It is said that caste differences prevent the institution of mess-rooms; yet in Madras, where caste distinctions are greater, workers avail themselves of the facilities which the Buckingham and Carnatic Mills provide.

Baths.—In the humid heat of Bombay, bathing is very essential after a day's work, but as yet no special facilities for workers are provided at the factories. Some employers permit their workmen to use the mill tanks, but these are not a healthy substitute for baths. It is surprising that some of the more enlightened mill owners have not encouraged swimming by the construction of swimming baths. Open-air baths could be erected without much expense and could be used as emergency tanks. If floor space were not available, roof baths (to serve as roof tanks) could be introduced.

Housing.—The subject of housing has been dealt with at some length in Chapters III and V, and we do not propose to deal with the matter further here. Although some employers have provided accommodation, this affects only a small number of workers.

Mental Development.—In Chapter V we described the system of educating half-timers and the provision made by the Social Service League for instruction of mill workers in night schools. The Currimbhoy Ebrahim and Tata Institutes have also established eight libraries and reading rooms. During 1922 the average daily number of readers was over a hundred. Personal inquiry at the Tata Institute elicited the information that Hari Narayan Apte's novels are mostly in demand; religious works are also popular,

prominent among these are Tukaram's teachings and short stories from the "Ramayana" and the "Mahabharata."

Encouragement of Thrift.—Much attention has been paid by the Social Service League to the organization of co-operative societies among the workers in the mills of Messrs. Tata Sons, Ltd., and Messrs. Currimbhoy Ebrahim, Ltd. The following statistics, compiled from the latest annual reports of the two institutes and of the Social Service League, show the zeal with which the League has carried out its work and the success which it has achieved.

Group of Mills.	No. of Societies.	Total Membership.	Loans Advanced.			Share Capital.	Deposits of Agents.	Reserve Fund.
			No. of Applicants.	Amount of Loans.	Loans Recovered.			
				Rs.	Rs.	Rs.	Rs.	Rs.
Tata .	30	2,029	1,646	81,710	78,548	19,855	22,359	6,769
Currimbhoy Ebrahim .	30	1,220	Not stated	43,210	37,387	10,625	Not stated	3,371

One society in the Tata group and three in the Currimbhoy group are exclusively for women-workers.

The largest credit societies among workmen in Bombay are the G.I.P. Railway Employees' Co-operative Credit Society and the B.B. and C.I. Railway Employees' Co-operative Credit Society. These societies are composed of clerks and artisans as well as other workmen; for this reason they are the most flourishing societies in Bombay. The rate of interest on deposits is 6 per cent. in both societies; on loans the G.I.P. Society charges 9 per cent., the B.B. and C.I. Society 6 per cent. Other details relating to these societies obtained from the Annual Report of the Registrar of Co-operative Societies, Bombay, for the year 1921–2, are given on opposite page:

Name of Society.	No. of Members.	Amount of Loans Advanced.	Amount of Loans Due.	Loans and Deposits held.	Working Capital.	Usual dividend on Shares.
		Rs. (lakhs).	Rs. (lakhs).	Rs. (lakhs).	Rs. (lakhs).	Per cent.
G.I.P. Railway Employees' C.C.S. . .	15,312	18·1	22·4	27·4	32·9	5
B.B. and C.I. Railway Employees' C.C.S. .	10,868	10·4	10·1	6·2	9·4	$5\frac{5}{8}$

There are, among others, a Co-operative Credit Society for Postal Employees, with a membership of 1,700 ; a society, started in January, 1923, among labourers working at the Port Trust Docks ; and a society for gas workers.

Apart from the above societies, co-operative credit has made little headway and progress is extremely slow. The work is handicapped by the migratory habits of the people and by the opposition of " jobbers " and mill clerks, who, as they are in the habit of lending money to the operatives at high rates of interest, or acting as agents for money-lenders, naturally resent the formation of these co-operative credit societies.

With the object of supplementing the work of their credit societies, four savings banks have been started by the Tata Institute and one by the Currimbhoy Institute. The results, on the whole, are encouraging. There are nearly a thousand depositors in the Tata Savings Banks, with an average deposit of Rs.10. The rate of interest granted on deposits is higher than that in the Post Office Savings Bank.

Works Committees.—Much of the present industrial discontent is the outcome of the lack of personal touch between the management and the workmen. Unfortunately managers of mills in Bombay are too inclined to rely on the jobber or mukadam for information about their work-people, and very often the information so supplied is inaccurate. With the object of promoting better understanding between both parties, Works Committees have been established in the Tata and Currimbhoy Mills since 1920, by the B.B. and C.I. Railway and the Port Trust

Railway. The constitution of the Committees varies. In the Tata group each mill is divided into seven departments for the election of representatives to the Works Committee. Five representatives are elected by the workers in each department, and the jobbers, mukadams and firemen each elect five men from amongst themselves. The heads of departments and representatives of the management complete the body, which numbers altogether seventy persons. In the Pearl Mills (in the Currimbhoy group) a General Committee, composed of forty-eight representatives elected by the workpeople and five *ex-officio* members, discusses the grievances of the workmen and submits recommendations to a Working Committee composed of twenty members. The Working Committee is elected by the General Committee; it decides such questions as are within its powers and submits the remainder to the Supervising Board for disposal. Both in the Tata and Currimbhoy Mills the Committees may only discuss general "welfare" topics, e.g., the adequacy of sanitary arrangements, the working of the mill co-operative societies, etc. They are not permitted to discuss the most important questions, viz., wages, hours of labour, etc., the reason given for this being the illiteracy of the workmen.[1]

The Committees have been useful means for ventilating minor grievances. But there are difficulties to be contended with in the ignorance, the timidity and the lack of loyalty of the workers. For instance, the

"Works Committees which were set up in the B.B. and C.I. Railway Workshop, where the employees are almost all illiterate, disappeared at the first strike, owing to the workers' leaders' fear of victimization and the lack of loyalty of the workers to their representatives."[2]

[1] Mr. S. D. Saklatvala (Messrs. Tata Sons, Ltd.), in his evidence before the Industrial Disputes Committee, 1921.

[2] Report of the Industrial Disputes Committee: "The Agent of the railway has, however, established District Committees, consisting of six members, each elected by ballot . . . in each of the railway 'districts,' representing in all about 25,000 literate employees. Social and general questions, wages, housing, schools, medical provision and the like (individual grievances only being excluded) are discussed and the District Officers pass orders on those questions arising in District Committees which require their orders."

It is stated that many grievances have been met by employers in order to encourage the men to give expression to their feelings. The Committees are still in the experimental stage and it is too early to make any pronouncement regarding their success. The true test will only be applied when they are confronted with more difficult problems than those with which they deal at present.

Before dealing with the difficulties of "welfare work" in Bombay, mention should be made of the additional activities of the Social Service League for the amelioration of the conditions of the worker. Foremost among these is the recent establishment of the Bombay Working Men's Institute run on the same lines as the other two institutes described above. The League has found by experience that it is preferable to establish institutes in the different districts where the workers live, rather than an institute for the operatives in a particular mill or a group of mills, because most mill-hands live at a distance from their work. The new institute has been established through the philanthropy of prominent mill owners. The League intends to increase the number of institutes as soon as sufficient funds are available. Other important activities of the League are free dispensaries, settlement work, the employment of a poor man's pleader and the propaganda work which has met with such valuable results.

Difficulties of Welfare Work.—Welfare work is not conducted without difficulties. The success of a particular branch of work depends on the sympathy and active assistance of the management. Some managers realize the value of the work, while others regard it as a waste of money. Again, the ignorance and illiteracy of the mill-hand make the welfare worker's duties more arduous. The welfare worker is regarded with suspicion, and the mill-hand is encouraged in this belief by the jobber, mill clerks, etc. Upon the opening of each new branch of activity, be it crèches or schools, recreation clubs or works committees, new difficulties arise, created very largely through the ignorance of the worker. Nevertheless, despite these

difficulties, valuable pioneer work has already been performed.

The credit for what has been achieved until now rests with the Social Service League and with the two firms of Messrs. Tata Sons, Ltd., and Messrs. Currimbhoy Ebrahim & Sons, Ltd., who have financed the schemes. The admirable examples of what can be accomplished remain to be followed by others. Employers can no longer plead ignorance as to the manner in which to carry out their obligations. The way is clear to them. The large profits made by the mill industry in recent years exclude the plea of financial difficulties. Moreover, welfare work pays, and self-interest alone should lead employers to take action. Employers complain that the problem in Bombay, as in other parts of India, is the shortage and unreliability of labour. They hardly seem to realize, however, that the only method of solving the problem is to make the conditions of city life so attractive that workers will not desire to return to their villages, but will make their permanent residence in or near their employer's mill.

If employers do not take the initiative, their hands will be forced either by the legislature or by the workers themselves, for industrial labour in India is awakening. The contemplated early introduction of compulsory primary education will teach the rising generation of factory workers to read. When once they begin to read, they will begin to think and to demand their rights. Then will commence conflicts between labour and capital on the same scale as those taking place in Europe to-day. Although the capitalist in India has these warnings before him, yet he takes no heed. Now is the time for him sympathetically to investigate complaints and give opportunities to his workers to voice their grievances, while at the same time he carries out an active policy of industrial betterment.

SPECIMEN SCHEDULE.

Caste.....Creed.....Native Place.....Resident in Bombay.....months in year.

	Name.	Relationship.	Sex.	Age.	Main Occupation.				Subsidiary Occupation.	
					Occupation.	Employer.	Weekly Hours.	Monthly Earnings.	Occupation.	Monthly Earnings.
Wage Earners.										
NON-WAGE EARNERS.	Relationship									
	Sex.									
	Age.									
	At school.									

FILE NO.	HOUSING CONDITIONS.	FAMILY INDEBTEDNESS.	OTHER SOURCES OF INCOME.	INQUIRY NO.
	Kind of House. Rent (monthly). No. of Rooms. .....Persons.	To Total Amount. Rate of Interest. anna per Rupee per month. Cause of.	Agriculture. Overtime.	1

See Over.

APPENDIX I

A STUDY OF WORKING-CLASS HOUSEHOLDS IN THE PAREL WARD OF BOMBAY

In 1917–18 an inquiry was undertaken by the author into the social and economic conditions of the working classes living in an industrial quarter of Bombay City. A Committee [1] was formed to advise generally, and the active assistance of a number of social workers—members of the Bombay Social Service League and others—was enlisted.

The inquiry was confined to the wage-earning classes living within the municipal limits of Parel, a ward largely inhabited by mill-hands, railway workers, artisans, etc. In density of population and in infant death-rates it compared favourably with other wards of the city. There was no *prima-facie* evidence that social conditions in the district selected were worse than in other parts of Bombay.

The method of procedure was similar to that adopted by Dr. Bowley and others in selected towns in England,[2] with such modifications as were necessitated by the different conditions of Indian life and labour. The scheme adopted was to visit a sample of one in twenty of all the houses and tenements in the ward. "Randomness" was secured by taking a complete list of dwellings in the ward (kindly supplied by the Assessment Department, Municipality of Bombay) and marking off every twentieth residence and, in the case of chawls, every twentieth tenement. It was found that 466 residences and tenements would have to be visited. Voluntary and paid enumerators were employed, and after careful training and detailed instructions (a copy of which was supplied to each investigator) the house-to-house visitations were commenced. The inquiry was probably the first of its kind carried out in Bombay and naturally aroused considerable attention from among the inhabitants of

[1] The Committee included Sir Dinshaw Wacha, the late Sir Narayan Chandarvarkar, the Hon. Lalubhai Samuldas, Dr. Harold Mann, the late Principal Anstey, Mr. G. K. Devadhar, M.A., and Mr. N. M. Joshi.

[2] A. L. Bowley and A. R. Burnett-Hurst, *Livelihood and Poverty* (Bell & Sons, 1915).

the dwellings. A portion of the inquiry had been successfully carried out when vigorous recruiting for the Indian Army was commenced among the working-classes and the investigators were confused with recruiting officers. Leaflets printed in Marathi and explaining the objects of the inquiry were distributed by members of the Social Service League. This failed to reassure the tenants. As some of the investigators were threatened with personal violence and in one or two cases roughly handled, it was decided to suspend the inquiry for a time. Conditions, however, did not improve, and when, after a period of considerable industrial unrest (owing to the rise in the cost of living), wages were increased and all standards were altered, it was decided to abandon the remainder of the inquiry and to rest content with the information collected. The data obtained related to 139 out of the 466 residences to be visited, i.e., approximately 30 per cent. Upon scrutiny of the cards it was found that seven residences were vacant, information was refused by seven households (in some cases because they thought the men would be sent to the Front), and in four other cases the occupiers were not of the wage-earning class (being clerks, hotel-keepers, etc.), and were on this account excluded from the tables. The households which form the subject of most of the following tables number 121, these representing by sample 2,420.

Some of the information collected is out-of-date (e.g., that relating to wages, income and rent), but the greater part of it (e.g., information as to the composition and size of families, the overcrowding of rooms, the *proportion* of rent to total income, etc.) still holds good. Wherever possible, the conclusions arrived at are compared with those of the Inquiry into Working-Class Budgets conducted by the Bombay Labour Office in 1921–2 and explanations of divergencies, wherever they exist, are given. The differences in the scope and method of the two inquiries should be recognized. There could be no bias in the selection of households in the Parel inquiry, whereas in the Labour Office investigation the households were definitely selected [1] and consisted mainly of families which contained at least one man, one woman and one child. Excluding the single-men class (which contains 253 men in the official inquiry and sixty in the private inquiry), the difference in composition of households in the two studies is shown by the tables on opposite page.

[1] See above, Chapter V. " Attempts were made to select as far as possible a self-contained family, consisting of a husband, wife, and children. It was, however, discovered that families were made up of more than two adults and these were, therefore, included."—*Report of an Inquiry into Working-Class Budgets in Bombay*, 1923, p. 6.

	Parel Inquiry.		Labour Office Inquiry.	
	No.	Percentage.	No.	Percentage.
Families with at least one man, one woman and one child . .	51	48·6	2,220	90
Other families	54	51·4	253	10
	105 *	100·0	2,473	100

* It must be borne in mind that this represents by sample 2,010 families

Reference to the detailed classification of households on p. 133 shows how far the " self-contained family, consisting of a husband, wife and children," can be regarded as typical in Bombay City.

On the other hand, the Labour Office gave instructions that the budget statements should be obtained " from all the working-class districts within an industrial area," whereas the private inquiry was confined to a ward inhabited predominantly by mill-hands, as is seen below:

Industry.	Parel Inquiry. (Classification of wage-earners by industry.) Percentage of total.	Industry.	Labour Office Inquiry. (Classification of budgets by industry.) Percentage of total.
Mill Workers . .	80	Mill Workers . .	49½
Railway Workshops	4	Municipal Workers	15
Miscellaneous . .	16	Dock Workers .	12
		Railway Workers .	9
		Engineering Workers	8
		Gas and Electricity, Postal and Miscellaneous	6½
Total . .	100	Total . .	100

In the classification by religion and caste, the differences in detail are set out on the following page.

Religion and Caste.	Parel Inquiry.		Labour Office Inquiry.
	No. of Households.	Percentage of Total.	Percentage of Total Budgets.
Hindus—			
Maratha	71	58·7	44·6
Kunbi and Kulvadi . . .	5	4·1	8·3
Bhandari	8	6·6	3·0
Vani	5	4·1	1·0
Teli	4	3·3	Not stated
Sutar	4	3·3	1·8
Shimpi	3	2·5	Not stated
Khatri, Sali	3	2·5	Not stated
Mochi	2	1·7	·8
Lohar	2	1·7	1·6
Others (Dhobi, Bhaiya, Gavli, Ahir, Mahar and Brahmin)	6	5·0	29·2
Total Hindus . . .	113	93·4	90·3
Mohammedans	2	1·7	6·2
Indian Christians—Goanese .	2	1·7	1·8
Jews	1	·8	·3
Zoroastrians	—	—	·3
Not known	3	2·5	1·1
Total	121	100·0	100·0

The proportion between Hindus and non-Hindus corresponds fairly closely.

Housing and Rents.—It was ascertained from the records of the Assessment Department of the Municipality that of the total number of 466 residences which fell within the scope of the sample inquiry, 118 (or over 70 per cent.) were ground-floor dwellings, 207 (or 15 per cent.) two-storied, 98 (or 6 per cent.) three-storied, and 43 (or 2½ per cent.) with four or more stories. If we assume that a two-storied building contains at least twice the number of persons in a ground-floor dwelling, a three-storied structure three times the number, and so on, it would appear then that nearly 90 per cent. were housed in buildings of more than one story.[1]

[1] There are a considerable number of ground-floor dwellings (especially "katcha" huts and tin sheds) occupied by one family only, whereas a building of two or more stories is almost invariably a tenement dwelling. No allowance has been made for this in the estimate.

The following table shows the relationship between the rent paid in 1917–18 and the number of rooms occupied:

WORKING-CLASS HOUSEHOLDS CLASSIFIED ACCORDING TO RENTS AND ROOMS

Number of Rooms.	Monthly Rent (including Taxes), 1917–18.														Total.
	Rs. 2.	Rs. 2½.	Rs. 2¾.	Rs. 3.	Rs. 3¼.	Rs. 3½.	Rs. 3¾.	Rs. 4.	Rs. 4½.	Rs. 5.	Rs. 5½.	Rs. 6.	Rs. 7 and over.	Not stated.	
1	3	7	3	34	18	25 *	3	7	7	3	1	1	1	1	116
2	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3
3	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Total	3	7	3	34	18	25	3	7	7	3	1	1	5	1	120

* In one case there are two families in the one room, sharing the rent equally. This reduces the total number of units in the table by one, i.e., 120 instead of 121.

The number of households in one-roomed tenements was 116 out of 120 (or 96·7 per cent.). The corresponding figure of the Labour Office is about 97 per cent.

Sixty-four per cent. of the households paid rents varying from Rs.3 to Rs.3.8, the median rent being Rs.3¼. Since 1917–18 rents have risen considerably; according to the Labour Office figures for 1921–2 the predominant rent for a single room is between Rs.3.8 and Rs.5.8, the most common rent being Rs.3.12 a month.

A detailed description of the dwellings has been given in Chapter III.

Overcrowding of Rooms.—Overcrowding, as defined by the census officials in England, is said to occur when there are more than two persons to a room. Using this standard there was overcrowding in 74 out of the 120 households (or in 62 per cent.). The details are given on next page.

The average number of persons in single-room tenements in Parel was 3·5, whereas the corresponding figure for 1921 given by the Census Report (Cities of the Bombay Presidency) is 2·7. The Bombay Labour Office states that the average working-class family in the city of Bombay, according to the family budgets collected, consists of 4·2 persons. It is not surprising that this figure exceeds that of Parel. The Labour Office collected data relating to families consisting of "man, wife and children." Actually, there are a large number of smaller families. In

WORKING-CLASS HOUSEHOLDS CLASSIFIED ACCORDING TO THE NUMBER OF PERSONS AND OF ROOMS

Number of Rooms.	Number of Persons in Households.													Total.
	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	7	37	21	24	15	4	2	3	1	1	—	—	1*	116
2	—	—	—	1	—	2	—	—	—	—	—	—	—	3
3	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Total	7	37	21	25	15	7	2	3	1	1	—	—	1	120

* The abnormal case of thirteen persons to a room (15 ft. by 10 ft.) is that of a group of Pardeshis (all males) who migrated from Benares and are living together. This room was personally inspected.

Parel there were 29 families of " one adult male and one woman with no children," and 11 cases of " one woman," or two persons, one of whom is a woman—a total of 40 out of 105 families, or 38 per cent. As against this the Labour Office have 211 families of " one adult male and one woman with no children," and no other families with as few as two persons; the 211 families form only 8½ per cent. of the total (2,473) families.

In *Livelihood and Poverty* a new and more elastic standard of overcrowding[1] was adopted. Boys from 14 to 18 and girls from 14 to 16 were regarded as requiring three-quarters of the space essential for an adult, and hence equivalent to three-quarters of an adult. Children (5 to 14) and infants (under 5) were taken as equivalent to one-half and one-quarter respectively. Children were expressed in fractions of adults and the number of " equivalent adults " in each household was calculated. Upon this basis overcrowding was considered to exist where there were more than one equivalent adult to a room. According to this test 113 of the Parel households (i.e., 94 per cent.) were overcrowded.

Earners and Persons dependent upon them.—In the 121 households (including 42 boarders, 39 of whom were wage-earners and 3 dependents) there were 268 wage-earners and 206 [2] dependents. Of the wage-earners 202 (or 75 per cent.) were adult males, 50 (or 19 per cent.) women, and 16 (or 6 per cent.) lads, boys and girls. The majority of the dependents are wives or children under 14; some are the parents, sisters or other

[1] *Livelihood and Poverty*, p. 60.
[2] Seven of these are living away from the wage-earner.

relations of the wage-earners. The few dependent men are ill, infirm or unemployed.

The Census officials carried out an analysis of the composition and size of 260 mill-hands' families in 1921. While the definitions [1] used were slightly different and the families were "selected," yet on comparing the results of the two studies they closely correspond.

	Parel Inquiry.	Census, 1921.
Percentage of Wage-earners . . .	56·5	59·5
Wage-earners : Percentage of Adult Males .	75	72
,, ,, Females .	19	21
,, ,, Aged .	Not distinguished	4
,, ,, Children .	6	3
Dependents : Percentage of Children .	50	51
,, ,, Adult Females .	32	40

Size and Composition of Families.—The detailed classification of households on pp. 133–5 shows considerable variation in the composition of families. Excluding the "single-men" class, there are about 75 different groupings in 105 households. The largest group is the one where the married man is the sole wage-earner; it forms 38 per cent. of the whole. The largest sub-groups are "man earner and dependent wife" and "man and wife earners with no dependents": these form 19 per cent. of the whole. The statisticians' so-called "normal family" [2] only occurs in four of the 121 households (i.e., 3 per cent. of the cases). If we define "family" as consisting of man, wife and with or without children (adult sons and daughters to be included), we find that there are 24 cases of "man and wife," 12 cases of "man, wife and 1 child," 9 cases of "man, wife and 2 children," and 10 cases of "man, wife and 3 or more children." Again, when the definition of "family" is widened to include all the households except the "single-men" class and those containing only one person (e.g., including households such as 3 single women and 1 single man working on his own account), we still

[1] The Census definitions were :

	Males.	Females.
Children	0–14	0–11
Adults	15–54	12–49
Aged	Above 54	Above 49

[2] Man, wife and three children.

find the family of two persons is the one that most frequently occurs; the "median family" consists of three persons. The details are set out below and are compared with the results of the above-mentioned Census inquiry:—

Number of Persons in Family.	Percentage of Families.*	
	Parel Inquiry.	Census, 1921.
2	36	21
3	20	18
4	17	21
5	13	20
6	8	8
7	2	3
8	2	2
9 and over	2	7
Total	100	100

* Excluding "families" of one person.

In the Parel ward the families which were found most frequently consisted of "man and wife," and the "average" family consisted of three persons (viz., man, wife and one child). The Bombay Budget Report states that, according to the family budgets collected, the "average" working-class family consists of about 4 persons (viz., 1 man, 1 woman and 2 children under 14). The reasons for this difference have already been given on p. 124, and no further comment is needed.

Earnings, 1917–18.—The earnings of each worker, as stated by him or a member of his household, are tabulated on the opposite page. They have not been checked by reference to the employer. The large number of "not known" and "doubtful" cases include boarders and persons working on their own account (e.g., hawkers, carpenters, etc.). Abnormal statements have also been placed under the heading "doubtful."

Four-fifths of the men received between Rs.12 and Rs.30 per mensem; the average earnings were Rs.19.1. The Bombay Wages Report gives the average monthly earnings of men in the cotton-mill industry as Rs.18.6.8 in May, 1914; according to the same authority the wages in May, 1921, were Rs.34.15.2.

The Report of the Budget Inquiry (1921–2), issued by the same office, gives the average monthly earnings of adult males as Rs.42.5.7, or 20 per cent. greater. It would appear that either the cotton-mill industry is badly paid compared to other

MONTHLY EARNINGS OF MALES (OVER 18 YEARS) AND FEMALES (OVER 16 YEARS)

Earnings.	No. of Males.	Earnings.	No. of Females.
Under Rs.10	1	Under Rs.5	1
Rs.10 to Rs. 11	3	Rs.5 to Rs.6	2
11 ,, 12	3	6 ,, 7	4
12 ,, 13	18	7 ,, 8	9
13 ,, 14	12	8 ,, 9	18 *
14 ,, 15	7	9 ,, 10	2
15 ,, 16	16	10 ,, 15	7
16 ,, 17	5	15 ,, 20	1
17 ,, 18	9	20 ,, 25	—
18 ,, 19	5	25 ,, 30	—
19 ,, 20	—	30 and over	1
20 ,, 25	15	Unknown	1
25 ,, 30	11	Doubtful	4
30 ,, 35	5		
35 ,, 40	4		
40 ,, 45	2		
45 ,, 50	3		
50 and over.	2		
Unknown	45		
Doubtful	36		
	202		50 *

* Includes two married women under sixteen years.

occupations (which is not the case), or that the budgets selected were taken from " better-class " households and are not typical.

The average monthly earnings of women in Parel (1917–18) was Rs.8.8.6. The earnings of adult women cotton workers in May, 1914, was Rs.10.0.10, according to the Bombay Wages Report; the corresponding figure for May, 1921, was Rs.17.6.6. The Budget Report states that the average earnings per month for earning women was Rs.16.11.6 in 1921–2.

Family Income (1917–18).—Family income comprises the sum of the incomes of individual members of the household together with additional sources of income (e.g., from boarders, agriculture, etc.). Boarders usually paid Rs.6 to Rs.8 per mensem, and it has been assumed that a monthly profit of Rs.2 per head was made. In one case, where the persons lodged with the household, it was assumed that they shared the rent in proportion to the number of " equivalent adult " occupants.

APPENDIX I

The following table shows the relationship between "family income" and rent:

Family Income and Rent

(*Note.*—The "single-men" class has been excluded from this table.)

Monthly Rent (including taxes).	Family Income.										Total
	Rs.10 and below Rs.15.	Rs.15 and below Rs.20.	Rs.20 and below Rs.25.	Rs.25 and below Rs.30.	Rs.30 and below Rs.35.	Rs.35 and below Rs.40.	Rs.40 and below Rs.45.	Rs.45 and below Rs.50.	Rs.50 and over.	Unknown	
Rs.2 and less .	1	2	—	1	—	—	—	—	—	1	5
Rs.2¼ . .	1	1	2	—	—	—	—	—	—	1	5
Rs.2½ . .	1	—	1	—	—	—	—	—	—	1	3
Rs.3 . .	5	5	5	4	2	2	1	1	—	2	27
Rs.3¼ . .	1	5	2	3	1	1	2	1	1	—	17
Rs.3½ . .	2	5	7	2	—	1	—	1	2	1	21
Rs.3¾ . .	—	1	—	1	1	—	—	—	—	—	3
Rs.4 . .	2	—	1	1	1	—	—	1	—	—	6
Rs.4½ . .	—	1	3	3	—	—	—	—	—	—	7
Rs.5 . .	—	—	—	—	—	1	—	1	—	—	2
Rs.5½ . .	—	—	—	—	1	—	—	—	—	—	1
Rs.6 . .	—	—	—	—	—	1	1	—	—	—	2
Rs. 7 and over	1	—	—	—	—	—	1	1	1	1	5
Unknown .	—	—	—	—	—	—	—	1	—	—	1
Total . .	14	20	21	15	6	6	5	7	4	7	105
Median income . .	Rs.12	Rs.17	Rs.22	Rs.27	Rs.30½	Rs.36½	Rs.40	Rs.45	Rs.58½	—	—
Median rent .	Rs.3	Rs.3¼	Rs.3½	Rs.3¼	Rs.3½	Rs.3½	Rs.3½	Rs.4	Rs.3½	—	—
Rent as percentage of income .	25	19	16	12	11½	9½	8	9	6	—	—

The salient features of the table are the high proportion of the income expended on rent in the case of families with small incomes and the fall in the proportion as the amount of income increases. In the Budget Inquiry the percentage expenditure on rent for families with corresponding income limits was:

Below Rs.30 (excluding scavengers) . .	10·9 per cent.
,, Rs.30 (including scavengers) . .	7·5 ,, ,,
Rs.30 and below Rs.40	8·6 ,, ,,
Rs.40 ,, ,, Rs.50	7·3 ,, ,,
Rs.50 ,, ,, Rs.60	8·3 ,, ,,

A further table, showing the number of earners, average number of persons per family, etc., in relation to the "family income," is given on opposite page.

	Family Income.										
	Rs.10 and below Rs.15.	Rs.15 and below Rs.20.	Rs.20 and below Rs.25.	Rs.25 and below Rs.30.	Rs.30 and below Rs.35.	Rs.35 and below Rs.40.	Rs.40 and below Rs.45.	Rs.45 and below Rs.50.	Rs.50 and over	Un-known	Total
Families with :											
Man alone earning	9	12	8	6	1	3	1	4	1	1	46
Man and 1 or more children earning	—	2	—	2	—	1	—	1	—	—	6
Man and wife alone earning .	—	1	6	6	3	1	—	—	—	2	19
At least one male over 20 years earning . .	—	2	4	—	2	1	4	1	3	2	19
Woman alone earning . .	5	—	1	—	—	—	—	—	—	1	7
Woman, girls and lads earning .	—	3	2	1	—	—	—	1	—	—	7
No earnings . .	—	—	—	—	—	—	—	—	—	1	1
Total . . .	14	20	21	15	6	6	5	7	4	7	106
Total number of persons * (earners and dependents) . . .	35	58	73	50	18	30	26	36	21	11	358
Average number per family . .	2·5	2·9	3·5	3·3	3	5	5·2	5·2	5·2	—	3·4

* Excluding those living away from the family.

Sixty-six per cent. of the families had an income of less than Rs.30 per mensem. Families with less than half that amount were in every case supported by only one wage-earner. Fortunately the families with small incomes are also small in size.

CLASSIFICATION OF 121 HOUSEHOLDS ACCORDING TO WAGE-EARNERS AND DEPENDENTS THEY CONTAIN

Abbreviations.: *m*, man over 18 years, distinguished as *s* (son) if living in his parents' house; *l*, lad of 16 to 18 years; *b*, boy of 14 to 16 years.

f, woman over 16 years, distinguished as *w* (wife or widow) if married, and as *d* (daughter) if living in her parents' house; *g*, girl of 14 to 16 years; w^1 and w^2 signify 1st wife and 2nd wife respectively, and w^x signifies girl or child wife.

c, boy or girl of school age (i.e., 5 to 14 years), distinguished as *sc* (scholar) if attending school.

in (infant), child under 5 years.

◯ enclosing a symbol signifies "living in village."

Note.—*s* and *d* are not considered to be dependent children.

Wage-earners.	No. of Households.	Dependents.
Man only	18	No children, viz. : w, 11 ; w^x, 3 ; w, f, 1 ; w^x, f, 1 ; w, m, f, 1 ; f, 1.
	10	1 child, viz. : w, in, 6 ; w, c, 1 ; w, sc, 1 ; w, f, in, 1 ; w, f, c, 1.
	7	2 children, viz. : w, in, in, 1 ; w^1, w^2, in, in, 1 ; w, c, in, 1 ; w, c, c, 1 ;w, sc, sc, 1 ; c, c, 1 ; w, f, g, c, 1.
	5	3 children, viz. : w, c, c, in, 1 ; w, f, sc, sc, in, 1 ; w, s, c, c, c, 1 ; w, g, c, c, 1 ; w, l, c, c, 1.
	3	4 children, viz. : w, sc, sc, in, in, 1 ; w, c, c, c, in, 1 ; w, c, (c) (c), in, 1.
	1	6 children, viz. : w, f, b, c, c, c, c, in, 1.
	44	
Man and child . .	3	w, 1 ; m, f, 1 ; w^x, c, 1.
Man and boy . . .	1	w, c, c, in, 1.
Man and 2 sons . .	1	w, w^x, 1.
	5	
Man and wife . .	17	No depts. 7 ; f, in, 1 ; c, 1 ; s, 1 ; f, 1 ; in, in, 1 ; c, in, 1 ; c, c, 1 ; f, c, in, 1 ; w^2, f, m, c, in, 1 ; c, c, in, 1.
Man, wife, and sister .	1	f, in, 1.
	18	
"Working on own account." Man only . . .	2	No depts. 1 ; w, 1.
Woman only . .	3	No depts. 3.
Daughter only .	1	w, 1.
Son only . . .	1	w, 1.
Man and wife . .	1	No depts. 1.
Man and son . .	1	w, sc, 1.
Man and woman .	1	c, 1.
2 men	2	w, 1 ; f, f, m, 1.
Woman and son .	1	No depts. 1.
	13	

Wage-earners.	No. of Households.	Dependents.
2 Men	3	w, f, in, 1 ; w, sc, 1 ; w, w, c, in, 1.
Man and woman . .	2	c, c, 1 ; m, w, c, 1.
Man, woman, and child	1	◯, (b), (g), (c), (c), c, in, in, 1
3 Men	1	w, w, w, sc, sc, 1.
Man and 2 women .	1	f, c, in, 1.
2 Men and woman .	1	No depts. 1.
2 Men, woman, and child	1	c, c, in, in, 1.
2 Men, 2 girl-wives, boy, and child . .	1	f, 1.
	11	
Woman only . . .	3	No depts. 1 ; sc, 1 ; m, 1.
Woman and lad . .	1	No depts. 1.
Woman and daughter	1	No depts. 1.
Woman and son . .	3	No depts. 3.
Woman, lad, and school-girl	1	No depts. 1.
2 Women	1	c, c, 1.
2 Women and child .	1	in, in, 1.
	11	
Lad	1	w, 1.
Son	1	w, 1.
	2	
No earner (pensioner)	1	w, c, in, 1.
"Single Men":		
1 Man	3	
2 Men	1	
3 Men	3	
3 Men and child . .	1	
4 Men	5	
5 Men	1	
8 Men	1	
10 Men, lad, and boy .	1	c, 1.
	16	
Grand Total . .	121	

APPENDIX II

BUDGETS OF "SELECTED" FAMILIES, 1918

Inquiry Card No. 604.

Budget No. 1.

B. B. (aged 30) and his wife P. (aged 20) are natives of Turbhen (Chiplan). They belong to the Gurav caste. Both are at work, the husband as a labourer at one of the oil companies and the wife as a reeler in a cotton mill. Their respective wages are Rs.17 and Rs.7. B. B. earns Rs.2 in addition by overtime. He also obtains loans for mill-hands, etc., from a grain merchant, who gives him presents at Diwali in return for these services. Though he acts as an agent of the grain merchant for such loans, yet he has to stand security against any loss due to misappropriation by the borrowers. For this reason, he is himself in debt to the extent of about Rs.70 and has to pay a monthly interest of 1 anna per rupee. He and his wife occupy one room in a chawl and pay Rs.2.8 per month rent. The man is active but drinks—the enumerator adds that the amount spent in drink is Rs.3 per month, but at other people's expense. The items of income and expenditure are as follows:

INCOME: Rs.26 PER MONTH.

EXPENDITURE.

	Quantity.	Cost. Rs. a. p.
Food—		
Rice	12 paylis	5 0 0
Patni	4 ,,	1 8 0
Other grains	1 ,,	0 8 0
Pulse	½ ,,	0 4 0
Fish	—	1 0 0
Meat	—	1 0 0
Vegetables	—	0 8 0
Spices	—	0 8 0
Chillies	—	0 8 0
Salt	—	0 2 0
Milk	—	0 4 0
Tea	—	0 1 0
Sugar	—	0 8 0
Midday teas	—	1 0 0
Sweet oil	1 seer.	0 1 6
Copra oil	2 seers	0 7 0
Pan supari	—	2 0 0
Bidis	—	1 0 0

		Rs.	a.	p.
Fuel and Lighting—				
Kerosene oil . . .	—	0	5	0
Fuel	—	1	8	0
Services—				
Barber and dhobi . .	—	0	6	0
Rent.	—	2	8	0
Interest on Loan . .	—	2	0	0
Clothes	—	3	0	0
	Total	Rs.26	2	6

When he has enough money in hand, he spends Rs.2 a month on holidays and religious rites and Rs.3 on "guests." He also makes remittances of Rs.5 to Rs.10 monthly or once in two months to the members of his family in his village.

Inquiry Card No. 639.

Budget No. 2.

M. S. is a Ratnagiri Maratha, 35 years of age. He is employed as a "jobber" in the carding department of a cotton mill and receives Rs.80 a month in wages; he makes an additional Rs.10 by working overtime. He lives with his wife (28 years of age) in one room, the rent of which is Rs.3.8 per month. The enumerator states that he is one of "those who are ruined by being able to earn more than they require." He stands surety for some of his friends who give him drink. He also gets something from the men working under him. Yet with all this, his whole income is not at present sufficient to meet his drinking expenses, payment of interest and family maintenance. "His wife," the enumerator states, "is the most unhappy person in this settlement. I talked to him and promised to help him, but to no effect. He cannot even pay his rent regularly. It is said that there are some decrees pending against him, but somehow he manages to avoid the bailiff. He is indebted to grain dealers and others to the extent of from Rs.200 to Rs.300, on which he has to pay interest at the rate of 1 anna per rupee per month, i.e., Rs.12.8 to Rs.18.12. This debt has been incurred through his standing security for others, and through his own extravagance and drinking." His budget is rather interesting, as it shows how a well-paid operative can squander his money if he wishes to do so.

INCOME: Rs.90 PER MONTH.

EXPENDITURE.

	Quantity.	Cost. Rs. a. p.
Food—		
Rice	16 paylis	7 0 0
Other grains	—	1 0 0
Pulse	—	1 0 0
Fish	—	5 0 0
Meat	—	5 0 0
Vegetables	—	2 0 0
Spices	—	1 0 0
Chillies	—	1 0 0
Salt	—	0 4 0
Milk	—	1 0 0
Tea	—	0 8 0
Sugar	—	1 4 0
Midday tea	—	3 0 0
Sweet oil	2 seers	0 6 0
Copra oil	4 seers	1 0 0
Fuel and Lighting—		
Kerosene oil	4 bottles	0 10 0
Fuel	—	2 0 0
Extras—		
Pan supari	—	2 0 0
Bidis	—	2 0 0
Liquor	—	40 0 0
Holidays and religious rites	—	2 0 0
Guests	—	3 0 0
Services—		
Barber and dhobi	—	0 8 0
Rent		3 8 0
Interest on Loans		5 0 0
Clothes		5 0 0
	Total	Rs.96 0 0

The above details relate to a particular month, but his expenditure is very irregular and depends upon the amount of cash in hand.

Inquiry Card No. 646.

Budget No. 3.

B. K. is a Hindu 45 years of age, whose native place is Malwan (Ratnagiri district). He is a dhobi (washerman) by caste. Ten months of the year he spends in Bombay, where he lives alone and occupies a room for which he pays a rent of Rs.2 per month. B. K. is employed in the bleaching department of

a cotton mill and is paid Rs.14 per month. Although sober and a man of good habits he would know better how to spend his money if he had been educated. Like the average uneducated mill-hand he is thriftless and never thinks of providing for the future—whatever he earns, he spends. While he never saves anything, he avoids incurring debt. His monthly expenses are detailed as follows:

INCOME: RS.14 PER MONTH.

EXPENDITURE.

	Quantity.	Cost. Rs. a. p.
Food—		
Rice	2 paylis	1 0 0
Patni	5 ,,	1 8 0
Wheat	1 ,,	0 8 0
Other grains	1 ,,	0 6 0
Pulse	¾ ,,	0 4 0
Spices	—	0 2 0
Chillies	—	0 4 0
Salt	—	0 2 0
Jagri	10 seers	1 0 0
Ghee	—	0 4 0
Milk	—	0 2 0
Tea	—	0 1 0
Sugar	—	0 4 0
Fuel and Lighting—		
Kerosene oil	2 bottles	0 5 0
Fuel	—	1 0 0
Services—		
Barber and dhobi	—	0 6 0
Rent		2 0 0
Clothes		1 0 0
		Rs.10 8 0
	Balance in hand	3 8 0
	Total	Rs.14 0 0

Inquiry Card No. 605.

Budget No. 4.

N. M., aged 25, and his wife L. (18 years), Hindus of the Mali caste, are both working at the same cotton mill, the former in the sizing department and the latter in the winding department. The husband earns Rs.25 per month, and makes Rs.3 to Rs.4 in addition by overtime. His wife earns Rs.8 per month. A debt of Rs.10 has been incurred to meet expenses of visiting their native place, Tasgaon. No interest is paid on this loan as the man has been fortunate enough to obtain it from the social

worker in charge of the settlement. The couple occupy a single room for which they pay Rs.2.8 per month. Both of them are respectable and not addicted to drink, but they make no attempt to save money. Their monthly income and expenditure is stated to be:

INCOME: Rs.36.8 PER MONTH.

EXPENDITURE.

	Quantity.	Cost. Rs. a. p.
Food—		
Rice	4 paylis	1 12 0
Wheat	2 ,,	0 14 0
Maize	12 ,,	3 0 0
Other grains	1 ,,	0 6 0
Pulse	3 ,,	1 2 0
Vegetables	—	1 0 0
Onions	—	0 4 0
Spices	—	1 0 0
Chillies	—	0 5 0
Salt	—	0 2 0
Milk	10 seers	1 9 0
Tea	1 lb.	2 0 0
Sugar	10 seers	
Sweet oil	2 ,,	0 6 0
Pan supari	—	0 8 0
Bidis	—	0 10 0
Copra oil	1 seer	0 4 0
Jaggri	—	0 2 0
Fuel and Lighting—		
Kerosene oil	—	0 10 0
Fuel	—	1 4 0
Services—		
Barber and dhobi	—	0 9 0
Holidays and religious rites		0 12 0
Clothes		2 8 0
Rent		2 8 0
		Rs.23 7 0
	Balance in hand	11 9 0
		Rs.35 0 0

Inquiry Card No. 633.

Budget No. 5.

N. B., 36 years of age, is a Ratnagiri Maratha from the village of Kharepatan. Unlike most mill-hands from Ratnagiri, he resides in Bombay the whole year. He lives with his mistress, a woman of 28, and their child, a boy of 12 years. Occasionally he stays with his wife, who lives in another part of Bombay.

The man is employed as a " mukadam " in a cotton mill, where his mistress works in the winding department and the lad collects bobbins. Their monthly wages are Rs.25, 10 and 6 respectively. It appears that he made the acquaintance of the woman when he was placed in charge of the winding department. Owing to an accident the woman is unable to work much. Nevertheless, the total earnings of the three, with overtime, are said to average Rs.56. Owing to illness, a debt of about Rs.40 has been incurred with the grain-dealer.

INCOME : Rs.56 PER MONTH.

EXPENDITURE.

	Quantity.	Cost. Rs. a. p.
Food—		
Rice	16 paylis	10 0 0
Patni	4 ,,	2 0 0
Wheat	2 ,,	1 0 0
Other grains	1 ,,	0 8 0
Pulse	2 ,,	1 0 0
Fish	—	3 0 0
Meat	—	0 8 0
Vegetables	—	2 8 0
Onions	—	0 8 0
Spices	—	0 8 0
Chillies	—	1 4 0
Salt	—	0 5 0
Milk	40 seers	8 0 0
Tea	—	0 8 0
Sugar	—	1 0 0
Midday tea	—	1 0 0
Sweetmeats	—	5 0 0
Sweet oil	3 seers	0 9 0
Copra oil	1½ ,,	0 6 0
Extras—		
Pan supari	—	0 8 0
Bidis	—	1 0 0
Fuel and Lighting—		
Kerosene oil	—	0 8 0
Fuel	—	3 0 0
Services—		
Barber and dhobi	—	0 12 0
Rent		2 8 0
Interest on Debt		2 8 0
Clothes		3 0 0
		Rs.53 4 0
	Balance in hand	2 12 0
	Total	Rs.56 0 0

Inquiry Card No. 628.

Budget No. 6.

V. R. is a native of Khenoli-Vengurla (district Ratnagiri). He is a Hindu Maratha, 28 years of age. He lives with his wife, aged 20 years, their daughter (aged 4 years) and a male cousin of 23 years. All three adults are mill-hands, the two men being employed in the bundling departments of different mills. The head of the household earns Rs.25 per month, his wife Rs.7 and his cousin Rs.18. The cousin pays Rs.8 towards the expenses of the household, keeping the balance to meet his own personal expenditure, e.g.,on " bidis," " pan supari," tea, barber, etc. The husband has incurred a heavy debt of Rs.130, Rs.100 to a grain merchant and Rs.30 to a jobber. The debt was incurred to meet the expenses of his marriage and of the illness of his child who died. The interest charges alone are Rs.8.2 a month, the rate of interest being 1 anna per rupee.

INCOME: RS.40 PER MONTH.

EXPENDITURE.

	Quantity.	Cost. Rs.	a.	p.
Food—				
Rice	16 paylis	6	8	0
Patni	6 ,,	2	4	0
Bajri	1 ,,	0	6	0
Other grains	—	0	8	0
Pulse	1 paylis	0	6	0
Fish	—	1	8	0
Meat	—	1	0	0
Vegetables	—	1	0	0
Onions	—	1	0	0
Spices	—	0	4	0
Chillies	—	1	0	0
Salt	—	0	3	0
Milk	—	1	0	0
Tea	—	0	4	0
Sugar	—	0	10	0
Sweetmeats	—	1	0	0
Sweet oil	1 seer	0	3	0
Copra oil	4 seers	1	0	0
Extras—				
Pan supari	—	1	0	0
Bidis	—	1	8	0
Holidays and religious rites	—	0	8	0
Fuel and Lighting—				
Kerosene oil	6 bottles	1	0	0
Fuel	—	1	8	0

Services—			
Barber and dhobi	—	0	4 0
Interest on Loans		8	2 0
Rent		2	0 0
Clothes		2	8 0
	Rs.	38	6 0
Balance in hand		1	10 0
Total	Rs.	40	0 0

Budget No. 7.

Details of this family are not available. The family consists of K. P., his wife and son. Their family income is Rs.24 per month. Their expenditure is as follows :

	Quantity.	Cost. Rs. a. p.
Food—		
Wheat	3 paylis	1 5 0
Bajri	20 ,,	8 0 0
Other grains	1 ,,	0 8 0
Pulse	1 ,,	0 8 0
Meat	—	0 8 0
Vegetables	—	2 0 0
Spices	—	0 8 0
Chillies	—	1 8 0
Salt	—	0 4 0
Milk	—	2 0 0
Sweetmeats	—	0 8 0
Sweet oil	2 seers	0 6 0
Fuel and Lighting—		
Kerosene oil	2 bottles	0 5 0
Fuel	—	2 0 0
Services—		
Barber and dhobi	—	0 6 0
Holidays and religious rites		0 8 0
Rent		2 8 0
Clothes		2 8 0
Total		Rs. 26 2 0

Budget No. 8.

Details of this family are not available. The family consists of D. A., his wife and son. Their income is Rs.29 per month. Rent, Rs.2.8 per month. The items of expenditure, including the latter, are :

	Quantity.	Cost. Rs. a. p.
Food—		
Rice	8 paylis	3 8 0
Bajri	16 ,,	7 0 0
Other grains	1 ,,	0 6 0
Pulse	1 ,,	0 7 0
Fish	—	2 0 0
Vegetables	—	3 0 0
Spices and Chillies	—	2 0 0
Salt	—	0 4 0
Sweet oil	1 seer	0 3 0
Extras—		
Pan supari	—	1 0 0
Fuel and Lighting—		
Kerosene oil	2 bottles	0 5 0
Fuel	—	2 0 0
Services—		
Barber and dhobi	—	0 10 0
Rent		2 8 0
Clothes		2 8 0
	Total	Rs.27 11 0

APPENDIX III

STATISTICS OF DOCK LABOUR

(*Note.*—The following statistics give the number of shift engagements, i.e., if a labourer worked on 15 night shifts and 24 day shifts in April, 1918, he would appear as 39 units in that month. In the same way, in the distribution according to wages, the units are persons per shift.)

Month.	No. of Persons per Shift (000's). Dock Section.			Total.
	Military.	Trade.	Sundries.	
April, 1918	238	53	44	335
May	229	42	47	318
June	202·5	53·5	46	302
July	168	60	53	281
August	145	69	45	259
September	96	79	46	221
October	91	78	49	218
November	102	86	50	238
December	99·5	94·5	58	252
January, 1919	97	81	60	238
February	99	68	50	217
March	105·5	91·5	52	249

Number of Persons per Shift, according to Nature of Work, during the Month of March, 1919.

Nature of Work.	Mathadis.		Boy Coolies.		Women.		Total.	
	Day.	Night.	Day.	Night.	Day.	Night.	Day.	Night.
Military traffic .	1,706	450	86,052	15,698	1,610	—	89,368	16,148
Trade (Import and Export) . . .	24,403	14,291	23,525	16,627	7,667	5,114	55,595	36,032
Sundries (e.g., sanitary work, warehouse, sweepers, etc.)	3,798	134	43,459	3,464	1,128	200	48,385	3,798
Total . . .	29,907	14,875	153,036	35,789	10,405	5,314	193,348	55,978

Number and Amount of Wage Payments to Persons per Shift.

Wage.	1918.			1919.		
	Oct.	Nov.	Dec.	Jan.	Feb.	March.
Rs. as. p.						
1 10 0	54	115	—	—	—	—
1 8 0	5,549	5,146	—	1	37	—
1 7 0	119	51	—	—	—	—
1 6 0	300	493	174	144	416	149
1 5 0	—	17	104	54	—	72
1 4 0	327	10,918	12,699	9,313	15,639	15,349
1 2 0	493	1,256	9,575	13,843	794	7,233
1 1 0	—	—	18	57	—	18
1 0 0	10,949	1,138	2,549	1,474	1,735	2,281
15 0	—	15	116	—	—	13
14 0	1,125	2,230	3,241	1,723	1,531	2,698
13 0	1,975	2,701	1,930	1,442	1,530	2,276
12 0	9,734	10,336	4,958	5,972	4,181	4,104
11 0	122,225	151,184	142,480	129,722	138,697	139,269
10 6	—	—	20	—	—	—
10 0	20,335	4,301	19,927	26,011	1,272	12,083
9 6	—	—	—	—	27	—
9 0	2,894	5,163	2,279	422	460	619
8 0	9,050	7,059	10,857	10,925	10,774	15,610
7 6	17	—	18	—	—	—
7 0	1,517	933	1,661	1,378	924	1,582
6 6	—	—	—	25	—	—
6 0	453	321	476	335	269	410
5 6	10	30	—	—	—	—
5 0	222	96	7	55	18	78
4 0	364	297	181	241	165	203
Total	187,712	203,860	213,270	203,137	178,469	204,047

APPENDIX IV

INDUSTRIAL DISPUTES, 1916–21

A detailed record of strikes which occurred from 1916 to July, 1921, has been prepared by the author. A study of this shows that there have been four distinct " waves " of industrial unrest. The first of these commenced at the end of August, 1917, although isolated strikes in July and early August were indicative of the general discontent. During the months of September and October, 1917, over thirty strikes were recorded, but they were nearly all of short duration and were, with one exception (the strike of postal workers), confined to textile mills. The workers in almost all cases demanded 10 per cent. increase of wages to meet the enhanced cost of living, and in nearly every instance the strike was successful. A feature of the strikes was the isolated action of the workers of each mill; as soon as the concession was granted in one mill, the operatives in another would demand an increase.

The second wave—from April, 1918, to July, 1918—was also confined to textile mills. The strikes, which were for increased bonus to meet the rise in the cost of living, were mostly successful.

January, 1919, witnessed the first great mill strike, when 150,000 workers stopped work. The strike lasted for eleven days; the workers' demands for increased wages were conceded. There followed a series of strikes (eight in January and seven in February) in the railway workshops, mint, dockyards, engineering works, etc. The strikes were short-lived, as the demands for higher wages were granted.

The fourth wave commenced with another great mill strike on January 2, 1920, which lasted a month. Approximately 150,000 workers struck for higher wages, shorter hours and other concessions. The industrial discontent spread to the railway workshops, oil installations, dockyards, engineering works, municipal employees, tramway workers and even tailors and cutters. The strikes, which were chiefly for increased wages, were mostly successful.

The following table shows the frequency of strikes in Bombay City and Island since 1916 :—

Year.	Disputes commencing in the month of												Total.
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
1916 .	—	—	—	—	—	—	—	—	—	—	1	—	1
17 .	—	—	—	1	—	—	3	2	22	12	2	5	47
18 .	5	5	3	5	11	15	8	2	—	4	3	—	61
19 .	9	7	1	—	—	—	—	—	—	—	1	—	18
20 .	25	4	3	1	2	3	2	2	6	7	4	4	63
21 .	7	4	1	1	2	1	2	9	17	5	3	4	56
22 .	9	7	1	8	10	6	8	8	3	2	4	5	71
23 .	2	15	1	9	5	5	3	9	3	7	2	7	68
Total	57	42	10	25	30	30	26	32	51	37	20	25	385
Monthly average (1917–1923) .	8·1	6	1·4	3·6	4·3	4·3	3·7	4·6	7·3	5·3	2·9	3·6	

Details of the industrial disputes, since July, 1921, are to be found in the *Bombay Labour Gazette.*

BIBLIOGRAPHY

I. AUTHORS

BOWLEY (A. L.), and BURNETT-HURST (A. R.): "Livelihood and Poverty." Bell & Sons, 1915.

CURTIS (Sir GEORGE): "The Development of Bombay." *Journal of the Royal Society of Arts.* July 15, 1921.

EDWARDES (S. M.): "Rise of Bombay: A Retrospect." *Times of India* Press, Bombay.

MIRAMS (A. E.): "Memorandum of Evidence on 'Industrial Employees.'" (Indian Industrial Commission, 1916–17.) Government Central Press, Bombay.

—— "Report on the Proposed Development by the Bombay Port Trust of Antop Village." Scottish Mission Industries Co., Poona, 1919.

ORR (J. P.): "The Bombay City Improvement Trust from 1898 to 1909." *Times* Press, Bombay, 1911.

PROUD (E. D.): "Welfare Work." Bell & Sons, 1916.

TURNER (J. A.) and GOLDSMITH (B. K.): "Sanitation in India." *Times of India* Press, Bombay, 1916.

II. OFFICIAL PUBLICATIONS

(*a*) INDIA

"Gazetteer of Bombay City and Island." Vols. I, II and III. 1909.

Census of India, 1911. Vol. VIII. Bombay (Town and Island).

Census of India, 1921. Vol. IX. Cities of the Bombay Presidency. Parts I and II.

Labour Office, Bombay. "Report on an Enquiry into Working-Class Budgets in Bombay." Government Central Press, Bombay, 1923.

—— "Report on an Enquiry into the Wages and Hours of Labour in the Cotton Mill Industry." Government Central Press, Bombay, 1923.

—— "Labour Gazette" (monthly).

"Report of the Industrial Disputes Committee," Bombay, 1922.

"Final Report of the Lady Doctor appointed by the Government of Bombay to investigate the conditions of Women Industrial Workers." Bombay, 1922.

"Annual Factory Reports of the Presidency of Bombay."
"Annual Reports of the Director of the Public Instruction, Bombay Presidency."
"Annual Reports of the Registrar of Co-operative Societies, Bombay Presidency."
"Annual Reports of the Sanitary Commissioner for the Government of Bombay."

(*b*) England and Wales

Local Government Board. Forty-third Annual Report. Supplement containing a Third Report on Infant Mortality. (Cd. 7511.) 1914.
—— Forty-fifth Annual Report. Supplement containing a Report on Child Mortality. (Cd. 8496.) 1916.

III. MISCELLANEA

Annual Administration Reports of the Municipal Commissioner for the City of Bombay.
Annual Reports of the Executive Health Officer for the City of Bombay.
Annual Administrative Reports of the Bombay Improvement Trust.
Annual Administration Reports of the Bombay Port Trust.
Annual Reports of the Bombay Millowners' Association.
Annual Report of the Bombay Sanitary Association, 1922.
Annual Report of the Bombay Presidency Infant Welfare Society, 1922.
Leaflets of the Bombay Co-operative Housing Association.
Social Service League, Bombay—Eleventh Annual Report.
—— "The Social Service Quarterly."
—— "The Bombay Working-men's Institute: Its History and Objects."
Annual Reports of the Tata Sons Workmen's Institute.
Annual Reports of the Currimbhoy Ebrahim Workmen's Institute.
Rules and Regulations of the following Unions: The Bombay Presidency Postmen's Union; B.B. and C.I. Railway Union, Bombay; G.I.P. Carriage and Wagon Workmen's Union, Bombay; G.I.P. Loco Workmen's Union, Bombay; Bombay Port Trust Railway Employees' Union; G.I.P. Railway Staff Union.
Annual Reports of the following Unions: The Bombay Presidency Postmen's Union; B.B. and C.I. Railway Union, Bombay; G.I.P. Railway Union, Bombay; Bombay Port Trust Employees' Union; G.I.P. Railway Staff Union.
"The G.I.P. Union Monthly."
"The G.I.P. Herald."

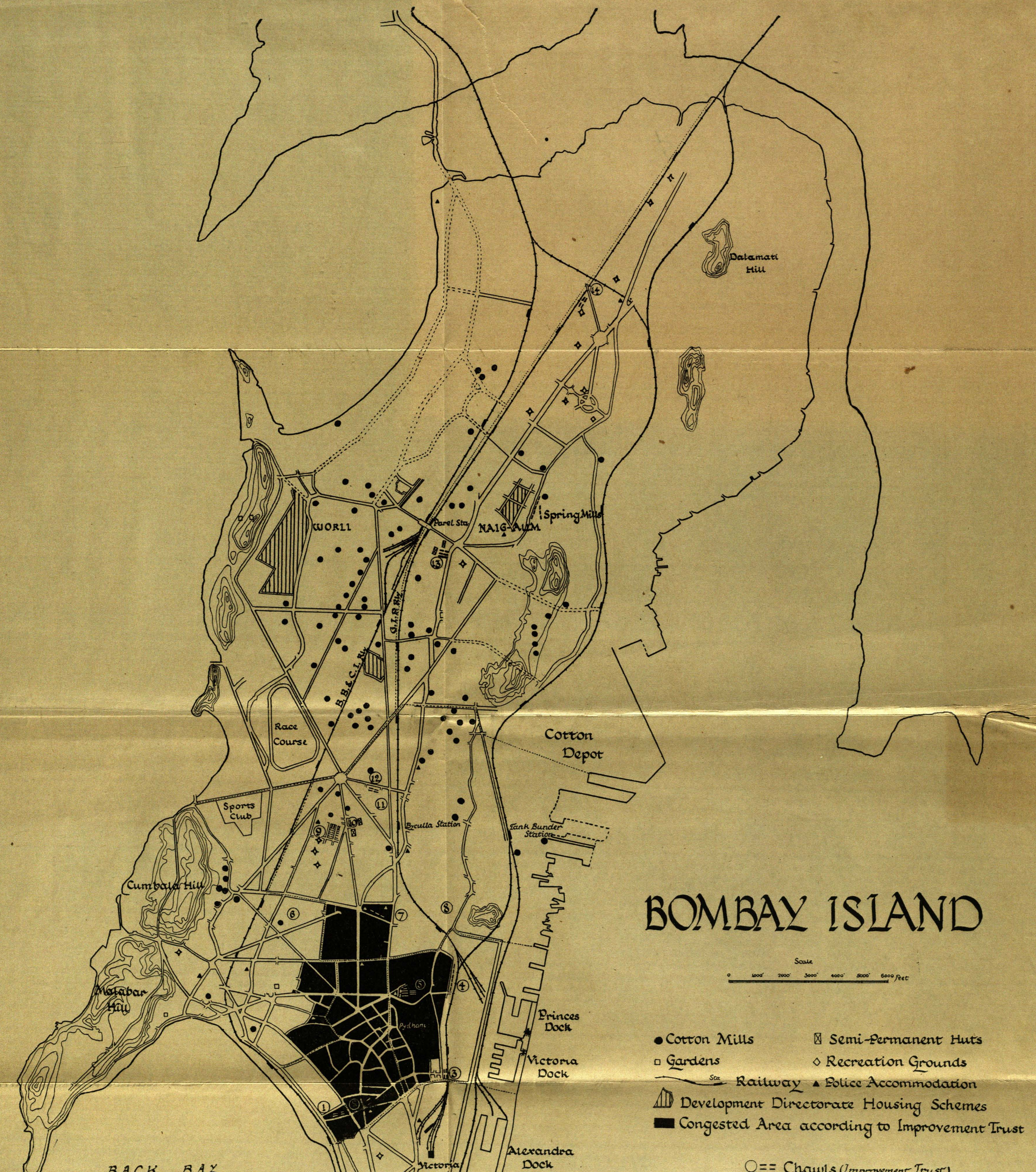
GLOSSARY [1]

Akhara . gymnasium.
Ambarus. a drink made from mango-juice.
Athawada. mill-hand who works alternate weeks.
Badli . . substitute.
Bajri . . bulrush millet.
Balla goli. opium pill.
Baroot . labourers skilled in stacking case cargo.
Bhatta . food allowance.
Bhaya. . caretaker.
Bidi . . country-made cigarette.
Bigari. . unskilled labourer; works chiefly in the building trade.
Bunnia . grain merchant.
Burra-khana big dinner.
Bustee . collection of huts.
Channa . pulse.
Chapatti . unleavened bread.
Charpoy . bed.
Chatai. . mat.
Chatti. . earthen water-pot.
Chawl. . tenement building.
Chula . . fireplace.
Compound courtyard.
Coolie. . unskilled labourer.
Coolie-lines row of workmen's dwellings.
Coor-moora parched rice mixed with gram.
Dada . . hooligan type of mill-hand.
Dai or dhai untrained midwife.
Dal . . pulse.
Dal-pani. dal-water.
Dastoori . commission.
Depressed classes persons of low caste (e.g., Mahars, Chambhars, Dheds).
Dhobi . . washerman.
Diwali. . festival of lights.
Galla . . double room.
Ghagar . large water vessel.
Ghati . . Hindu of the Deccan.
Ghi . . clarified butter.
Ghongadi. blanket.
Goanese . Indo-Portuguese from Goa.
Go-down . warehouse.
Gram. . chick-pea.
Gully . . narrow passage.
Gunny . sacking.
Halalkhor sweeper.
Handa. . large copper basin.
Helkari . casual labourer.
Hisab . . account.
Holi . . festival of fire.
Hookah . Indian smoking pipe.
Jagry or jagri unrefined sugar.
Jobber . foreman mill-hand.
Julaha . weaver.
Karanda . small round brass basin fitted with a lid.
Katcha . crude.
Khanavali. boarding-house.
Khata-book account book.

[1] Excluding names of castes and geographical names.

Kutchra	household refuse.
Lakh	100,000.
Lascar	seaman.
Lathi	heavy stick, stave.
Lota	brass pot.
Maistry	chargeman.
Marwari	money-lender.
Matadi	bag-carrier.
Mawali	Bohemian type of mill-hand.
Mithai	sweetmeat.
Mukadam	foreman of a gang of labourers.
Nahani	bathing place.
Naikin	forewoman.
Naoghani	skilled weight-lifter.
Notice-wallah	notice-writer.
Pan supari	"pan"-leaf and betelnut.
Pardeshi or **Pardeshi Bhaya**	Hindu from North India.
Pat	stool.
Patni	coarse rice.
Pitli	brass plate.
Puranpoli	kind of tart.
Pylee	four Bombay seers; nearly 3 lbs. by weight.
Sari	woman's dress.
Seer (Bombay)	weight: 4,900 grains, Troy. measure: 49 cubic inches.
Shike	net bag.
Shimga	*see* "Holi."
Sowkar	money-lender.
Syce	groom.
Talimkhana	gymnasium.
Tamasha	entertainment.
Tolli	gang.
Tolliwallah	head of a gang.
Tom-tom	drum.
Toddy	country liquor.
Untouchables	persons of low caste.
Zavli shed	huts constructed from dry leaves of date or coconut palms.

BOMBAY ISLAND



Scale

0 1000' 2000' 3000' 4000' 5000' 6000 feet

- ● Cotton Mills
- ▨ Semi-Permanent Huts
- □ Gardens
- ◇ Recreation Grounds
- Sta. Railway
- ▲ Police Accommodation
- Development Directorate Housing Schemes
- ■ Congested Area according to Improvement Trust

○== Chawls (*Improvement Trust*)

1. Chandanvadi
2. Princess Street
3. Mandvi Koliwada
4. Chinch Bunder
5. Imamwada
6. Foras Road
7. Nagpada
8. Mazagaon
9. Agripada
10. Kalapani
11. Peon's
12. Mahar
13. Suparibaug
14. Matunga