

INDIAN INDUSTRIAL COMMISSION

1916-17.

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MEMORANDUM OF EVIDENCE

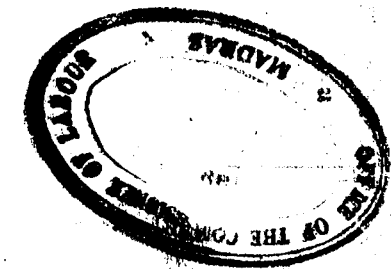
ON

‘INDUSTRIAL EMPLOYEES’.

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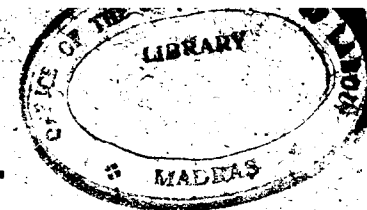
Mr. A. E. MIRAMS, F.S.I., F.S.A.,

Consulting Surveyor to the Government of Bombay



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INDIAN INDUSTRIAL COMMISSION, 1916-17.

MEMORANDUM OF EVIDENCE OF MR. ARTHUR EDWARD MIRAMS,

Consulting Surveyor to the Government of Bombay, Fellow of the Surveyors' Institution, Fellow of the Royal Society of Arts, Fellow of the Royal Sanitary Institute, Member of the Town Planning Institute (Eng.), Member of the Tribunal of Appeal (Bombay).

"Industrial Employees—their improvement of vital consequence if the development of Industry is to be advanced."

In treating of this subject I desire to confine myself to matters germane to the improvement of the conditions of the Industrial classes in this country, which connotes improvement to Industry; and to make suggestions. The improvement of the employee for his own sake would, I apprehend, hardly be considered as a subject coming within the terms of reference of this Commission, and although a fascinating and highly important topic must consequently be left with this remark.

In the first place I desire to disclaim any intention of discussing or criticising the action or inaction of employer or employee in connection with the actual work of the factory or the workshop. I am not qualified to express an opinion on this branch of the subject, even if it were thought desirable for me so to do.

I make no apology for bringing the question of factory employees before the Commission, because I am profoundly convinced that the improvement of industry is so bound up and intertwined with the improvement of labour that the two things are inseparable; and an enquiry having as its objective the improvement of industry would be hopelessly incomplete without hearing evidence on the conditions of labour, in the absence of which Industry would cease to exist.

Details of general housing which may be considered as immaterial to the present issue may acquire accidental significance if I unduly dwell on them and I have attempted to eliminate as far as possible questions and facts which, whilst having a direct bearing on "housing" generally, yet do not directly influence the housing of the industrial classes. The term industrial classes is so comprehensive however and the subject is of such vast importance that it is very difficult indeed to draw the line, and I realize I must claim the indulgence of the Commission if it is felt that I have sometimes taken a rather wide survey. On the other hand, I consider that I ought not to weary the Commission with evidence of great length and this has resulted in my treating some of the points in rather a cursory manner.

Industry calls for vigorous workers and my proposals aim at the re-vitalizing of the industrial and factory populations of our towns. I ask myself, as I have asked employers—"Have employers sufficiently realized their responsibilities in this direction? Have they taken heed that the offspring of the workers—the embryo worker of tomorrow—shall be well born and sturdy?"

If industrialism is at basis a means of providing sustenance for the people, the system should provide for a natural and healthy environment. All Factory Laws, to a limited extent, safeguard the lives of the employees whilst actually in the factory, but something more is required than the mere prevention of accidents. A something which it is difficult to legislate for.

Obviously most of the implements of manufacture, at any rate in our large towns, are now the property of the rich, and the labourers, who work the machines, are but too often part of the machinery. The lot of the pehians of today is in some respects rather worse than that of the slaves of former times. Slave ownership had its responsibilities, and the better type of master used to show a kind of patriarchal benevolence towards his vassals, which is sadly missing in modern times.

A certain section of employers have unfortunately under-estimated the somewhat tangled ramifications of the labour problem. A country might be rich in minerals and soil and natural products, but unless it was rich in men, in its working classes, in men of good stamina and physique, there was an essential ingredient of the country's wealth which was missing. It is India's duty to see that its working class population is brought to its highest state of proficiency and this can only be done by seeing that it is given a proper physical, moral, educational and social environment. A few wise employers have already appreciated this, but they are very few.

With a view to there being a proper recognition of the need that exists and an enlightened view of the methods which should be employed to meet that need, and to be in a position to review the subject in a comprehensive manner, I have enlisted the co-operation of a large number of factory owners throughout India, and have taken the opportunity of discussing the matter in many of its aspects with big organizers of industry in different centres. I am indebted to the Factory Inspectors of the Bombay Presidency, Central Provinces, United Provinces, Madras, Burma, Bengal, Behar, Orissa and Assam for help rendered—they kindly undertook to issue circular letters to most of the owners of large factories in their respective districts.*

A copy of the circular letter and attached questions accompanies this memorandum (Appendix A). I personally sent a similar letter and questions to every factory owner in the Bombay Presidency and Sind to the number of 737. The copies issued through the aforementioned Factory Inspectors in other parts of India number 165, making a total in all of 902.

It is only fairly satisfactory to be able to report that of the number issued to the owners in the Bombay Presidency 352 replies have been received, being equivalent to 47.7 per cent., and of the number issued to the owners in rest of the Provinces and Presidencies, 98 have been received or an equivalent of 59.3 per cent., making a total of 450, being an equivalent of 49.9 per cent. of total number issued.

But the result is not altogether disappointing when it is remembered that the number of owners approached was not inconsiderable and that some of them are little used to statistical enquiries, and further that the return of the completed list was purely voluntary. In some cases, I imagine, and especially in the case of those who had made no housing provision, that the return was withheld as the result of an apprehension that legislative action might be taken to enforce them to do something in that direction. In other cases I fear that want of interest was the cause, and this is the most deplorable reason of all and would indicate a want of appreciation of the fact that the enquiry was as much in the interest of the owner as the employee. On the other hand, the owners of many of the 462

* I was hoping that I should have been able to place before the Commission the opinions, etc., of owners of large factories throughout the whole of India, but Mr. L. H. Taffs, M.A., Inspector of Factories, Punjab, etc., expressed himself as unwilling to assist me, and as a result no questions were able to be sent to owners of factories in his district.

ginning factories might reasonably have considered that particulars from them would be of little interest, inasmuch as their work was purely seasonal.

The total number of factory employees as compiled from the annual reports of the Inspectors of Bombay, Bengal, Behar, Orissa and Assam, Burma, Central Provinces and Berar, Madras, and the United Provinces, is seen to be 9,56,708. The employees accounted for in the returns received number 5,03,289, or an equivalent of 52.5 per cent. of the whole.

The distribution of the total number of factories and employees for the year 1915 is as follows:—

	Factories.			Employees.			
	Perennial	Seasonal	Total	Men.	Women.	Children.	Total
1. Bombay	320	466	786	2,10,822	53,110	16,634	2,80,566
2. Bengal, Behar, Orissa and Assam	322	125	447	3,29,610	50,573	32,072	4,12,255
3. Burma	480*		480	62,134	3,601	617	66,352
4. C. P. and Berar	450*		450	29,633	16,605	2,608	48,846
5. Madras	284	133	417	64,746	13,591	6,082	84,419
6. United Provinces	79	142	221	15,336	6,963	1,971	24,270
Total	1,005	866	2,801	7,52,281	1,44,443	59,984	9,56,708
	980*						

When referring to these figures it must be remembered that they are only in respect of factories and industrial concerns employing 50 or more persons, and take no cognizance of the large number who find their employment in industrial establishments not sufficiently large to be classed as factories. The latter class is the more difficult to legislate for as it is spread over comparatively large areas with resulting lack of opportunity for co-operative or collective action. The improvement of their position as workers is a subject for a detailed and exhaustive enquiry. An enquiry which I have not attempted, but one nevertheless which I think should be undertaken by the responsible authorities without loss of time. By this I mean an enquiry on the lines of the Royal Commission appointed to enquire into the housing of the working classes in England, which issued its report in 1885. My investigations were undertaken with the definite object of throwing light on the problem of industrial labour as it exists today in India.

Inasmuch as any improvement of the part must have an influence on the whole, then by offering suggestions in connection with the factory employees, I indirectly make proposals for improving the lot of the industrial classes but I am unable to go much further in the latter direction in this note.

In the course of my enquires I have discussed the question of labour and its improvement with members of the Chamber of Commerce, of the Mill Owners' Association, mill and factory owners, mill foremen, and factory employees. By the courtesy of a number of owners of factories I have been able to visit the labourers themselves at their work, and have had them questioned with a view to probing the matter to the bottom. A series of questions (*vide* Appendix D) has been put to them after their confidence had been gained, as to their economic condition, where they live, how they live, what rent they pay, how much money they owe, and so on.

* Not classified.

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In Appendix M, I give a summary and an analysis of the answers of 100 employees in Bombay and a similar number in Ahmedabad, which are profoundly interesting to the earnest seeker after the truth. Entering upon the enquiry with an open mind, it did not take me long to discover what was at the root of the whole question, and it was encouraging to find that the weight of opinion was decidedly in favour of certain definite and fundamental remedies which I propose to refer to in the course of this memorandum connected with improved environment.

HOUSING.

"The little flights to purer air,
The lifting-up which now and then
Is doubtless well for working men,
Shall be my unremitting care."

Ibsen.

Although I have observed a good deal of poverty in my walk through life and in many countries, and although I had read a great deal about poverty, I confess I did not realize its poignancy and its utter wretchedness until I came to inspect the so-called homes of the poorer working classes of the town of Bombay.

In the warm and bright climate of India, less food, less clothing, less shelter are needed than in Western countries, and one has less cause to feel sorry for the tattered wretch who sleeps with careless ease in the main roads of our great city, but see him in his home amongst his family, and one instinctively asks oneself, is this a human being or am I conjuring up some imaginary creature without a soul from the underworld? Some of the children outlive the dire psychic and moral consequences of the depraved and wretched condition of their earlier years, but very few; how they do it is a mystery: most never attain a robust manhood or womanhood.

Almost any quarter of the bazar will furnish examples of the places we call the homes of the people, the celebrated chawl; the origin of the word I do not know, but it has come to have a special significance as indicating a tenement structure which has been especially constructed for and occupied by the poorer classes. Many of these chawls are huge houses of from 3 to 5 floors with anything from 10 to 40 or more rooms. Each floor has a verandah running along its whole front or an interior corridor. On the ground floor facing the road are often to be found small shops with narrow frontages and shallow depths, the tenants of which pay high rents and sell anything from *pán* and *biddis* to furniture and curios according to the district in which they are situate. Behind the shops are rooms, frequently very dark, which may be occupied by the tenants of the shop or not. The access to the upper floors is by means of a very narrow and steep staircase. Glancing into the rooms as one walks along the verandah, hanging on the outside of which a miscellaneous assortment of wearing apparel is almost always to be seen, the visitor might be excused for thinking them sparsely inhabited, but a closer inspection may reveal, sitting on the floor, a mother and 2 or 3 children, the father and as often as not some of the family relations and a lodger. In the evening this is not at all an uncommon sight, especially if it is meal time.

In such a room, which under the Bombay bye-laws must be 100 square feet in area (10 feet $\times$ 10 feet would thus satisfy the requirements), where there is hardly space to move, whole families sleep, breed, cook their food with the aid of pungent cow-dung cakes, and perform all the functions of family life; the

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common latrines alone being set apart. Some of the rooms so called, in the upper stories of the older houses, are often nothing more than holes beneath the sloping roof, in which a man cannot stand upright. The rear rooms are usually dark and gloomy in the extreme and it is only on a closer inspection when one's eyes have become accustomed to the gloom that the occupants can be seen at all.

This is truly a distressing state of affairs, and those who know the conditions will agree, is not in the slightest degree overcoloured. It is to this environment that the would-be factory employee is introduced on his arrival in Bombay from his home in the Konkan. Charles Dickens said:—

"I have systematically tried to turn fiction to the good account of showing the preventable wretchedness and misery in which the masses of the people dwell, and of expressing again and again the conviction, founded upon observation, that the reform of the habitations must precede all other reforms, and that without it all other reforms must fail."

All the civilized nations today recognize the truth of what the great student of humanity wrote a generation ago. In Bombay the Municipality in the past has done something to improve these chawls by compelling owners to cut chowks through the buildings to give increased light and air to the interior rooms, but unfortunately of recent years they have abandoned this policy. However plans of new buildings are carefully scrutinized by the Municipal Engineer with the object of enforcing the existing regulations as to light and air, but the powers behind him are by no means sufficient and new buildings are being erected today, which he knows are not sanitary and yet he cannot refuse to pass the plans, because they comply with the bye-laws. The Bombay Improvement Trust have erected chawls of one-room tenements of 2 and 3 floors, but still they are chawls (see plans, Bombay Improvement Trust Chawls), and what is more, the rent which the Trust expect to obtain from them is much in excess of what the ordinary factory hand can afford to pay. In this connection it is interesting to record that a well known mill owner has just made proposals to the Improvement Trust to take over three or more blocks of their chawls at their full rent and let them out to the employees of his mills at a reduction of rent of about 40 per cent. The loss in rents will be borne by his mills and is equivalent to an increase of the wages bill by an amount equal to the loss.

As I have remarked in another part of this memorandum, the loss will only be a loss in name. In effect it will, I am convinced, be a distinct gain to the mill. The gentleman who made this offer is a shrewd business-man and knows quite well that it is a business proposition.

In Appendix J, I have shown what the Bombay Improvement Trust have done in the way of providing housing accommodation for the working classes and from Appendix K it will be seen that the rents per room varies from Rs. 3½ to Rs. 5 per month. The Trust are confronted with the question as to how far it would be right for them to incur loss on schemes which provide for better housing of the poorer classes near the places in which they are employed. Personally I have no doubts on the subject at all, in spite of the objection raised by economists that this would practically amount to subsidizing employers out of public funds. If this argument was carried to its logical conclusion, then no public authority is justified in spending money which benefits the individual at the expense of the public, an impossible state of affairs.

I must not be understood as desiring to absolve the employer from his share of the burden however. It seems perfectly clear that if a certain factory has attracted to it a large number of persons by whose efforts the factory is maintained,

that the owner of the factory has a responsibility thrown upon him of seeing that the people he employs are able to exist, at any rate as human beings.

Considering the question apart from the benefits of good housing accruing to the factory, which as I have indicated elsewhere are very considerable, it seems clear that a duty lies at the door of the employer as well as the local authority. A duty which should be performed in a spirit of co-operation.

The theory is of course precisely the same in the case of the small employer, but the degree of his responsibility is very much less, whereas in the multiplicity of small employers the local authorities' burden becomes the greater. This has now been recognized in most civilized countries in the world, with the result that the housing of the working classes has rightly come to be considered a subject of national importance.

The most profitable investment of capital is generally that which looks for its reward years ahead and it is this aspect of the labour question which the employer should be encouraged to consider.

The greatest asset of a factory, as with a country, is a virile and contented worker. This has been but too little understood in this country, and the great hope for India is that the employers of labour, as well as the civic authorities, will soon be brought to realize that their position as industrial forces will be governed by their attitude towards the improvement of the environment of the labouring classes.

Strong, healthy and happy workers in our large towns, we shall never have, until the land in their neighbourhood is measured out in a more generous scale for the homes of the people. They require, as a necessity of life, plenty of light, plenty of air, and sanitary accommodation in which to live, and wherever at all possible some open space which they can use for cultivation, for after all the workers of this country are the cultivators of a year or two ago, and indeed to a great extent of today. It has been truly said—"If you gave a man a garden without any interest in it he turned the garden into a desert, but if you give a man a desert which was to be his own property he would turn the desert into a garden." So I put in a plea that the man may have a piece of ground that he can use himself for growing his own produce. That will be a source of more lasting attraction and amusement to him than a flower garden. I know that such a thing is impossible in the midst of a crowded city, but here I particularly refer to factories which are not so placed.

Every cultivator knows that to produce the best bullocks, and horses, he must look after their feeding, training and shelter: why should the mass of the factory hands of this country have less thought, care and attention bestowed upon them? The individual employer probably, if he thinks of the subject at all, argues with himself that it is useless, as far as he himself is concerned, doing anything for his employee, as the latter is only a rolling stone and may next month go off to another factory. I have attempted to shew that this is fallacious. Even the dog recognizes the hand that tends and feeds him; and experience shews that a well-treated servant is not desirous of leaving a good master.

Healthy and vigorous workers postulate good housing, and the provision of the latter can no longer be indefinitely postponed if this country desires to compete on equal conditions with other centres of the world's commerce. It seems to have been assumed in some quarters that what is frequently seen

associated with industrialism is inseparable from it, and that poor, mean, squalid and dirty houses occupied by ill-paid and emasculated labour are inevitable.

That this is a fallacy conjured up in the imagination of those who have not seen what has been done in other countries, is obvious to those more widely travelled, but nevertheless, that the opposite is the case has yet to be adequately demonstrated in India.

I have been asked on several occasions—"What is to be done with a great deal of the present house property in the centre of Bombay?"

The only way to improve the bad housing conditions that exist, is to improve the conditions; that is to say, to compel the owners by legal enactment to allow no room to be occupied that is not sanitary, to keep the rooms sanitary, and to penalize overcrowding. The existing houses in the thickly populated quarters must be brought up to a satisfactory condition for residence.

I am bound to say that better means of access by road through the centres of population leading right through the suburbs will have an important bearing on the situation. Rapid access to the suburbs will be available by, I trust, express trams, and re-building in what are now insanitary areas will be encouraged by the opening out of congested quarters. In Liverpool electric trams running on sleeper tracks carry the worker in from the suburbs at 30 miles per hour. There is no reason why this should not be done in Bombay Island. Stringent application of bye-laws prohibiting the use of insanitary rooms and houses will compel landlords to improve or demolish their property.

It was a very serious, if not disastrous, thing for Bombay when the G. I. P. Railway were allowed to acquire a very large area of land at Matunga, in the heart of Bombay Island for workshops. This should never have been possible, as the railway company could easily have made equally suitable arrangements elsewhere. The very least the company, and indeed both railway companies, can do now, is to provide housing accommodation for their employees outside the Island, and I strongly recommend that action be taken to enforce this being done.

The building of a model working class house is not a solution to the housing problem. The thing must proceed as an item of a settled policy.

It is clear that good intentions do not make model houses and to build successfully one requires an intimate knowledge of how the poor live and what they want and where they want it. Familiarity with the most advantageous methods of planning and the selection of a suitable locality having regard to local conditions is essential to permanent success.

Given the houses and site, even then success is not assured, for faulty management may wreck the whole enterprise. At first it will have to be on the lines of a benevolent autocracy with accent on "benevolent" and gradually co-operation may be introduced as the residents become more enlightened.

I have no faith in charity, as a remedy. But that it can play a very useful part is evidenced by Trusts like the Peabody and the Skinners in England. By all means let philanthropy do its proper part in the amelioration of bad housing conditions but it is useless relying on eleemosynary efforts for a solution of the problem.

It may not be considered as germane to this enquiry to discuss housing generally, and I do not therefore attempt to go into the question in its broader aspect

but to devote my remarks as far as is possible to the housing of the working classes to the extent that it affects the industrial and factory workers. In India as in other countries private enterprise has failed to provide adequate sanitary accommodation at such a rent as the poorer employees of our mills and factories can afford to pay. The absorption of capital in the prosecution of the war, and the demands upon it, which may be expected to arise in connection with commerce directly afterwards, will, it may reasonably be anticipated, cause the rate of interest to remain at a high level for some years. Moreover, the range of investments bringing in high though non-speculative returns without entailing either anxiety or trouble to the investors have considerably increased, and are proving very attractive. It is thus difficult to see how private capital can be expected to assist in housing, when only a comparatively low return can be expected.

But the large factory and mill owners are in a different position to the ordinary building speculator. They are, at least in the big centres of industry, finding it difficult to secure a sufficient supply of regular labour to meet their requirements, and it is clearly a business proposition on their part to do all they can to attract labour. They are in a peculiarly favourable position for providing housing for their employees; large numbers of people daily find employment in their factories, and at present have to be content with living in squalor and filth. This is the employers' opportunity for offering inducements in the way of good housing. This will attract labour who, I am convinced, will be perfectly satisfied to settle down if reasonable facilities are offered. It may be asked: "How can a factory owner obtain an economic return from housing when the private capitalist is unable to do so?" The reply is that a 2 per cent. or 3 per cent. return on capital expended on housing of his employees is but a part of the profits. The other and major portion is the return derived from healthy, contented, regular and efficient workmen. I have been preaching this up and down the country during the past two or three years, and I find that the employers are beginning to realize that this is something more than the imagination of a visionary. Some of the more far-seeing mill owners in Ahmedabad have now definitely asked me to design colonies and houses on selected sites. I have done this and they are about to commence building operations. How necessary this is can be judged by a glance at the photographs of the accommodation at present used by employees reproduced in views Ahmedabad Nos. 1 to 4 attached to this memorandum. The structures depicted are of *kutch* construction, built of brick and mud masonry, with mostly unplastered bamboo battens and covered with tin sheets.

All public health officers know beyond a shadow of a doubt that the relation between overcrowding and disease is close and positive and I am convinced that the manner in which the Industrial workers live in India today causes, in addition to spreading tuberculosis and other diseases, lack of interest in public affairs, loss of industrial efficiency, bad training and development of children, excessive mortality, particularly among the infants and children, as well as moral and mental delinquency and deficiency, especially among the young.

If I am right, and I do not think the statement can be disputed, then it is high time that the public conscience was awakened to the need for action.

If any factory owner still has any doubts in his mind as to whether better housing will pay, then let him ask some of the employers of labour engaged in housing work, and let him learn from them some of the advantages to their industry that have resulted in what may be termed the by-products of their social enterprise. It pays, and I think it is worth repeating, in the greater efficiency of the

worker, in an increased interest in his work and a higher degree of skill. It pays in a greater continuity of service and consequently it means less changing of employees and resulting trouble in obtaining fresh hands. It pays in reducing the number of days lost through illness and intemperance. It stabilizes labour by reducing the occasions for strikes and labour troubles.

I am told that the people of Bombay would not be willing to embark on a housing policy. I do not believe it. I refuse to believe that the Municipality would not be ready to fall into line with other civilized communities and shoulder the burden which, to some extent at least, is theirs, and I imagine that if the position was only made clear to them that Calcutta and Madras would not be far behind.

In order that it may not be thought that I am exaggerating the results of providing good houses, etc., for employees, I give the experiences of The Pelzer Manufacturing Company, of South Carolina, U. S. A. This Company operate four mills with 1,10,000 spindles and a full complement of looms, and constitute one of the largest cotton manufacturing plants in the South. The number of employees approximated 2,800, all of whom resided in houses which are the property of the mill corporation. These cottages, of which there are about 1,000 in the place, contain an average of 4 rooms each. The main rooms are usually 16 feet square, while the back rooms measure about 14 x 16 feet. Each house is provided with a plot of ground sufficiently large for small gardens which are ornamented with flowers and shrubs. Tenants are required to keep their premises in good, clean condition, and prizes are offered by the Company for the most attractive looking cottages and gardens.

Water is supplied to employees free of charge and a large tract of meadow land is set apart for the pasturing of cows. All sanitary and street work is paid for by the Company, which spares no effort to render life in the village pleasant and attractive to its inhabitants.

The rental of the houses has been fixed at the remarkably low price of Re. 1-8-0 per room, per month, or Rs. 6 for an ordinary cottage. This rate, it is stated, is barely sufficient to pay taxes and repairs and yields the Company no return whatever on the money invested. While it is true that these dwellings are far inferior in construction to those of a representative industrial community in the North, at the same time it is claimed that they are amply sufficient to meet the requirements of those who occupy them and that is the important thing.

The town of Pelzer, in which the factories are located, contains a population of about 6,000 persons, all of whom are more or less dependent for their livelihood upon the mills. The town is not incorporated, but is held as private property by the mill corporation, which owns every house and every foot of land in the place. No house ownership is allowed, the policy of the Company being one of the absolute industrial control, coupled with a large regard for the general welfare of its employees. There are five churches in the place, neat and commodious in construction, which are well attended by the operatives. In the matter of providing educational facilities for its employees the Company has taken an advanced position. Two well equipped schools, with Kindergarten Departments annexed, are maintained. These are open ten months in the year and are absolutely free to all residents of the place. There are also night classes for those whose work prevents their attending the day sessions. As a condition of obtaining employment in the mills, parents are required to sign an agreement in which

this clause is inserted: "I do agree that all children, members of my family, between the ages of 5 and 12 years, shall enter the school maintained by said Company at Pelzer, and shall attend school every day during the school session, unless prevented by sickness or other unavoidable causes." In addition to this each child who attends school a month without absence receives a prize of five annas. About Rs. 150 a month is thus expended. When it is remembered that there is no compulsory school law in South Carolina, and that the length of the public school term is not more than four months per year, the comparative educational advantages offered at Pelzer appear very great. As an evidence of the great good being accomplished by these schools, it may be said that when they were first started probably 75 per cent. of the adult population of the place could not read or write. Now this percentage has been reduced to 15 or 20, and the illiterates are chiefly new comers from the rural districts nearby. About Rs. 15,000 is expended annually by the Company in the maintenance of the schools.

The Corporation has also established a circulating library containing 6,000 volumes of approved standard literature. This library is installed in a building known as "The Lyceum," which is fitted up in a very tasteful and attractive manner. The main apartment of the building has been set aside as a reading room for women and in addition to the books contains about 25 of the leading newspapers and periodicals. Another room is reserved for the use of men, while a third room is furnished with tables and other facilities for carrying on social games. The library is open every evening from 6 o'clock until half past 10 and all day on Sunday. No charge whatever is made for its use. The Company also provides a course of free lectures on history and travel accompanied by stereopticon illustrations, which has proved of great educational value. Athletics and outdoor sports are given special encouragement. The employees have organized several baseball teams which have been uniformed and otherwise aided by the Company. A fine bicycle race track is kept up, upon which the members (all employees) give exhibitions of fancy riding and compete for prizes offered by the Company. The Smyth Rifles, so named in honour of the president of the corporation, possesses the distinction of being the only military organization in any of the South Carolina mills. This Company is composed entirely of young men operatives and is a part of the regular State Militia. There is also a brass band fully equipped with fine instruments and numbering 36 members which constitutes the band of the regiment to which the Company belongs. These organizations participate in the annual encampment of the State forces and are assisted by the corporation in all necessary ways.

A saving bank is conducted by officers of the Company, in which employees are encouraged to deposit their surplus earnings, receiving interest thereon at the rate of 1 per cent. per quarter.

In thus making provision for the well-being and happiness of their employees, the officers of the Pelzer Manufacturing Company believe that they are putting their capital where it will yield them the very best returns possible, at the same time fulfilling the duty incumbent upon them as employers to assist their working people to better things by supplying them with such means for the betterment of their condition as they could not otherwise enjoy. As a result of this policy the most friendly relations exist between the Company and its employees, no labour difficulties having occurred in the factory since its establishment in 1881.

This is a fine record and many similar could be quoted from different countries, so that I am not suggesting a "leap in the dark."

Assuming that I have made out a case for the provision of housing for the industrial classes, the next question is: How is it to be done? There is no difficulty in providing nice houses for people who can afford to pay the price, but it is a difficult matter when it comes to housing the factory employees in congenial surroundings, with good cottages within easy reach of the factory, at rents which the employee can afford to pay, in conditions conducive to mental, moral and physical development. If the magnitude of the subject is properly understood there should be no difficulty in making experiments. I have already indicated my objection to the normal type of Bombay four-storied chawl: anything more hideous or more undesirable for the rearing of a family it would be difficult to find. The most that can be said of even the most modern type is that it is better than the slums it has helped to replace. I have a strong predilection forced on me by the logic of circumstances that the simple, plain type of cottage of ground-floor, or at most two-storey construction is what is required to meet modern requirements. The cost of building materials has gone up enormously, and while wages remain as they are, it is useless attempting any construction which will not allow of sanitary accommodation being let at a monthly rent of between Rs. 2 and Rs. 3. This means the coat must be cut according to the cloth and only the plainest materials used. The actual material will vary in different parts of India. In Ahmedabad, I have just prepared a design for rows of 6 cottages, each row costing rather less than Rs. 3,000. Each cottage has two rooms and a verandah and a rent of Rs. 2 per month will show a return of $2\frac{3}{4}$ per cent. It is provided with a sink, a couple of shelves and a dozen pegs. The walls proposed are to be of burnt bricks set in lime. The flooring is to be of good murum, with a plaster of mud and murum. Cement flooring is not only costly but the people complain that it is cold to sleep on. The roofing will be of double country tiles. Corrugated iron sheets have become very costly and when uncovered by tiles are not desirable for such a hot place as Ahmedabad. Brick construction is specially proposed for Ahmedabad, as stone is unprocureable; in other places where stone is cheap, there of course brick would not be used. Further details are given on the plan No. 387—A Typical block of six cottages.

The Government of Bombay are encouraging the development of mill colonies and garden suburbs by allowing the factory owners to consult me through the Collector of the district. This usually means *inter alia* the provision of "lay-out" and "development" plans free of any charge to the owner. It is gratifying to find that they are availing themselves of this opportunity and the "lay-out" of several distinct colonies has now been prepared. Appendix X gives an aeroplane view of a portion of one of the sites at Ahmedabad as it will appear after development.

There are very few suggested schemes of social amelioration that escape the laconic definition "Utopian" or "Socialistic," and there are persons whose acrimony is instantly stimulated whenever it is proposed to examine existing institutions. This being the position, I am putting before the Commission with a certain amount of temerity an indication of a few practical schemes which it is hoped to start in Ahmedabad almost immediately.

Six different sites around Ahmedabad, suitable for development as garden suburbs for housing mill employees, have been selected. I have gone on the

assumption that a certain group of mills will be served by one suburb situated within a mile from the mill centre. The position of the sites for the different suburbs are shown on the map of Ahmedabad (see plan) and have been selected with due regard to the following points:—(1) good building land, (2) proximity of mill, (3) healthy situation and (4) possibility of extension in the future.

The object I had in view was a twofold one: first to provide hygienic accommodation of a model type at a rent which the working class can afford to pay, and secondly, to provide for the æsthetic in a humble way by designing a lay-out in such a manner that long rows of coolie chawls have been avoided. The proposed development would give a more homely aspect to the dwellings than is to be found in rows of military or police lines.

Dear land is the chief cause of high rents for cottages, and municipalities must face the task of offering facilities for the erection of cottages in the suburbs, the rents of which together with cost of transport to and from the place of work should not be more than the rental demanded for inferior property in the congested districts. I know of no better way in which this can be done than by the local authorities acquiring large areas of suburban agricultural land at wholesale prices, developing it and offering building plots at very low rentals, on suitable conditions.

In many instances owners of factories find it difficult to obtain land by private treaty, which is suitable for housing purposes, but I am hoping that Government will be able to acquire these lands at normal prices and lease them for a long period at low ground rents or re-sell them outright to the person undertaking to build. Where the case merits it, Government may see its way to forego for a substantial period some or all of the non-agricultural assessment on such lands as are used for housing the working classes. This would be a direct encouragement to the builder, who as a *quid pro quo* would of course be required to subscribe to certain simple building regulations, safeguarding the development.

It is obviously useless to prepare development plans encouraging site values if forethought is not taken in the planning of the house itself. It is an erroneous idea that what the poor require is fanciful decoration. It is not the minutiae of lattice windows, paved paths and ornamental doors and so on they want; it is a home, however unpretentious, in which they can comfortably exist and rear their children. At any rate that is the objective which should be aimed at by factory owners and local authorities when they are shaping their schemes.

The fact is, this problem of housing has reached an acute stage and I am convinced that it is hopeless to expect the best classes of Indian labour to take kindly or even at all to industry, when they are required to live in such degrading conditions as exist today in our larger towns.

At the last census there were in Bombay Municipal limits 37,932 occupied houses, housing a population of 979,445 persons, representing an average of 26 persons per house for the whole city. That the large majority of the men of Bombay do not have their wives with them is clearly shown by the fact that 640 thousand of the total population are males and only 340 thousand females. This would be a serious state of affairs for any city, and Bombay is no exception.

I am not surprised to be told by factory employees that they have nowhere to take their wives and families to. They do not know that the infantile death-rate for Bombay City reaches the appalling figure of 329 per thousand as against

what is still bad enough, viz., 172 per thousand for the whole Presidency; but they do know in a rude sort of way that the risk of infants dying in the city is double what it is outside. It is not fair to the people themselves nor is it common sense on the controlling authorities' part to allow this sort of thing to continue.

If the population was to be brought up to its normal balance it will be seen that accommodation for another 300 thousand women would be required, truly an alarming thing to contemplate. But this must not be used as an argument for not providing decent accommodation. Rather should it serve as an incentive to the Municipality to be up and doing. Such is the present economic position that the poor people live on dear land and the rich on cheap land, an extraordinary anomaly for which the Municipality should certainly provide a palliative if not a corrective.

Poverty is remediable. Economists of the highest authority do not subscribe to the belief that want is a biological necessity or inseparable from social conditions, although very much bound up with and affected by them.

No tremendous revolution should be essential to the betterment of the lot of the wage-earning class. Amelioration is a question of national policy, social wisdom, sound economics and common sense. A suggested specific for mitigating the poverty of wage-earners is the system of co-operation between the employer and the employed. Profit-sharing has been tried with considerable success in many industrial and commercial undertakings and to a limited extent this is what I am pleading for when I ask the employers to spend something more than they have in the past on improving the environment of their own people. No effort is too great if only the employers in India can be brought to a full recognition of the fact that action in this direction on their part would lead to a cessation of animosity between the worker and the employer, an increased output of labour and a mutual benefit all round. I suspect it is only a morbid infatuation with the militant competitive ideal which impedes the progress of co-operation between master and man in this country. The shrewdest capitalists recognize its merits after a fair trial.

WHAT OTHER COUNTRIES HAVE DONE.

It is perfectly clear that the development of industry has created a concentration of population in our cities, with its resulting problems of overcrowding and insanitation which it is not a simple matter to deal with. It is found that the question of cheap but sanitary dwellings for our industrial population is everywhere acute, as the result of the failure of private capitalists to meet these requirements. India is not peculiar in this respect and almost every civilized country in the world has dealt with it at some time or the other.

Most European countries have as the result of investigation provided for Government aid in one form or another for the better housing of the working people. The method of granting the aid differs greatly in the various countries but the form in which the aid is given may be divided into three main classes:—

(1) Building directly for rental or sale—Great Britain, France, Germany, and Italy;

(2) Making loans of public funds (including Government guarantee of loans) to—

(a) *Local authorities*—Great Britain, Belgium, Austria, Germany, Denmark, Norway and Sweden;

(b) *Co-operative or non-commercial building societies*—Great Britain, France, Belgium, Austria, Germany, Denmark, Italy, Norway, Sweden and Holland;

(c) *Employers*—Germany and Luxemburg;

(d) *Individuals*—Great Britain, Germany, Australia, New Zealand and Norway.

(3) Granting concessions in or exemptions from rates and taxes, or the granting of some other form of subsidy—Austria, Belgium, France, Germany, Italy, Hungary, Spain, Switzerland, Australia and New Zealand.

By these various methods these countries have expended vast sums from public funds to aid in the erection of sanitary buildings of low cost for their industrial classes.

Loans to public welfare, and co-operative societies and associations have played a very prominent part in the action of various countries, but for the great masses of the socially and economically less favourably situated working population, and above all for the unskilled workers, with respect to whom the housing problem is most pressing, building societies or associations are not adapted.

What then is to be done for this class? After a study of this question in some of the countries referred to, and many discussions with responsible persons, I have come to the deliberate conclusion that as far as the poorer classes are concerned—and here I refer to the poorer industrial class—salvation cannot be obtained unless the municipalities of our towns take definite action themselves to erect houses for them and also encourage private enterprise by granting rating and taxing concessions to builders of houses for the working classes. But I do not stop here I am of opinion that the big employers of labour should be brought to a clearer recognition of the fact that a duty lies at their door in the direction of housing their employees and they should be encouraged by being assisted to obtain suitable sites for the purpose.

We are not by any means wholly lacking in these respects in Bombay, as the following table which classifies what has been done by various large public and semi-public bodies shows, but still a great deal more is required:—

Working Class Housing Accommodation provided by Public Bodies in Bombay up to the end of 1915.

Name.	No. of tenements.	Occupants.	Cost of construction (building only).
<i>Permanent Chawls.</i>			Rs.
1. The Bombay Improvement Trust*	4,234	13,936	25,33,993
2. The Bombay Municipality ..	2,053	8,235	19,29,979
3. The Port Trust ..	962	4,430	9,33,930
4. The B. B. & C. I. Railway Company ..	763	1,702	5,09,198
5. The G. I. P. Railway Company ..	211	540	1,48,755
Total ..	8,223	28,843	60,55,855

* Also provide 928 tenements in semi-permanent camps to accommodate 3,808 persons.

The Improvement Trust naturally heads the list with accommodation for nearly 14,000 persons to their credit, or if the so-called "semi-permanent" quarters are included, a total of under 18,000 is reached. When it is realized that they have dishoused about 64,000 persons the position is seen to be rather a serious

one. Fortunately private enterprise has come to their assistance to a considerable extent and has in one and two-room tenements accommodation for some 15,500 persons. Other private buildings have of course been erected on Trust estates, but if every available room is counted, according to the last published report there is still a net deficiency of over 17,000 persons, which means overcrowding and higher rents in the already congested bazar (see Appendices H, I, J). I am strongly of opinion that whoever dishouses a number of persons compulsorily, whether for an improvement scheme, a railway, a dock or what else, should be compelled to provide housing accommodation for at least 50 per cent. of the persons dishoused.

A Government resolution issued through the General Department of Government of Bombay (No. 3022), dated 14th June 1909, stated *inter alia* :—

"An important question to which insufficient attention has hitherto been devoted is the construction of chawls for the accommodation of the working classes. At the time of the formation of the City Improvement Trust it was estimated that a sum of 75 lakhs would be required for erecting sanitary dwellings for the poorer classes during the first 10 years of the Trust's existence. The Trust has now been 10 years in existence; but the sums hitherto expended on this object do not exceed 15 lakhs. His Excellency the Governor in Council is of the opinion that more rapid progress is now essential. The street schemes completed by the Board hitherto have resulted in the displacement of considerable numbers of the poorer classes. His Excellency the Governor in Council is not satisfied that the dwellings erected by the Trust for their occupation are nearly adequate to meet the growing demand for such quarters, which has been progressively accentuated by the development of Bombay. It is desirable that a vigorous policy for providing such chawls should be adopted forthwith. The accommodation should be provided in the east, north-east and central portions of the Island, in the vicinity of the docks, factories and workshops. To this the Governor in Council attaches great importance, having regard to the moral and physical advantage which good sanitary accommodation will confer upon the working classes, with consequent gain to the general health of Bombay."

The Bombay Improvement Trust Act was amended in 1913 so as to enable the Trust to finance building schemes called 'Poorer classes accommodation Schemes' for employers.

Any person employing members of the poorer classes may apply to the Improvement Trust to make a scheme for him. The scheme must provide for:—The construction of dwellings by the Improvement Trust or the employer according to plans prepared by the Trust and the letting on lease of the dwellings to the employer. The scheme may provide for the acquisition of the site and for the construction of accessory dwellings of any description necessary for the scheme and for the dwellings being erected on land acquired by the Trust, or owned by the employer. Before the Trust start to execute the scheme the employer must deposit with the Trust 20 per cent. of the estimated cost of the scheme. The deposit is returned to the employer by annual payments which are equivalent to the annual sinking fund charges on the cost of the scheme. On completion of the buildings by the Trust they will lease them to the employer for 28 years at an annual rent equivalent to (a) the interest payable by the Trust on all monies spent by them on the scheme, and (b) 2 per cent. per annum on the capital cost which represents the annual sinking fund charges for the recovery of the capital at the end of 28 years on the 3 per cent. table. On the determination of the lease the land and buildings then vest wholly in the employer.

This is an excellent arrangement as it enables the employer in effect to borrow capital at the same rate of interest as the Trust, which represents a saving to him of from 2 to 3 per cent. So far only one mill has availed themselves of this opportunity and they are spending nearly 5 lacs on the experiment. 504 rooms are to be built which, I understand, are to cost on an average Rs. 972 per room. This is of course a great deal too much by comparison with the rent which the ordinary mill hand can afford to pay. At 6 per cent. to cover interest and sinking fund the annual net rent would be Rs. 58 or about Rs. 84 gross, equivalent to Rs. 7 per month. The principle is good but it is to be hoped that cheaper buildings will be evolved in course of time. They will naturally have to be of much cheaper materials, but the point I desire to make is that if the masses of the people cannot afford to pay for the best type of building then they must have something that they can afford to pay for. It is to be sincerely hoped that the mill owners of Bombay will see the advantages of the Trust schemes and avail themselves of the opportunities they offer.

If we turn to the greatest housing authority, I suppose in the world, viz., the London County Council (preceded by the Metropolitan Board of Works), we find that up to the end of 1912 they had in all their schemes together dishoused 66,273 persons, but had provided new accommodation themselves for 65,773 or all but 500. In addition to this they have provided new accommodation for a further 46,573 on their developed estates in the suburbs. I do not say that the economic conditions are similar in England and in India, but I do say that if the industrial and working classes are to be assisted to live under better conditions new accommodation must be provided. This does not require any argument. It is perfectly clear that the more houses that are demolished without new accommodation being provided the worse the overcrowding will be, and the higher the rents the people must pay. To the above criticism I must add that I am a great admirer of the work of the Bombay Improvement Trust and am convinced that future generations will live to thank the Trust for the great and important improvements they have, and are about to carry out.

Housing of the Working Classes by the Calcutta Improvement Trust.—The Calcutta Improvement Act only dates from 1911, so that not much can be yet expected from the operations of the Trust. They did however in the year 1914 erect three blocks of dwellings at a total cost of Rs. 2,44,855 (Land Rs. 72,400 + Buildings Rs. 1,72,455). The rents fixed were Rs. 8 for shops, and Rs. 3 and 4 for ground and upper floor rooms respectively. The number of tenements provided was 252 inclusive of shops. The total gross rents worked out to Rs. 11,928 (994 × 12) per annum and the Trust hoped that this would shew a net return of 4.1 per cent. This would have only left 16 per cent. of the gross rents for outgoings, which is obviously too small. The Trust now find that the premises are not fully occupied and the year ending March 1916 shews a net return of 0.8 per cent. only on the capital expenditure. They (the Trust) appear to have recently decided that they cannot build model bustees which would let at a rental which the working classes could afford to pay. This is not an uncommon experience of public bodies, but there are only two things to be done—to build at the cost of public funds or to reduce the quality of the materials used—if the people are to be provided for. One hopes that the Trust will not be discouraged by their first attempt.

WHAT THE EMPLOYERS OF LABOUR SAY.

Appendix A is the circular request I issued to all the principal factories in the Presidency and other parts of India.

The first six questions have been dealt with in the memorandum.

From the reply to question No. 7, the factories in Bombay Town and Island appear to experience most difficulty in obtaining labour during the following months and in the order given:—

The worst months being March, September, May to August, October and April. During December, January and February no difficulty is experienced.

Outside Bombay Island, in Ahmedabad, Surat and Sholapur no difficulty is experienced during March, but during the 4 or 5 months from July to November there seems to be a general consensus of opinion that labour is scarce. During the remaining portions of the year most of the employers find no difficulty.

East Khandesh. The worst months for labour are November and December. This is due to the fact that cotton picking season is in full swing there: for January and February, and to a slight extent in March.

Reply to question No. 8. Generally speaking, the employers show a lamentable lack of knowledge as to the physical conditions of their employees. In only one case out of the whole of the returns received has an indication been given that a serious attempt had been made to note or record the illness of the employees. There seems to be the general tendency to put the whole of the indisposition down to fever; a few cases only showing diarrhoea and dysentery.

For these reasons on the whole, I do not feel disposed to attach much importance to the general body of the replies to this question.

In reply to question No. 9. No record is kept as to the number of deaths of employees.

Replies to Nos. 10 and 11 of the questions have been summarized in Appendix C to this memorandum. They are of intense interest and deal with a considerable number of questions intimately concerning the factory owner and the factory employee.

There is an extraordinary consensus of opinion that housing is desirable and further that factory owners would benefit by providing decent accommodation at moderate rents. Many statements make it clear however that employees do not take kindly to discipline and the enforcement of sanitary rules in accommodation provided by factories. Such comments clearly indicate that the employer has not gone the right way to work. Factory housing can never be successful if it is desired to keep the tenants under a sort of martial law. They might almost as well be in prison.

Some of the returns refer to the difficulty of getting land in the vicinity of the factories. This is evident when the mills themselves are in overbuilt neighbourhoods, but it should be remembered that it is not necessary or even desirable in my opinion to have the accommodation too close to the factory. Give the people a chance to forget their workshop and have the hands a short distance away.

An objection raised to this is that there would be poaching of labour by other factories. Under existing conditions it is true this probably would

result to a slight extent, but no more than is the case today, but the whole problem will be solved by making labour attractive and the reward for it compensatory.

A clear indication is expressed that shops for the sale of food-stuffs should be provided.

EDUCATION.

It is interesting to notice the importance attached by the writers of the replies, to Education, and I think this is extremely encouraging. I am dealing with the problem at some length as it is one that deserves more than passing mention.

I am not in the position of having to prove that the ordinary factory employee would be of greater value in the industrial world if his education was improved. This, I think, is now generally admitted by all thinking people. The trouble is that the employee is so crassly ignorant that everyone seems afraid to make a serious beginning with him. The education under existing regulations can only be voluntary, supported possibly by a certain amount of moral suasion, and consequently it must be made intensely interesting.

Attempts have already been made to deal with this question both in Ahmedabad, Bombay, Madras and other places as far as the children are concerned. As long ago as 1911, Government asked the Bombay Municipality if something could not be done to give effect to the Factory Labour Commission's recommendations for the education of Factory boys. At that time there were some 3,350 children working in Bombay City alone in the mills and factories, the large proportion of whom did not attend any school, and it was impossible that they could do so. Even then some 17 mills had schools of a sort, but the results were not good, and not even encouraging. The Municipality opened four factory schools for boys, but as such they have been a failure. In only one instance, I understand, did 10 or more factory boys regularly attend one school (DeLisle Road). I do not think it is a coincidence that the teacher of the class in this school was an ex-mill hand.

As recently as 14th February 1916, Government expressed itself disposed to accept the unanimous suggestion of a Committee appointed by them in 1913 to the effect that the "half-time" factory employee's period of work should by legislation be made compulsorily divisible into two 3-hour periods; the interval being partially utilised for instructional purposes. It is understood that the Millowners of Bombay are considering a proposal whereby they will pay the school fees and a monetary bonus to all regular attendants from their mills at schools to be opened by the Municipality especially for this class of scholar. This is all in the right direction and holds out some hope that a proportion of the children at least will have a fair chance of an elementary education. But I think something more must be done. I am of opinion that employees between school age and ripe manhood and womanhood should be given a chance to become more useful members of the community and more efficient citizens.

Ahmedabad is making experiments in this direction and the managers of the Samasta Gujrat Paisa Fund are to be congratulated on their enterprise. The supervisors of the schools work voluntarily and the teaching staff is mostly composed of enthusiastic college students, who are now and then given a nominal honorarium. This is excellent material and if properly directed should do well.

I desire to emphasise the importance I attach to the correlation of Housing, Education and Recreation.

I make no pretence to pose as an educationalist, in the common acceptation of the term, nor do I think that the foibles and failings of human nature can be changed as by a wave of a wand, but I do think a great part of civilization and industrial progress is bound up with the cultivation of generous motives, of disinterested sympathies, of desire for justice and order and co-operation. There must be no vagueness of aim and we must definitely decide what we desire the educational process to do for the factory employee. I venture to suggest that the aim should be a threefold one:—

Firstly.—The education must be elastic enough to enable the discovery of aptitude and capacity; consequently variety is required.

Secondly.—It should be to reveal as far as possible to the semi-dormant mind a real idea of the conditions under which it lives. Elementary science is an integral part of such an education and general knowledge of physical laws and processes is of primary importance.

Thirdly.—Education should aim at the training of the employee in good moral and physical habits, to develop wholesome mental interests and robust health of body—in short the training of character. But at this juncture the problem is a knotty one. It will not suffice if a halt is called here. If we merely develop the muscles and encourage the belief that the world is a place in which to get all one can, and to fortify oneself in wealth and comfort, we must not expect good citizens. No, the scholar must learn what duty and service and self-sacrifice mean. This can only be done by the cultivation of an imaginative sympathy, which can put itself in the place of another and desire to share rather than amass happiness.

After all education is a contact of living minds and that is where the difficulty lies. The personality of the teaching staff is the root of the whole matter. Men and women of knowledge and of keen intellect are required, but if that is the sum total of their equipment they will miserably fail. I speak with conviction, as the result of a fairly extensive knowledge of working men in this, but principally European countries. The teachers must be men and women with a touch of inspiration, who will take a real personal interest in their pupils.

The classes could be made interesting and attractive in a dozen different ways.

By means of entertainment is one. The education must be such as would attract him. There is nothing strange in this. This is known to all educational authorities all over the world. The school master who teaches mathematics merely by putting his students through a series of rules and worked examples, has a very low percentage of satisfactory results as compared with the master who appeals to the students by means of object lessons which at once enable them to grasp the theory being propounded, and creates an interest in the subject entirely foreign to the student, and bit by bit they will assimilate it. Do not let them know that they are treated as children and are being taught. Teaching on the Kindergarten method is eminently suitable. Incidentally each employee should know what he is doing, viz., helping towards the production of a better thing. I do not pretend to give a dissertation on how to teach. I leave it to proper authorities, but I have attempted to lay down some general lines which experience has shown to be very successful in other countries.

In dealing with the Presidency the conditions are largely similar to the whole of India. The employers of labour should realise that their interest comes back to them by way of increased efficiency resulting from more interest in the work of the employee and the efficiency of his labourer and improved health and stamina. It is perfectly clear that the housing to be provided for the poorest class of employees must be commensurate with their food, sanitary construction and environment.

Recreation.—It has been recognised by many large employers of labour that the employee after a day's hard work is just as much in need of recreation as any of the other more favoured members of the community. This question of amusement is a difficult one because so low in the social and intellectual scale are many of the factory employees that the spontaneous provision of amusements by themselves is practically an unknown thing, apart perhaps, from the more degrading and grosser forms of indulgence in gambling and drinking. This being the position it is clear that some organised method of providing amusement and enabling an employee to provide his own amusement is desirable. It is not necessary in a report of this nature to go into the details of what actually should or would be provided, as this is a question which can be well left to the discretion of the parties concerned. My experience of the working classes in other countries however certainly leads me to the belief that a social institute run largely by a committee of more intelligent employees which would embrace amongst its attractions, entertainments, lantern shows, and may be boxing and wrestling as well as accommodation for simple social intercourse, would at once be highly successful and would form the germ from which foot-ball and hockey clubs, etc., might readily come into existence. There is practically no limitation to the benefits of such an organization to the employees. It may be thought that the more literate members of the personnel of the factories would have some difficulties in availing themselves of such amusements. But a moment's reflection would show that this is by no means the case. It is from their ranks that the committee would be recruited; and it is just this more educated type of man who should do his share in improving the lot of the less fortunate employees.

Part of the work of the institute would be the supplying of the necessities of life at something little more than cost. Baths and washing arrangements and games should also be provided. The consensus of opinion seems to be that the vast majority of the employees are unaccustomed to and as a result do not indulge in such amusements. Experience of life shows us that a man to be healthy must have amusements, no matter what walk of life he is in; and such an institution will form an excellent paving ground, and in a very short time members would readily pick up and enjoy a number of games which are now quite foreign to them. Apart from the mills there is a vast field open to the philanthropists of the large towns, many of whom are only too ready to put their hands in the pockets if they see that the money is well and wisely spent. There is simply no limit to the benefits such an institute would confer on the working classes. It would naturally include a medical officer to give free medical advice.

Scarcity of labour for want of proper attraction.—A suggestion for an increase in wages is an economic aspect of the question I do not discuss. As to whether they cannot see their way to slightly increasing the wages of the employees

is a matter for employers as a body to decide. If they do it by means of the provision of institutes, social amenities and better housing, then it may be that they have done their share. If they do not recognize the responsibility then they will find they are left behind in the race; and that employers of labour of more advanced type will quickly have the pick of the labour market.

ECONOMIC POSITION OF EMPLOYEES.

I had it suggested to me by a man of considerable means, that most of the destitution and misery that prevails amongst the lower class of mill employee was due to their thriftlessness and waste. I asked that gentleman if he had ever tried to keep and rear a family on Rs. 10 per month.

Hopeless poverty engenders recklessness, and indigence is inimical to mental development. Living from hand to mouth creates a despair of ordered domestic economy; and the alleged extravagance and carelessness of the factory employee is less the proof of a spendthrift tendency than the evidence of the extreme difficulty of prudent expenditure.

It has been alleged to me over and over again by employers of labour that the ordinary mill employees are given to drunkenness. Is it surprising that the toddy shop is the resort of these people? A man craves for company and relaxation, and as he cannot obtain it in any other way he seeks it among his fellows at the toddy shop. The habit of drunkenness is thus fostered and results in a desire which frequently becomes a pathological obsession. *Drunkenness is the effect of environment.*

The remedy is:—Change the environment.

A new school of workmen must be created and the old school will die a natural death by effluence of time. The present position is:—

That the employee is not able to live in comfort, the squalid surroundings and his drunken friends aggravate the situation, and, once degraded, he becomes steeped deeper and deeper in the mire.

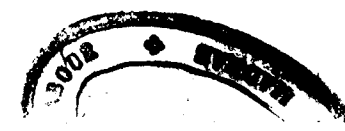
He is forced to borrow and once he borrows he is always a borrower as the result of the high interest he has to pay.

I deal with the question of domestic economy in some detail because it plays a very important part in the industrial position.

In the minority report of the Committee appointed by Government of Bombay in July 1913 to enquire into the education of factory children the following suggestive statement was made:—"The economic conditions of their (the young operatives) parents are such that they (the young operatives) will work for the remaining six hours at other mills under other names and it is next to impossible for the present to stop this practice which is notorious."

This is a definite and clear recognition of the fact by gentlemen who have unrivalled knowledge of the working conditions of our great mills, that the economic condition of the working classes connected with the mills is unsatisfactory.

There is, then, no need to labour this point of the bad economic position of the mill hands, but before any suggestion for remedying it is made, it will be desirable to examine the cause and to touch on the effect. During the past 18 years there has been a fairly general increase in industry in India, and I have endeavoured



to give some slight indication of this in Appendices F, G, and the three diagrams showing (i) Progress of Mill industry in India and Bombay Presidency, (ii) Growth of labour and increase in the number of Factories and (iii) Remarkable increase in Export of Cotton to Japan during the past five years as compared with Export prior to 1911.

In the Cotton Mill industry alone the mills have increased from 173 in 1897 to 272 in 1915, being equivalent to nearly 58 per cent., and the employees of the mills have increased from 144 thousand to 265 thousand or 84 per cent. during the same period.

My recent enquiry in Bombay previously referred to shewed that 48 per cent. of the employees came from the Konkan, 24 per cent. from the Deccan, and the rest 28 per cent. from other parts of India.

The average age of an employee was found to be 35 years. The average members of a family were 4.3, of which only 1.8 were earning members. The average monthly earnings of a family were found to be Rs. 25.7. Of this sum Rs. 14 are spent on food, Rs. 4 on house rent, and Re. 1-8-0 on *pān* and *biddis*. Only 28 per cent. of the employees drink tea and the average expenses per family under this head are Rs. 2-8-0 per month. Thirty-two per cent. are liquor drinkers which on an average costs them Rs. 2-12-0 per month per family. The average expenses of a family are (14 + 4 + 1-8-0 + 2-8-0) Rs. 22 per month. This does not include occasional expenses on clothing, medical help, etc., and the regular item of interest on debt.

It is found that 80 per cent. of the employees in Bombay are in debt and that the average debt per head is Rs. 111.37. The employee having no security to give has to pay a very heavy rate of interest. Eight per cent. of the employees pay interest at annas two in the rupee per month, that is at 150 per cent. Fifty per cent. of the employees (or 62.5 per cent. of those having debts) pay interest at one anna in the rupee per month, that is at 75 per cent. The usual practice of the marwari is to recover the interest in advance. Thus for every rupee borrowed the employee receives only annas fifteen in cash, one anna being deducted as interest; and at this exorbitant rate of interest an employee on an average has to pay Rs. 7 by way of monthly interest. This is an extraordinary state of affairs, and on the face of it makes one think that in the circumstances the employee can never repay his capital debt back and that the marwari who is universally run down must be very often a loser in the bargain. The key to the solution however lies in the fact that the marwari does not lend a large amount to one man. He is a shrewd business man, and gives out his capital in small sums to a variety of people. He is besides very keen about his interest. He will let an employee keep the loan, but will have his interest regularly. In this way the marwari receives as interest alone Rs. 150 in two years at 75 per cent. for every Rs. 100 lent. He has thus recouped his capital and made a handsome profit of 25 per cent. He still has a claim on the employee for the amount lent and so is never a loser in the end.

The average expenses of a family without tea and liquor are Rs. 19-8-0 per month and with the average interest of Rs. 7 payable to the marwari, the employee's expenditure amounts to Rs. 26.5 as against his earnings of Rs. 25.7. The employee can thus at most try to make both ends meet but he is never able to pay back his debt. The state of indebtedness thus becomes chronic. Recently the Servants of India Society have started co-operative credit Bank

to help the employees, by lending them money at a moderate rate of interest and if such institutions were started in every mill the results would be surprising.

Going to the root of this question of indebtedness, what are its causes? Is it the reckless expenditure and indulgence in vices by the employee? Enquiry shews that only 38 per cent. of the employees in Bombay are drinkers of intoxicants, but not necessarily all immoderately so. The reasons alleged for debt are:—

- Marriage,
- Funerals,
- Occasional extra expenditure,
- Initial expenditure on commencement of service,
- Medical help,
- Famine at native place.

Twenty per cent. of the employees contract debt for marriage, 7 per cent. for funeral expenses, 28 per cent. for occasional extra expenditure such as journeys to their native place, etc., 7 per cent. for expenses at commencement of service, 14 per cent. for medical help, for illness in the family and 3 per cent. for famine at their native place.

This shews how keen is the struggle for existence. Twenty-eight per cent. of the employees have even after a year or two's work nothing left for occasional extra expenditure.

I found that 80 per cent. of the employees interviewed lived with their families in one-room tenements. The average number of inmates in such a tenement is 4.5 and the average rent per tenement is Rs. 4 per month.

On an average each employee was found to have put in 15.3 years of total service, of which 9.3 years^(a) were in the mill where the employee was then employed. Fifty-nine per cent. of the employees had been employed in one mill only since the beginning of their service.

Fifty per cent. of the employees were found to be unmarried and of the remaining 50, 17 had lost by death one or two children and 17 more had lost three or more children and the remaining 16 had all their children living.

Forty-five per cent. owned landed property and 44 per cent. went to their country home each year.

I desire to draw the particular attention of the Commission to Appendix E which contains an account of a mill hand's life in so far as his finances are concerned. It is of profound interest as having been written by a trustworthy and experienced man who has literally "been through the mill" himself. His remarks as to how the debts of a deceased member of the family only go to burden the survivors are of course founded on fact.

Under Hindu law it is a religious duty of the family of the deceased debtor to discharge the deceased from "the sin of his debts." The Hindu commentator Narada says:—

"Where a devotee or a man who maintained a sacrificial fire dies without having discharged his debt the whole merit of his devotions or of his perpetual fire, belongs to his creditors."

(a) I apparently unconsciously selected old hands. I do not think this figure can be accepted for general application.

The duty of relieving the debtor from these evil consequences falls on his male descendants to the second generation and was originally quite independent of the receipts of assets.

With these serious penalties for debt hanging over their heads, it seems almost incredible that anyone ever gets into debt, and still more incredible that vast numbers are debtors. It certainly seems to indicate a sublime trust in their children's ability to solve the problem, if not a wanton disregard of the consequences to themselves.

I should like to suggest the following remedies :—

- (1) Registration of all money-lenders.
- (2) Limitation of interest.
- (3) Imposition of "Dam dupat" (i.e., that no money-lender is able to recover more than double the amount lent) to all castes. At present it can only be enforced when both the contracting parties are Hindus.
- (4) Legislation somewhat on the lines of the Deccan Agriculturists' Relief Act, 1879, for all persons whether agriculturist or not. If the ignorant borrowers were made more conversant with the provisions of section 19A of the Indian Contract Act, 1872, which enables the Court to set aside agreements obtained by undue influence they would not be so often victimised by the money-lender.

Appendix H shows that the average rise in rent per building in Bombay is 72 per cent. or if ward A is omitted 70 per cent. This is borne out by Appendix I which follows. Eleven properties were selected haphazard and their rents traced back to the year 1901. The enquiry shows that in some cases the rents have increased by 177 per cent. without any material additions or alterations to the buildings having taken place. The average increase however is 70 per cent.

This is a very serious state of affairs, but is only to be expected when the population is increasing (it increased by 26 per cent. between 1901 and 1911) and the housing accommodation is increasing in a much lesser ratio. Between 1901 and 1915 the increase in the number of buildings in Bombay was only 16 per cent. The position is still worse from the industrial employee's point of view because food-stuffs during the same period have risen 32 per cent. in price as the table I give below shows :—

Schedule of prices of food stuffs per Indian maund.

	1901.		1915.	
	Rs. a. p.		Rs. a. p.	
Jwari	2	15 6	3	10 5
Bajri	5	5 8	4	10 4
Wheat flour	4	7 11	6	3 0
Rice	4	6 4	5	13 0
Tur (dal)	5	7 4	6	15 9
Sugar	8	2 7	13	7 2
Firewood	0	8 9	0	13 2
	31	6 1	41	9 7 = Rise of 32 per cent.

The rise in wages as against this, it is more difficult to define. But I have prepared a statement with the assistance of the Chief Inspector of Factories of Bombay, which I give below :—

Schedule of wages in Bombay.

Occupation.	Year 1902.	Year 1913.	Percentage of increase.	Year 1915.	Percentage of increase over 1902.
	Rs. a. p.	Rs. a. p.		Rs. a. p.	
Blacksmith ..	32 8 0	34 2 0	5.0	45 0 0	38.4
Fitter ..	32 8 0	40 0 0	23.0	45 0 0	38.4
Carpenter ..	25 0 0	32 13 0	31.2	50 0 0	100.0
Bricklayer ..	26 0 0	33 13 0	30.0	45 0 0	73.7
Mason ..	26 0 0	30 0 0	15.3	50 0 0	92.3
Weaver (man) ..	18 0 0	21 0 0	16.3	24 0 0	33.3
Spinner (man) ..	17 0 0	18 0 0	5.8	19 0 0	11.7
<i>Unskilled workmen.</i>					
Messenger ..	10 0 0	10 8 0	5.0	14 0 0	40.0
Cooly (man) ..	9 6 0	12 13 6	37.0	14 0 0	49.3
Cooly (woman) ..	6 0 0	6 12 0	12.5	8 0 0	33.3

This schedule shows that the increase in wages upto 1913 was within the range of 5 to 37 per cent. The wages of 1915 except in the case of male coolies show a marked increase, due mainly to the demand for skilled labour created by the war. The pre-war wages of the higher paid skilled labour all show a fairly large percentage of increase but the weavers, spinners and messengers were not so fortunate.

Summarising these results we find that (a) rents have increased in Bombay City by 70 per cent.; (b) food-stuffs have increased by 32 per cent.; (c) wages may generally be said to have increased, but at nothing like this rate. The result being that the working classes are much worse off. In other words, the purchasing power of the rupee is reduced.

Co-operative Shops.

The Swadeshi Mills at Kurla have for the last 22 years maintained a grain shop for the benefit of their employees. The rate for the retail sale of grain here is only such as would cover the cost of the grain at wholesale prices by the mill, plus the charges of cartage. Thus the mill does not make any profit out of the bargain and moreover bears the pay of the clerk engaged on the work. Notwithstanding this it is found that many of the employees prefer to buy grain from the banias outside. The following is a summary of a few of the reasons given by mill hands for this :—

1. The shop provides only rice, patni, bajri and dal.
2. Grain is issued to one man only once a week.
3. The amount of grain issued is limited to the pay due to the employee.
4. In addition to the main articles of food obtainable at the mill, many petty provisions, such as sweet oil, rockoil, kernel, sugar, flour, jagery, salt, fuel, etc., the cost of which comes to about as much as that of the main provisions, are required by the employees.

For these things the employee is forced to go to the bania. The bania who is a shrewd man sees that the employee who purchases from the mill store is

getting out of his clutches and he refuses to supply only these minor provisions on credit. In this way the employee is forced to give up dealing at the mill store and as a consequence has to buy all the necessities of life from the bania.

The second condition of the issue of grain only once a week from the mill store to one man is also found inconvenient by some. If their supply runs short before the end of the week, they would not be given a further supply by the mill, nor could they go to the bania having once left him.

Furthermore the bania, as a result of the heavy profits that he is making out of his customers, allows them abundant credit and the usual supply of provisions is not withheld even if an employee is out of service or unable to attend work owing to illness. Again the bania is moreover the peoples' banker and lends them a rupee or two, or even more, as required for petty expenses or holiday making.

The Morarji Goculdas Mills and the Indian Manufacturing Company found the grain shops a failure. To make such institutions a success the illiterate employees must be taught to appreciate their benefits. Many of the hands are altogether indifferent as to the low rates at which the mill sells the grain. Theirs is the policy of *laissez faire*. They have been accustomed to buy at their bania's and they see no reason to give him up. They do not realise that the bania is charging them heavy rates and at the same time giving them inferior quality. As the ordinary dealer praises his wares so the mill owner must proclaim to his employees by way of handbills and placards the benefits of the co-operative stores. But it must really be a co-operative store and not a shop dealing with grain only.

The Gokak Mills at Gokak have Co-operative Stores for the use of their employees.

The working capital is Rs. 7,000.

The number of members is 131.

Purchases are for cash or credit. Bills must be paid monthly, otherwise further supplies are stopped.

The articles dealt in are all kinds of native food-stuffs (known as "bussory"), groceries, stationery, cloth, and oilman stores.

The members state that the prices are cheaper and the quality better than when they obtained their supplies from sowkars.

The monthly turnover averages Rs. 2,500.

Other Mill owners would be well advised to consider action on these lines and for those of them who are not disposed to embark on such an enterprise themselves, I urge them to try the licensing of provision shops within their premises. The shops could and should be subject to inspection by the Mill authorities and the rates charged should be sanctioned by them. The shop-keeper might be given a couple of rooms in the mill compound free of or at a nominal rent and could fairly expect to get the custom of a considerable proportion of the employees, if not of all. In Bombay an average turnover of about 5,000 rupees a month, assuming an average of Rs. 5 per head per month, might be reckoned on. This method would relieve the Mill authorities of the vexatious trifles that they naturally are not anxious to be worried with and at the same time enable them to do a great deal towards ensuring a cheaper and better supply of food-stuffs to their people. There is little doubt that purveyors would

be prepared to compete with each other for the privilege thus offered of a virtual monopoly of the custom of the mill hands.

I do not think that the average person is alive to the effect of good environment and comfortable homes upon the character, disposition and energy of the people.

If action is taken on the lines indicated in this memorandum a great step forward will have been made in the Industrial progress of this country and what is equally important we shall be rewarded by seeing a real advance made in the direction of elevating, improving and dignifying of the life of those who are our fellow citizens.

I do not presume to think that I have, in the views I have expressed, done more than indicate the lines on which action should be taken. Matters so intricate demand the study of a large number of the ablest intellects and I have only been persuaded to give evidence before this Commission in the earnest hope that what I might say, and the facts I might put forward, would at least serve to indicate that the anomalies to which I have referred, are serious enough and of sufficient importance to justify not only the close reflection of sociologists but the strenuous action of employers of labour and of local authorities throughout India. There is no doubt that specific remedies could be applied by the legislature, by economic reforms, and by housing schemes, which, united with a general awakening of the public to a knowledge of what is needed, would go a long way towards the solution of what is one of the most pressing problems of India today, viz.:—"The Housing and Improvement of the condition of the Industrial classes of this Country;" till on the tide of successful experiment the distant shore is reached on which are to be found contented and healthy workers."

A. J. J. J.

1

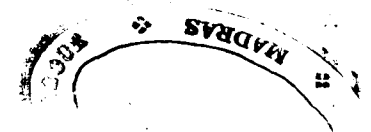


Very primitive tin sheds used for Housing of Mill Employees in Ahmedabad. Note the rubbish on roof. Size of room 10' x 8' 6". Height only 6' 0". Four to six persons stay in each so called room. Rent annas eight per month.

2



Nearer view of above.





Some huts occupied by Mill hands in Ahmedabad. Rent of the very kutcha shed in front is Re. 1 per month. Built of bamboo battens mostly unplastered. No privy or water convenience.



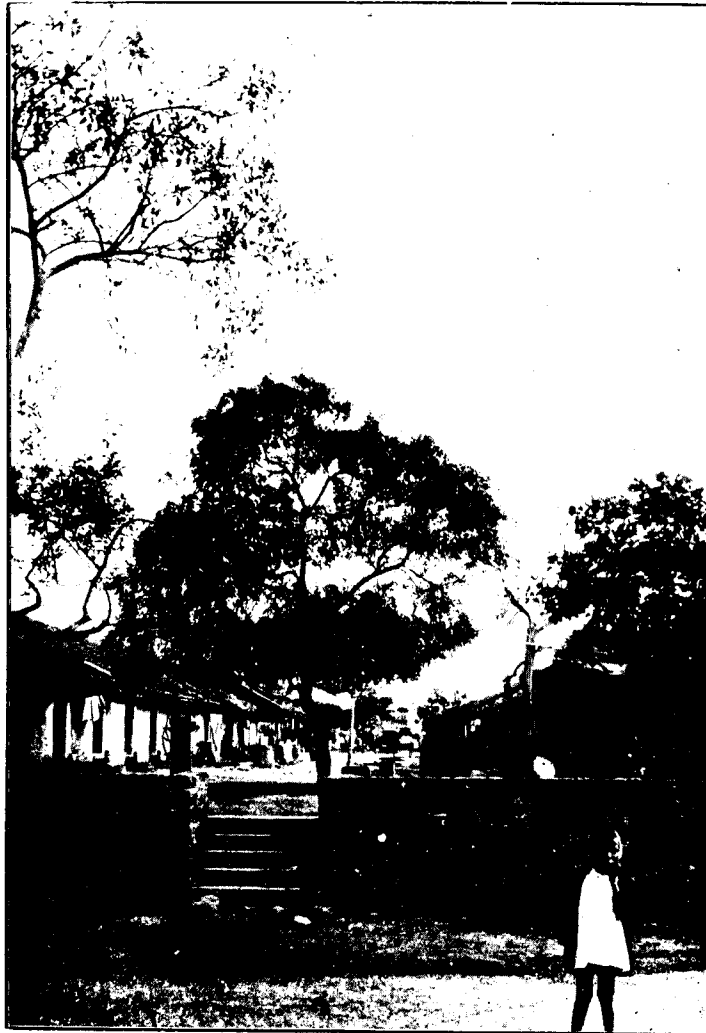
Chawls erected by the owners for mill hands of The Raipur Manufacturing Company Limited, Ahmedabad.



Ahmedabad—Hut built of brick and mud masonry. Occupied by Mill hands. In one of the rooms (11' x 11' x 10') there were 8 inmates residing.



Nearer view of the above.

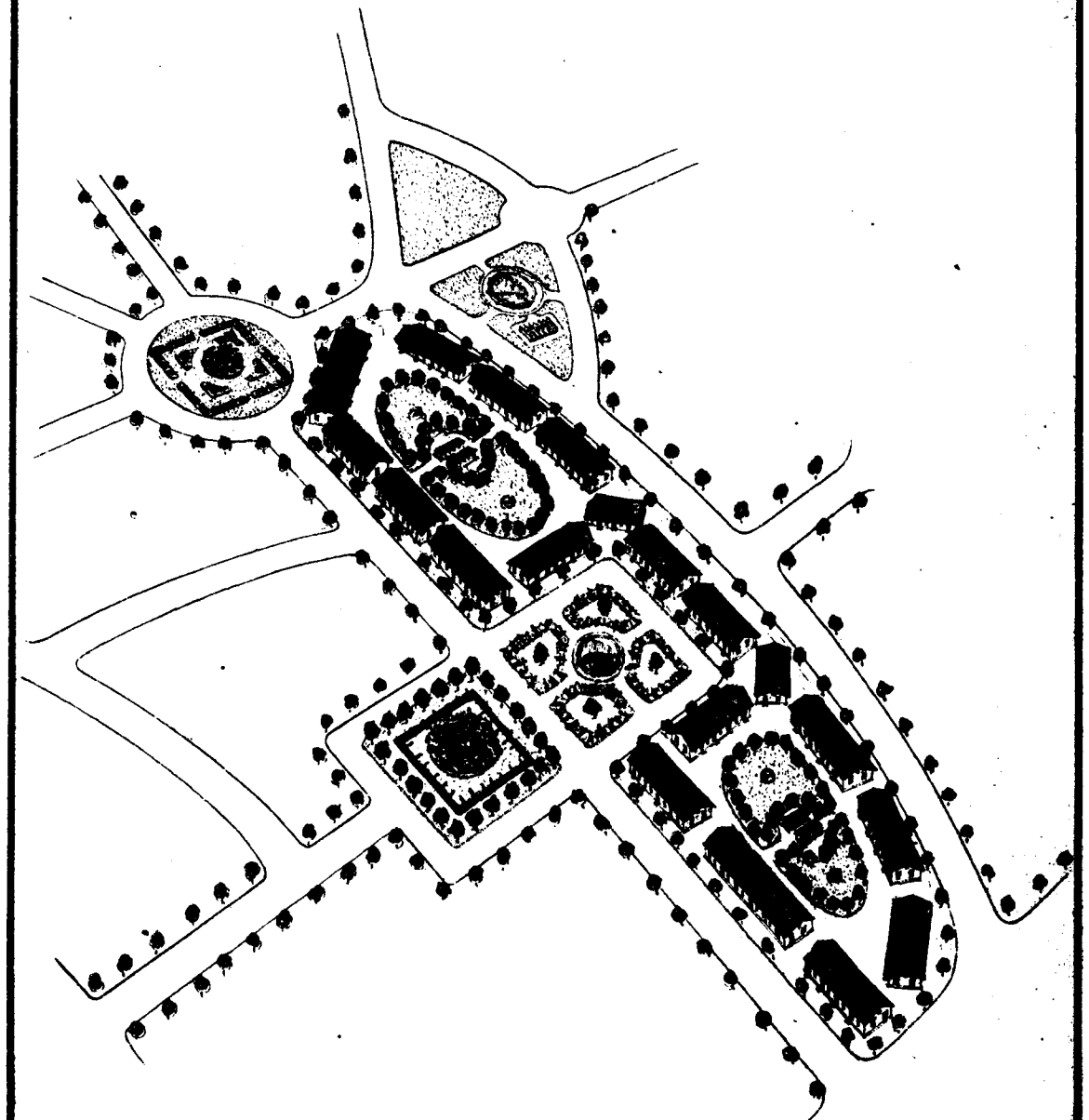


Sholapur.—Mill Employees Quarters. Quite a good style.

AHMEDABAD

MILL SUBURBS

PORTION OF SITE No 5

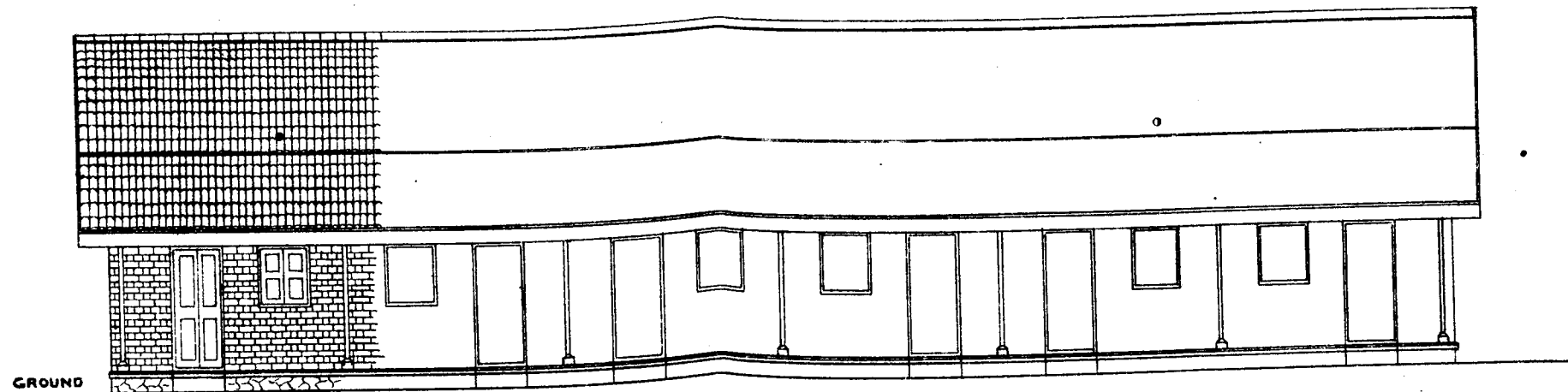


AEROPLANE VIEW AFTER PROPOSED DEVELOPMENT

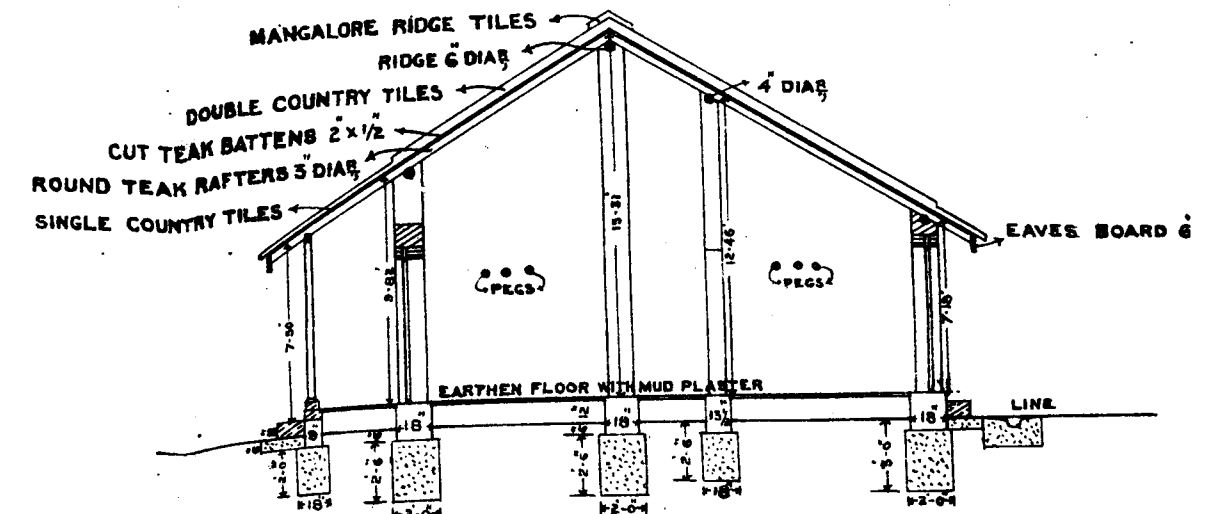
A. E. MIRAMS, F.R.S.,
CONSULTING SURVEYOR TO GOVT.
19-7-1922

SUITABLE FOR OCCUPATION BY MILL EMPLOYEES

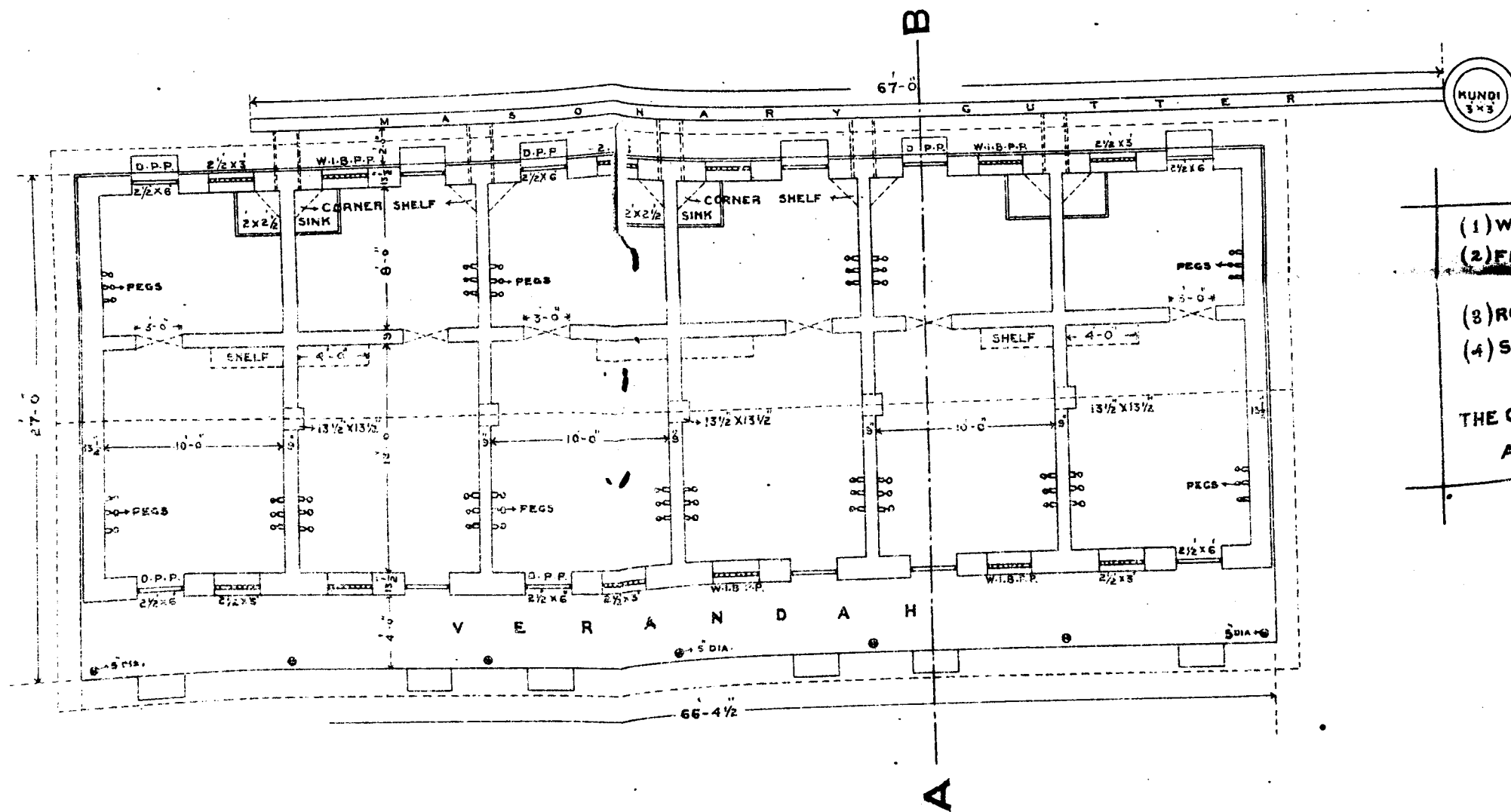
SCALE 8 FEET TO AN INCH



FRONT ELEVATION



SECTION ON A.B.



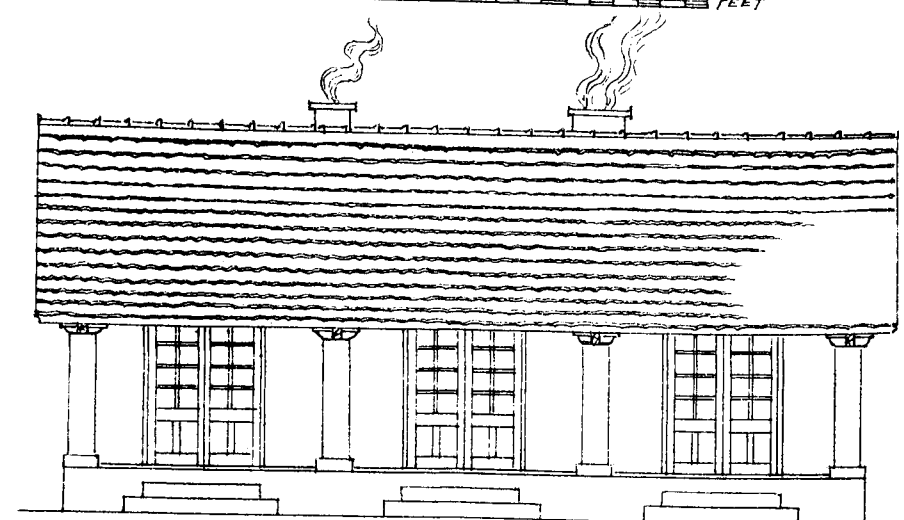
PLAN

SPECIFICATION

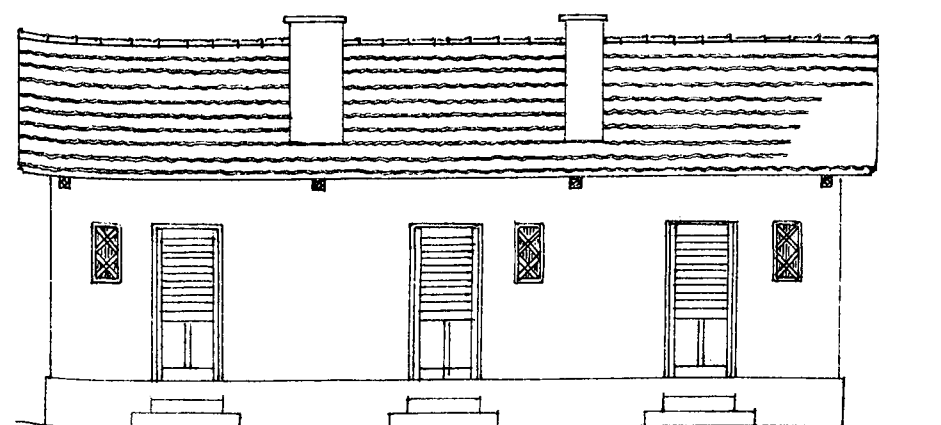
- (1) WALLS TO BE OF BRICK & LIME & LIME POINTED
- (2) FLOORING TO BE OF MURUM WITH MUD PLASTER ON TOP
- (3) ROOFING TO BE OF COUNTRY TILES
- (4) SINK, SHELF & PEGS ARE TO BE PROVIDED

THE COST OF A BLOCK OF SIX COTTAGES EACH HAVING TWO ROOMS AND A VERANDAH WOULD BE RATHER LESS THAN Rs. 3000/-

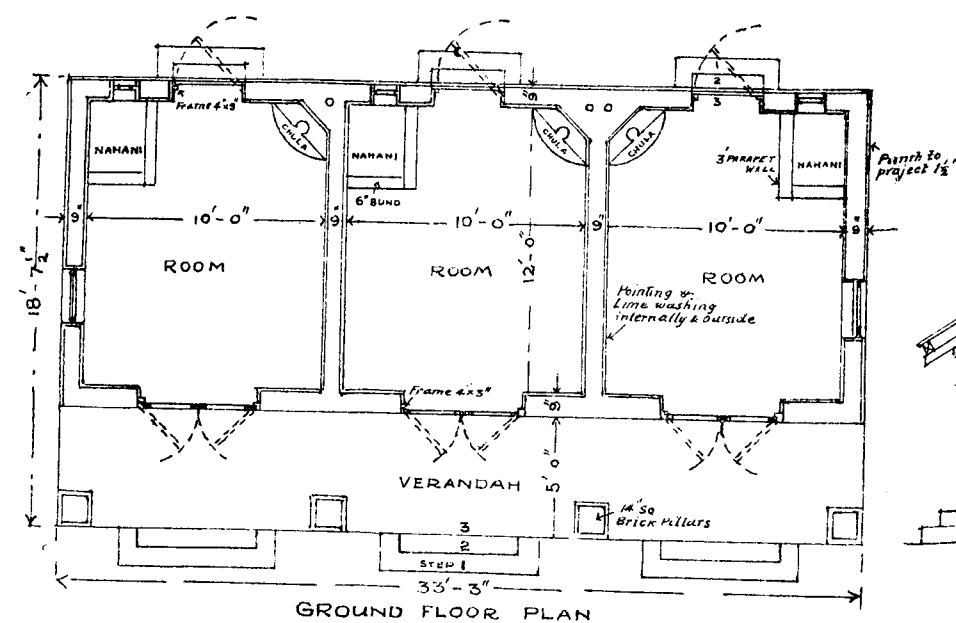
The Bombay Improvement Trust
CHEAP MODEL WORKMENS CHAWLS in
Scheme No V
 Scale of 1" = 10' 0"



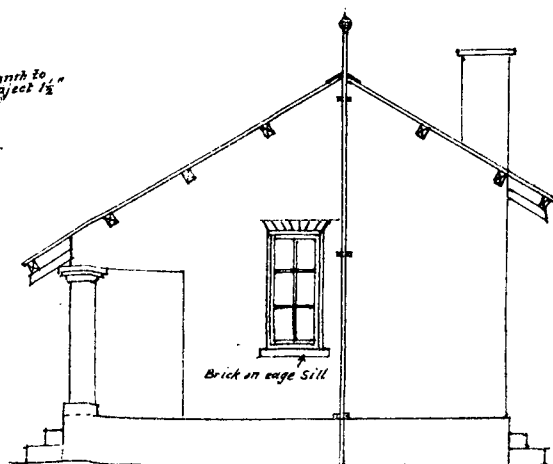
FRONT ELEVATION



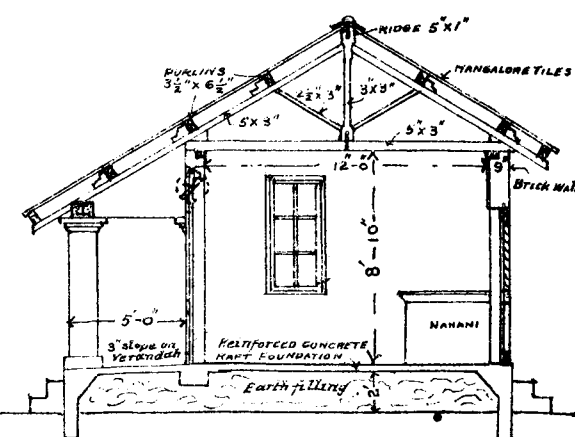
REAR ELEVATION



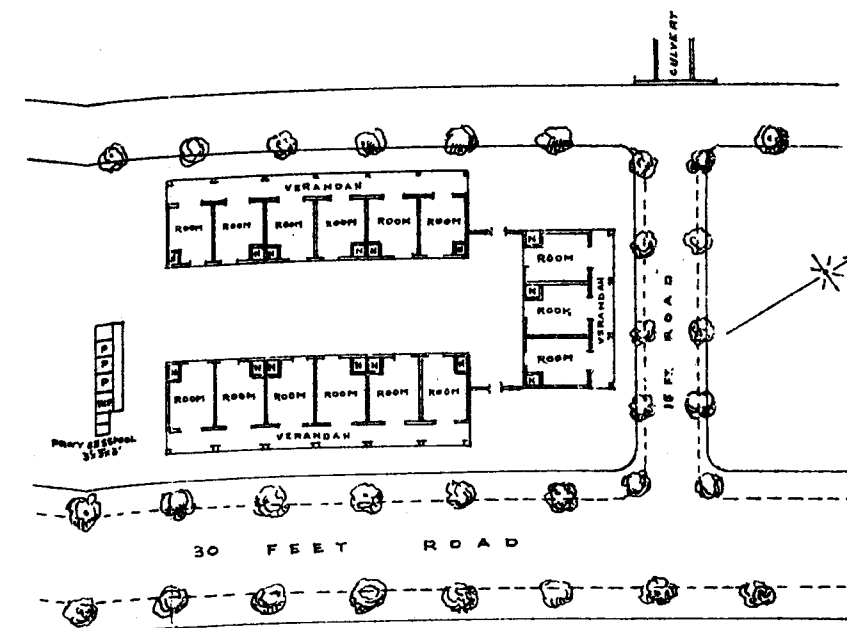
GROUND FLOOR PLAN



END ELEVATION



CROSS SECTION



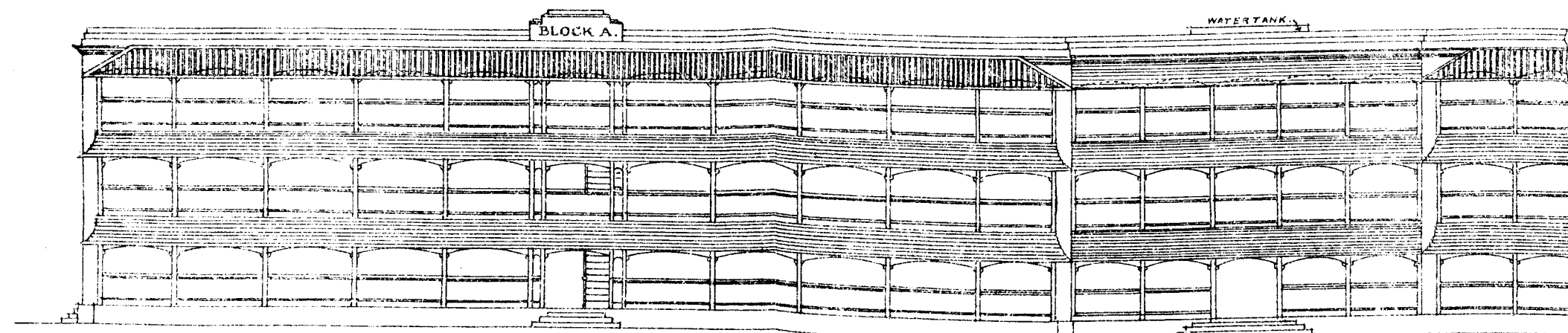
SITE PLAN
 Scale of 1" = 10' 0"



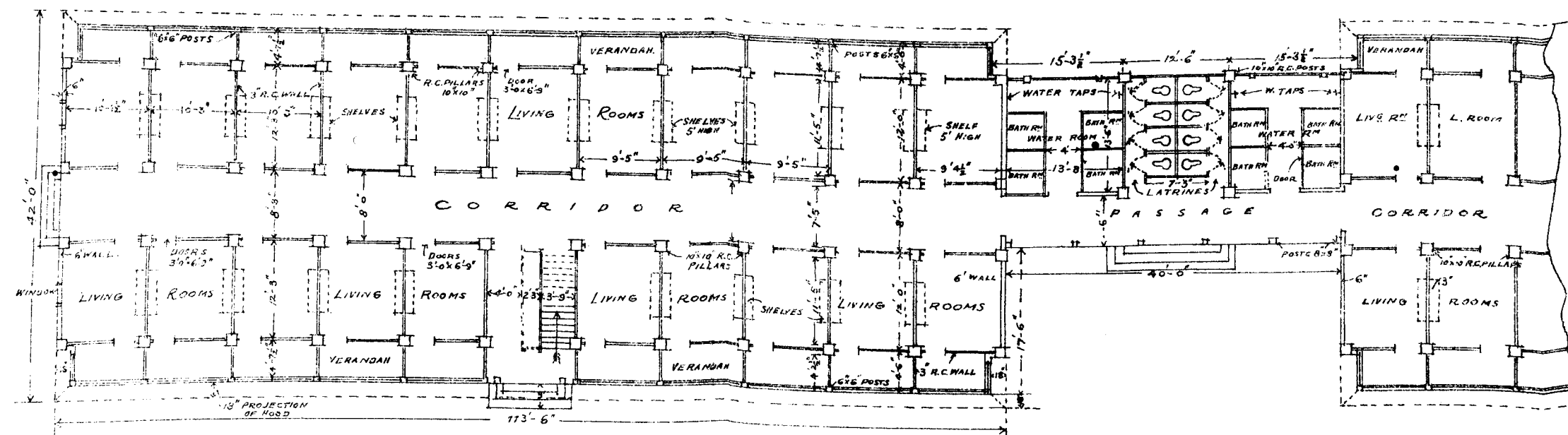
J. R. Hawthorne
 A. I. B. A.
 OFFICE TRUST ENGINEER 31-7-10

The SPRING MILL CHAWLS,
Bombay Improvement Trust Scheme N°XLIII.

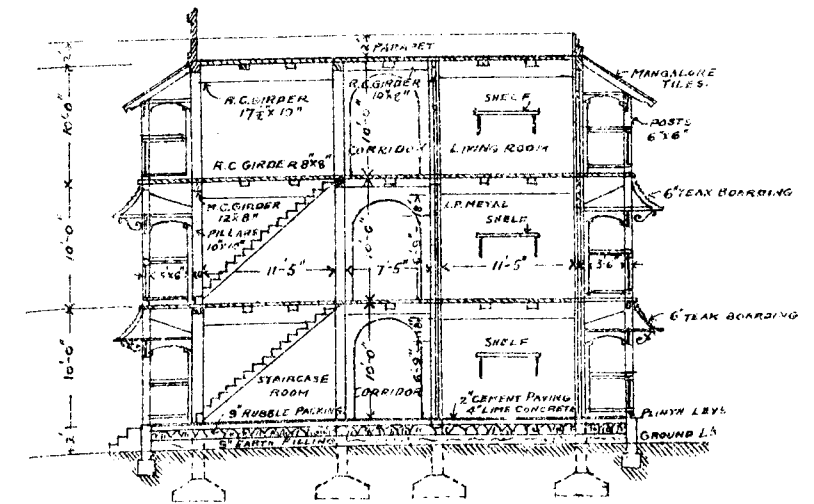
Scale of feet.



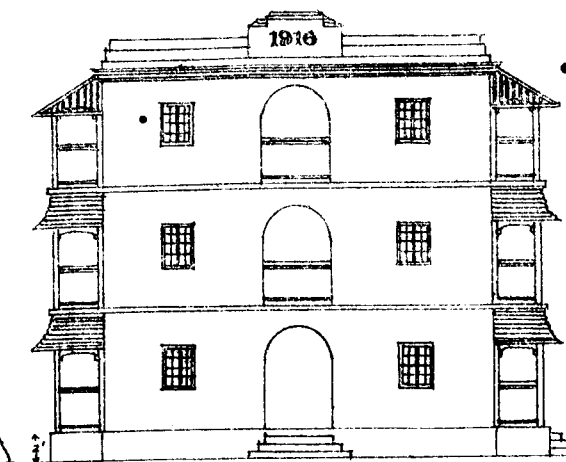
FRONT ELEVATION



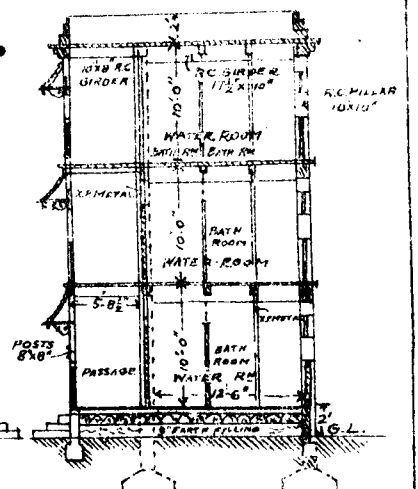
GROUND FLOOR PLAN



CROSS SECTION



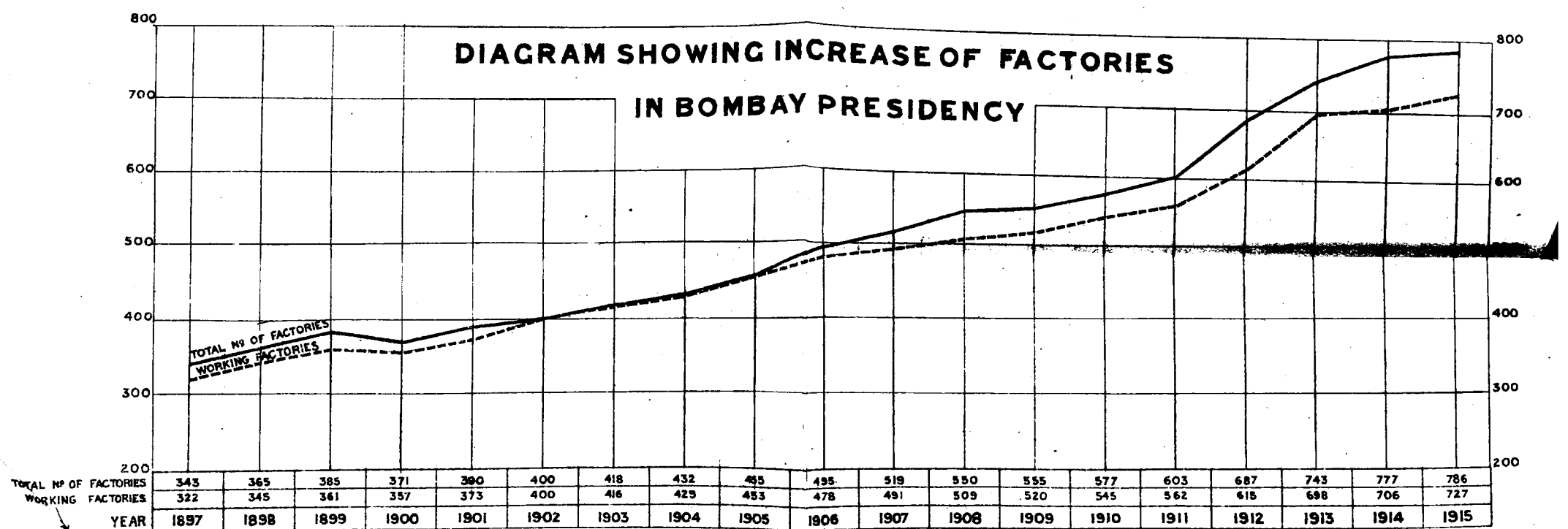
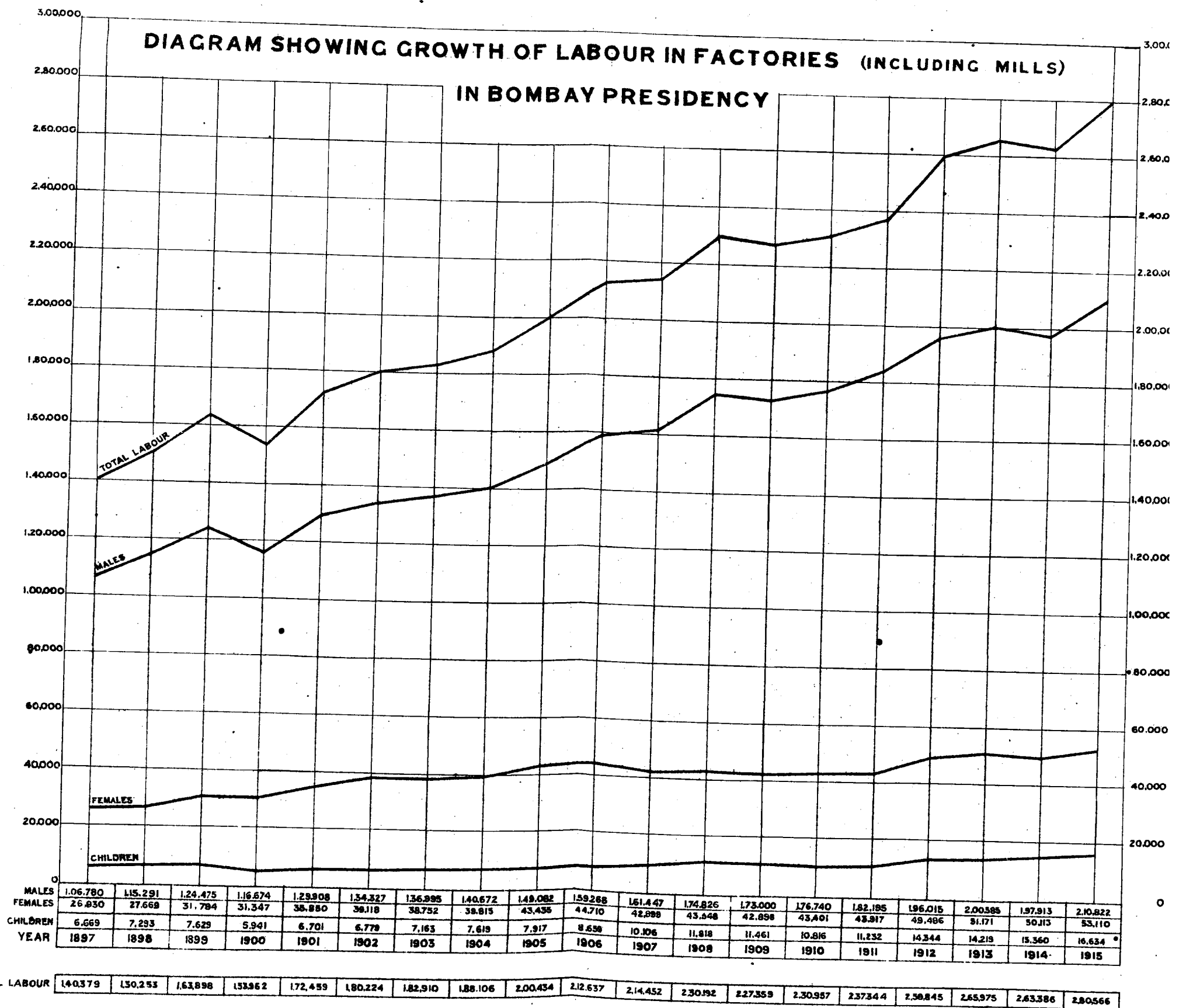
SIDE ELEVATION



SECTION
THRO' BATH ROOMS.

R. B. Harshin
L.C.E.
ASST. ENGINEER.

R. B. Harshin
A.R.B.A.
OFF. TRUST ENGINEER.



THESE DIAGRAMS ARE PREPARED FROM FIGURES KINDLY SUPPLIED
BY CHIEF INSPECTOR OF FACTORIES BOMBAY PRESIDENCY.

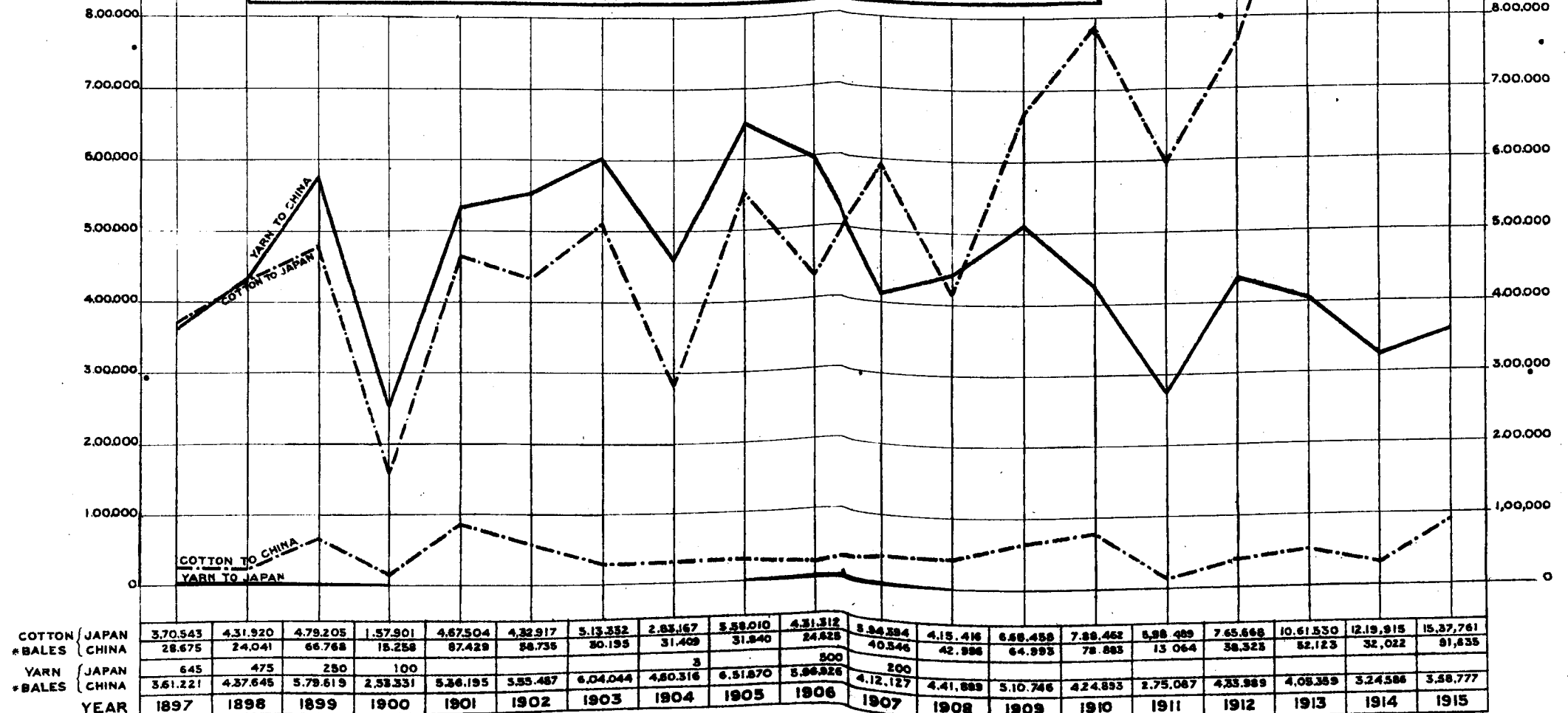
Govt Photodupl. Office, Poona, 1917.

A.E. MIRAMS, F.S.I., F.S.A., &c.,
CONSULTING SURVEYOR TO GOVT.

DIAGRAM SHOWING THE REMARKABLE INCREASE OF EXPORT OF COTTON TO JAPAN DURING THE PAST FIVE YEARS AS COMPARED WITH EXPORT PRIOR TO 1911

PARTICULARS	YEARS.			PERCENTAGE OF INCREASE		
	1897	1911	1915	1897-1911 14 YEARS	1911-1915 4 YEARS	1897-1915 18 YEARS
1 TOTAL EXPORT OF COTTON FROM INDIA.	14,60,486	24,32,192	28,97,732	66.53	19.14	98.41
2 TOTAL EXPORT OF COTTON FROM BOMBAY PRESIDENCY.	9,41,057	14,09,895	20,38,422	49.82	44.58	116.61
3 EXPORT OF COTTON TO JAPAN FROM BOMBAY PRESIDENCY.	3,70,543	5,98,489	15,37,761	61.52	186.94	315.02
4 EXPORT OF COTTON TO CHINA FROM BOMBAY PRESIDENCY.	28,675	13,064	91,835	-54.44	602.98	220.20
5 EXPORT OF YARN TO JAPAN FROM BOMBAY PRESIDENCY.	645	---	---	---	---	---
6 EXPORT OF YARN TO CHINA FROM BOMBAY PRESIDENCY.	3,61,221	2,75,087	3,58,777	-23.84	30.42	-0.67

THE FIGURES IN THE TABLE ABOVE REPRESENT NUMBER OF BALES OF 400 LBS. EACH.
- SIGN PREFIXED TO FIGURES INDICATES DECREASE.



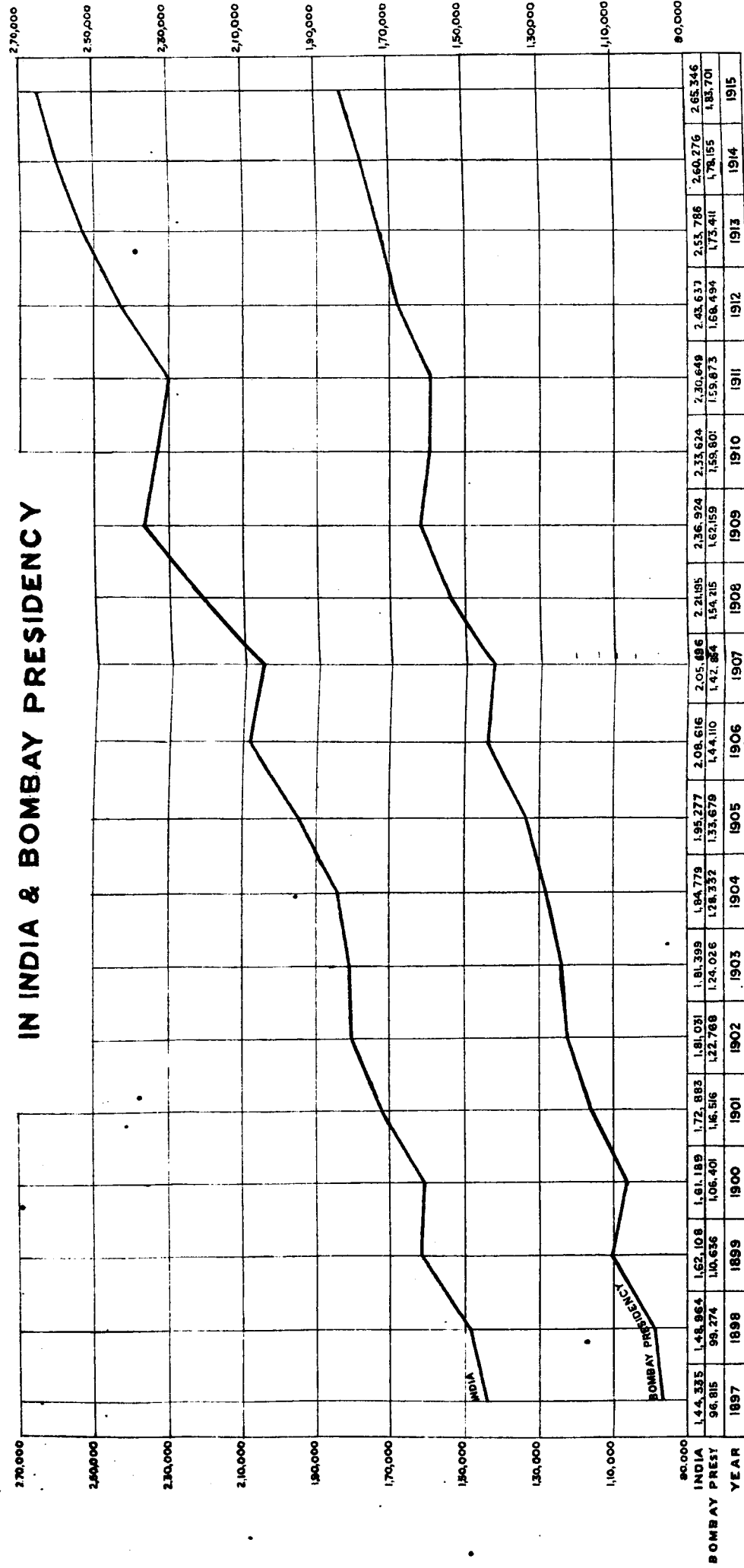
* OF 400 LBS EACH

THIS DIAGRAM IS PREPARED FROM FIGURES KINDLY SUPPLIED
BY THE BOMBAY MILL OWNERS' ASSOCIATION.

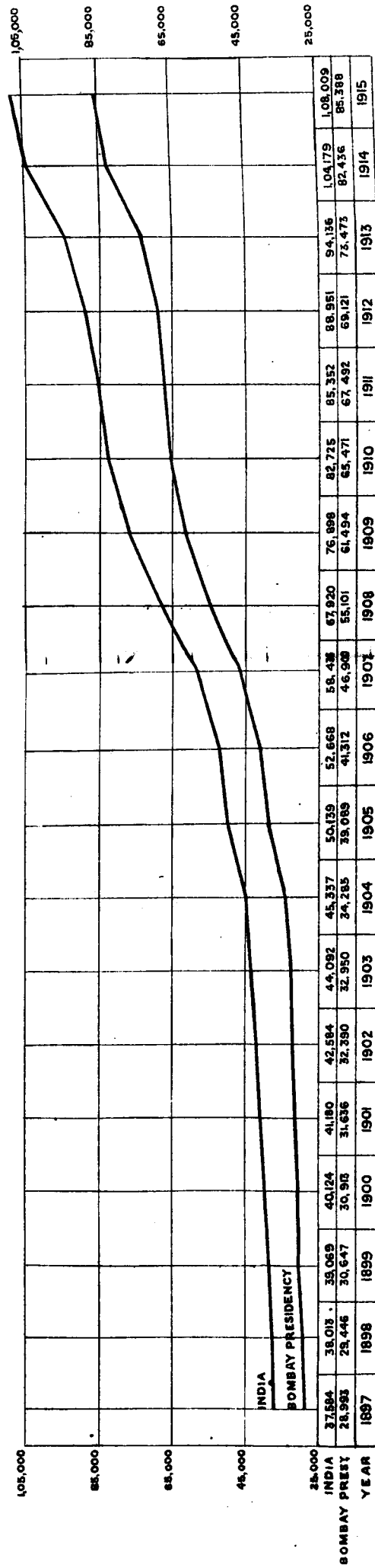
Govt Photodupco Office, Poona, 1917.

A.E. MIRAMS. F.S.I., F.S.A., AC.
CONSULTING SURVEYOR TO GOVT.
1-2-17

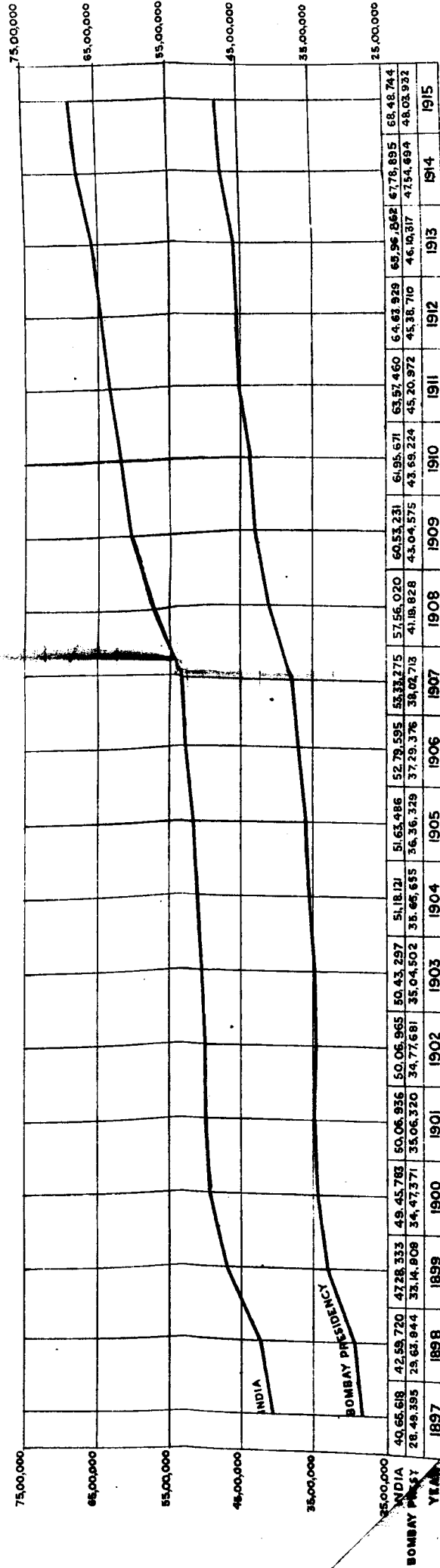
DIAGRAMS SHOWING PROGRESS OF MILL INDUSTRY
IN INDIA & BOMBAY PRESIDENCY



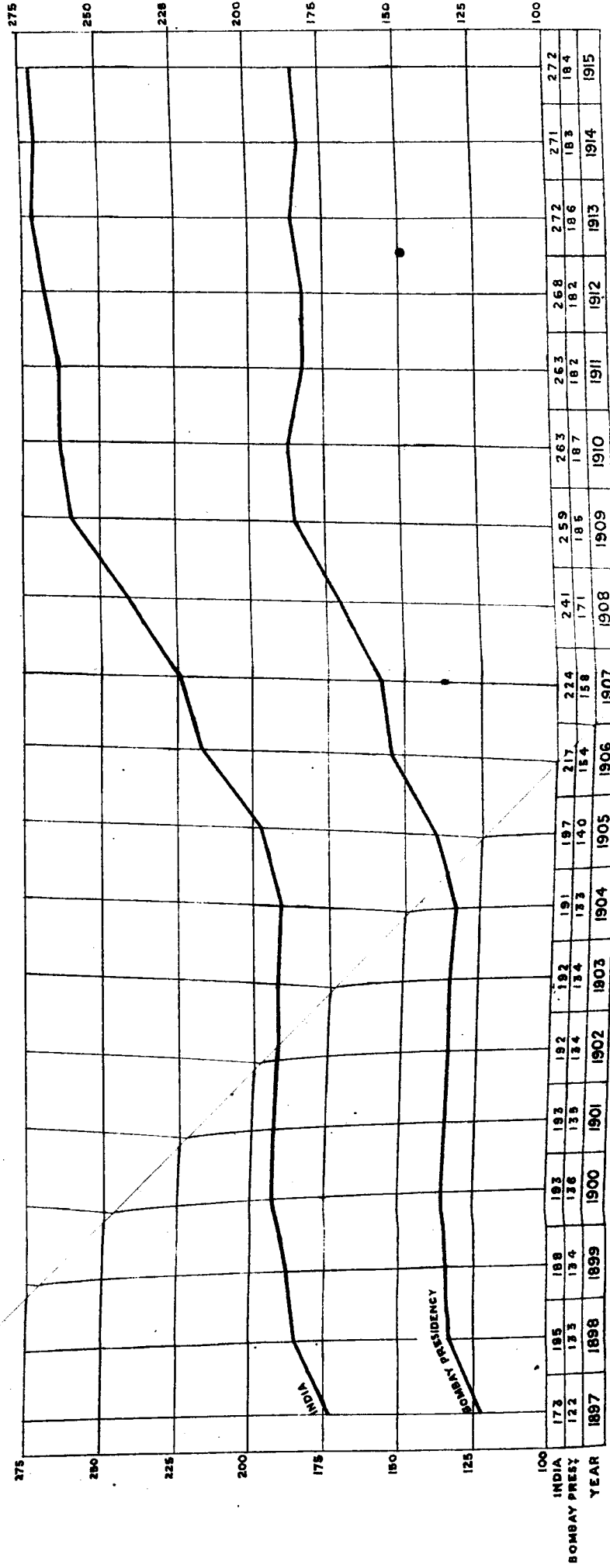
DAILY NUMBER OF HANDS EMPLOYED



NUMBER OF LOOMS



NUMBER OF SPINDLES



THESE DIAGRAMS ARE PREPARED FROM FIGURES KINDLY SUPPLIED
BY THE BOMBAY MILL OWNERS ASSOCIATION

NUMBER OF MILLS

Consulting Engineer Office, Poona, 1917

A.E. MIRAMS, F.S.I., F.S.A., &c.,
CONSULTING SURVEYOR TO GOVT.

APPENDIX A.

LETTER ADDRESSED TO ALL MILL AND FACTORY OWNERS IN THE BOMBAY
PRESIDENCY AND TO MANY IN OTHER PARTS OF INDIA.

No. 707 of 1916.

21st November 1916.

From

A. E. MIRAMS, Esq., F.S.I., F.S.A., &c.,

Consulting Surveyor to the Government of Bombay, Poona.

Dear Sir,

Housing of Factory Employees.

By desire of Sir Thomas Holland, Chairman of the Industries Commission, a memorandum is being submitted to the Commission dealing with the above subject. It is quite unnecessary to remind you of its extreme importance from the Factory and Mill Owners' point of view. It is clearly the business of the employer of labour to consider carefully the conditions which will conduce to increased production and to study the means whereby his increased wealth may lead to an improvement in the physical and social welfare of his employees.

In a survey of this nature the proper housing of the Working Classes must of course take a very prominent place. It is generally admitted that the existing housing of the Working Classes in this country does not tend to improve their physical, moral or social status, and indeed is the direct cause of their want of stamina and diminishing earning power.

In order that a final solution may be arrived at as to the best means of improving the conditions of these people, it is of the utmost importance that the essential facts should be correctly ascertained. It is to this end that your hearty co-operation is invited. The purpose of this investigation is primarily to find out exactly what the conditions are, so that appropriate action may be taken to bring about their amelioration.

I am enclosing herewith a list of questions which I ask you to be good enough to have very carefully answered. I need hardly say that the questions only indicate to a slight extent the nature of the enquiry which is being made. I desire to impress upon you the fact that you would thus be aiding in no small measure the solution of a problem which vitally concerns yourself as an employer of labour, as well as a citizen of an important commercial town.

Will you kindly have the form completed and returned to me within the course of a few days?

Yours faithfully,

(Signed) A. E. MIRAMS,

Consulting Surveyor to the Government of Bombay.

APPENDIX B.

(being questions accompanying Appendix A).

HOUSING OF FACTORY EMPLOYEES IN INDIA.

Questions.	Reply.				
1. Name of Factory					
2. Locality and Town					
3. Number of employees. { (a) Males (b) Females (c) Children (d) How divided as to Caste	Hindus.	Mahomedans.		Others.	
4. Hours of working and Rate of daily wages. { (a) Jobbers (b) Spinners (c) Weavers (d) Children (e) Others					
5. Number of working days per month		Days.			
6. Average attendance of employees per month. { (a) Jobbers (b) Spinners (c) Weavers (d) Children (e) Others					
7. Do you experience any difficulty in obtaining labour? If so, why and during what period of the year?					
8. In your experience what are the diseases most common amongst your employees?					
9. Number of deaths per annum among your employees during each of the last 5 years.	1911.	1912.	1913.	1914.	1915
10. Have you made any provision for housing your employees? If so, please state— (a) Area of land so utilised (b) Its position with reference to your factory or mill. (c) Capital expenditure incurred for— (i) Land (ii) Building (d) Gross annual rents (e) Gross annual expenditure (f) How many separate tenements have been provided? What is the number of total occupants of each? (g) Number of employees so housed— (i) Males (ii) Females (iii) Children (iv) Families (h) Are tenants selected? (i) Is there always a demand for accommodation? (j) Are you aware of any demand from your own employees for additional accommodation? (k) Was the accommodation ever vacant, and if so, what do you think it was the result of? (l) Is the result of the provision of this accommodation that the employees remain permanently in your service?					
11. Please state your own views generally on the subject of housing of Factory Employees.					

APPENDIX C.

PROVISION OF HOUSING ACCOMMODATION.

SUMMARISED REPLIES TO QUESTION 11 OF APPENDIX B WHICH GIVES OPINIONS OF MANAGERS AND AGENTS OF FACTORIES IN INDIA ON THIS QUESTION.

Ahmedabad.

1. *The Ahmedabad Advance Mills Co., Ltd.*—Employees 1,340. Has provided chawls for nearly 300 employees. Is constructing additional accommodation. Capital expenditure on existing accommodation :—Buildings Rs. 12,000 ; gross rent Rs. 600 ; expenditure Rs. 286 ; net return on building 2·6 per cent. "We have all along been of opinion that the Mill Companies should do their best to provide sanitary dwellings somewhere near the mills for the operatives and we have been acting up to our convictions to the best of our ability." 5
2. *The Imperial Iron Works.*—Employees about 200. Provide no accommodation. In reply to question No. 7 state :—"We experience great difficulty in obtaining skilled labour throughout the whole year. With the higher wages the employees get indifferent to work and idle and they do not regularly attend. Several of them are addicted to the drink habit, and as long as they have sufficient to maintain themselves they will not care to go to work. This is a factor that interferes with the working of factories." Solution :—"Give them education and provide housing accommodation." "No doubt that many of the factory owners will take steps in the direction of providing housing accommodation, but unfortunately the present building rules regarding the appropriation of agricultural lands to non-agricultural purposes hamper them to a great extent. We really believe that Government ought to come to the rescue of the factory owners by giving them a measure of latitude by interpreting the rules in a liberal spirit instead of strictly enforcing them. What we mean is that the spirit of the rules should be observed and not the letter." 10
3. *The Ahmedabad Victoria Iron Works Co., Ltd.*—Employees 136. Provide no housing accommodation. "As we depend on out-station moulders to man our moulding-shop as much as on local supply, a small block of, say, from 16 to 20 rooms would be a welcome adjunct to the works. In our opinion, precisely because these foreign (*up-country*) moulders are rather irregular in their habits, the provision of decent quarters is bound to influence their habits, inasmuch as it will wean them from the society of questionable characters, besides enabling us to exercise some sort of control (extra-factory control) on their ways of living. Our emphatic opinion is that one of the palliatives of scarcity of labour will be supplied by the provision of some kind of residential facilities to those who migrate to Ahmedabad in search of employment. This is, apart from any altruistic considerations, purely a business proposition. Want of housing facilities for mill employees is a crying need of the city." 15
4. *The Aryodaya Spinning and Weaving Mills Co., Ltd.*—Employees 1,923. Provide 117 tenements for 350 of their employees. Cost of building Rs. 11,000 ; gross annual rent Rs. 1,300 ; and expenditure Rs. 200. Net return on building 10 per cent. Property held on low ground rent. Are erecting new chawls to meet demand. "We are in favour of having house accommodation for the employees, as well as having uniform dress and refreshments, etc." 20
5. *The Saraspur Manufacturing Co., Ltd.*—Employees 1,214. Provide 222 tenements (rooms and huts). Cost of building Rs. 33,000 ; gross annual rent Rs. 3,000 ; and expenditure Rs. 600. Net return on buildings 7 per cent. Remark :—"Owing to the inability of getting land for the purpose we have not been able to do anything in the matter to add to our existing accommodation." 25
6. *The Saraswati Oil and Manufacturing Co., Ltd.*—Employees 40. (1) "Housing may be supplied at a monthly rent equivalent to nearly half the rate current in the surrounding localities. (2) Shops should be established by the mill for selling of food-stuffs at moderate terms, thus securing purity of food-stuff, consequent health and economy for the employees." 30
7. *The Ahmedabad Spinning and Weaving Co., Ltd.*—Employees 1,992. Provide accommodation for heads only, and not for ordinary employees, at a cost of Rs. 5,000 on building and Rs. 3,000 on land ; gross annual rents Rs. 500 and expenditure Rs. 100. Net return 5 per cent. "If housing accommodation were provided for mill-hands, it is good both for the employer and the employee." 35
8. *The Ahmedabad Fine Spinning and Weaving Co., Ltd.*—Employees 216. Provide no housing accommodation for their employees, but remark :—"Workers are, like the current of a river, changing. Our candid opinion is that if there are some facilities of keeping certain workmen in the mill premises, it would be very convenient to the working of the mill. We do not approve the idea of housing in groups of mills as suggested by Mr. Mirams, because there is every practical possibility of poaching the labour and heavy strikes and internal feuds. So far as our inference from practical experience goes we can state that housing in groups will not be 40

APPENDIX C—continued.

successful, but housing for each factory within its own limits or outside, independent of any close neighbourhood of a similar other group, will be a practically feasible and lasting idea."

9. *The Bharatkhand Cotton Mills Co., Ltd.*—Employees about 700. Provide 150 tenements. Give preference to old hands in allotment of accommodation. "We are in favour of providing chawls for mill-hands so as to get permanent hands." 5

10. *The Raipur Manufacturing Co.*—Employees 848. Provide 194 rooms. State there is no demand for additional accommodation from their employees. Cost of land Rs. 4,000; building Rs. 43,000; gross annual rents Rs. 1,800; expenditure Rs. 100; net return 3.6 per cent. "We have found it very beneficial to provide accommodation for our employees, but it should be noted that we are outside the city limits, and until we provided accommodation, were always at a great disadvantage as regards supply of labour." 10

11. *The Purshottam Spinning and Manufacturing Co., Ltd.*—Employees 500. Provide 55 rooms; charge rent Re. 1-8-0 per room per month. Cost of land Rs. 3,500; building Rs. 11,000; gross annual rents Rs. 1,000; and expenditure Rs. 100. Net return 6.2 per cent. "Some of the employees remain in our service owing to this facility of housing in the neighbourhood of the mill premises." 15

12. *The Motilal Hirubhai Spinning Weaving and Manufacturing Co., Ltd.*—Employees 1,175. "By the provision of housing accommodation there shall be less difficulty for regular presence (attendance)." 20

Ahmednagar.

No accommodation for employees has been provided in this district by factory owners or managers. Rents being cheap, and all industrial concerns being only seasonal, no difficulty is generally felt.

Baroda.

1. *The Baroda Spinning and Weaving Co., Ltd.*—Employees 722. Intend to build some quarters in mill vicinity. "In mofussil housing accommodation on cheap scale is essential, but at the same time there should be Government co-operation, who should give suitable plots of land free, or with a very limited or nominal rent for a very long period." 25

2. *The Shri Sayaji Mills Co., Ltd.*—Employees 431. Provide chawls in the mill premises. Expenditure on land Rs. 2,550. Building Rs. 12,750. Gross rents Rs. 612. Gross expenditure Rs. 50. Net return 3.6 per cent. "It is necessary that there ought to be good sanitary houses for mill-hands. This we believe is advantageous to both the parties; the mill thus gets ready hands to work in time (without being late) and useful for in case of emergency. Also if they live for a pretty long time we believe a natural tendency of good-will towards the mills is created in them. These poor people generally live in unhealthy places and in vicious neighbourhood, which naturally have very bad effects on their health and morals which we believe may be avoided by proper supervision and by making provision for their recreation, and education by way of some lectures, 'kathas' or cinema views, etc." 30

3. *The Shri Sayaji Jubilee Cotton and Jute Mills Co., Ltd., Sidhapur.*—Employees 305. Provide 48 tenements. Expenditure on building Rs. 10,000; gross annual expenditure Rs. 200; gross rents Rs. 500; net return on building 3 per cent. "It is in the interest of the factory to provide housing accommodation for its employees." 35

4. *The Maharaja Mills Co., Ltd.*—Employees 549. Provide no housing accommodation. "In cities like Bombay and Ahmedabad provision of housing is essential." 40

Belgaum.

The Gokak Water Power and Manufacturing Co., Ltd., and the Falls and Campbell Mills.—Employees 1,900. Provide some accommodation. Accurate figures as to rooms and expenditure not stated. "The advantages are that one can supervise the cleanliness of the colony, watch the health of the people, and generally take an interest in them." 45

Bijapur.

The Mahalaxmi Oil Mills Co., Ltd.—Employees 70. Intend to provide housing accommodation for ten of their best servants. "The provision of housing is advantageous to the concern from all points of view. The employees will be punctual; we can look after their sanitary conditions of living. In the absence of this provision what the employees do is to hire the cheapest possible house; result illness, which inconveniences the employer very much. Since they are ill, deduction of wages, if resorted to, adds to their hardship." 55

APPENDIX C—continued.

Bombay.

1. *The Morarjee Goculdas Spinning and Weaving Mills.*—Employees 3,262. Have provided one chawl of 32 tenements of two rooms each, as a first experiment for housing 264 persons. Expenditure on land Rs. 10,000 and on building Rs. 28,000; gross annual rents Rs. 2,730; gross expenditure Rs. 840. Net return nearly 5 per cent. In reply to question No. 10:—"Not necessarily. But given chawl accommodation on the model of the Improvement Trust Chawls, and given that the rental is reasonable, say from 1½ to 2 rupees per month for an ordinary average operative earning Rs. 12 to 15 per month as wages, and given other facilities to obtain supplies of domestic consumption on the spot, there is no reason for the employee who is the breadwinner of the family to change the mill. Almost all mills give advances to the extent of about 60 to 70 per cent. of the wages. Were the hands of a mill to congregate so as if they lived in a self-contained and self-sufficing village, which affords all facilities generally needed for the household, their attachment to the mill where such facilities are opened would be great. But it must be borne in mind that when a mill hand can obtain a more remunerative employment in another factory which affords no facilities, he would never think of remaining in his old place. A fractional minority which has a sentimental attachment might remain fast; but the majority, it must be frankly acknowledged, are devoid of any sentiment. Sentiment only comes by cultivation, for which education is the first essential. Another deterrent to permanent attachment is the migratory character of a large operative population. The hands on the least plea rush to their villages. If on their return they have some near relations working elsewhere they would sooner transfer there and care very little to be in the old place even if facilities were afforded. In short, the average factory hand is unthinking and easily misled by relations or other designing persons." In reply to No. 11:—"It is now universally recognised that suitable sanitary accommodation to house the operatives in a factory as far as possible near the seat of their work is really in the interests of both. The mutual benefits are obvious. But many of the cotton factories plead their inability to build sanitary chawls for their work people for the simple reason that they have no spare funds. This difficulty the Government removed by amending the City Improvement Trust Act, authorising the Board of Trustees to advance a factory all the cost of the land and the building of the chawls. The moneys so advanced were to be repayable in 28 years; so far as is publicly known only two mill companies have partially availed themselves of the monetary facilities so generously afforded by legislation. But here another difficulty has been urged. There is such a scarcity of land in the vicinity of a mill. Not only is it scarce but is exceedingly dear when available. The cost is practically prohibitive. Again, building materials have risen from 25 to 40 per cent. The capital debt which a mill incurs under the circumstances is deemed prohibitive; Mill owners consider it problematical what may be the market value of the land and the buildings at the date of the redemption of the loan from the Trust. And yet meanwhile they have to pay the annual interest on the costly capital outlay." 5

2. *The New Kaiser-i-Hind Spinning and Weaving Co., Ltd.*—Employees 1,252. "Our view in this matter is that the Government should by legislation make it compulsory on large employers of labour to provide accommodation for at least ¼th of their employees near the factory. Although the Improvement Trust Act provides facilities for voluntary building of chawls for workmen, very few mill owners have taken advantage of the same. Under the circumstances, we strongly advise the Government taking legislative measures to make provision of accommodation for factory workmen compulsory." 10

3. *The Simplex Mills Co., Ltd.*—Employees 2,200. Provide no accommodation as their mill is situated in one of the best labour centres. "Housing of factory employees is very important; it should be well considered by the millowners whose mills are situated in localities where housing accommodation is not available." 15

4. *The Madharji Dharamsi Manufacturing Co., Ltd.*—Employees 2,339. Provide 131 rooms. Expenditure on land Rs. 13,000; building Rs. 35,000; gross rents Rs. 6,000; gross expenditure Rs. 1,500. Net return over 9 per cent. "It is very advantageous to house the employees as they are very useful in case of emergency." 20

5. *The Bomanjee Petit Mill.*—Employees 2,486. } Provide accommodation, viz., 157, 56
The Dinshaw Petit Mill. " 2,480. }
The Manockjee Petit Mill. " 5,197. }

and 217 rooms, respectively. Expenditure on land:—held on lease, Rs. 30,000, and Rs. 19,800, respectively; expenditure on buildings Rs. 86,438, Rs. 20,802, and Rs. 1,21,787; gross rents Rs. 4,824, Rs. 1,344 and Rs. 6,936; gross expenditure Rs. 1,540, Rs. 350 and Rs. 1,750. Net return 3.7 per cent., 2 per cent. and 3.6 per cent., respectively. "If housing accommodation for mill hands is provided in close proximity to the mills in which they are employed, it would be a source of mutual advantage. The employers fully realise this and do what they can towards supplying the want. In most cases however they are handicapped from doing anything substantial in this direction owing to several disabilities, such as want of building space, financial difficulties, etc." 25

APPENDIX C—continued.

- 5A. *The Framji Petit Spinning and Weaving Co., Ltd.*—Employees 2,918. "We are very anxious to provide chawls for accommodating our employees, as we believe to do so would be of mutual advantage; but we are unable to build chawls on account of there being no available land in the neighbourhood of the mill." 5
6. *The Sassoon Spinning and Weaving Co., Ltd.*—Employees 2,675. Provide no accommodation. "An excellent scheme, provided vacant land in the compound is available; but we do not think mill chawls would be a success for the following reasons:—
- (a) Joint family system.
 - (b) Different castes and communities."
7. *The Sassoon and Alliance Silk Mill Co., Ltd.*—Employees 806. "We do not think mill chawls would be a success for the following reasons:—
- (a) Joint family system.
 - (b) Different castes and communities."
8. *The Khatau Makanjee Spinning and Manufacturing Co., Ltd.*—Employees 1,752. Provide no accommodation, but intend to, if land were available. "We approve of the factory hands being housed in the neighbourhood of the factory and the cleanliness of the tenements attended to, by the employers." 15
9. *The Victoria Mills, Ltd.*—Employees 1,276. Provide no accommodation but will be building two chawls in 1917. "If we could provide sufficient accommodation for our labour it would be a great benefit to the Mills as there will be no shortage of labour; and the employees will be able to get accommodation at low rents." 20
10. *The Sanj Vartaman Printing Press.*—Employees 104. "Our employees live far from the Press (Fort) as they cannot get cheap accommodation in the same locality. Some steps should be taken for providing housing accommodation to suit their income." 25
11. *The Chotani Saw Mills.*—Employees 150. Provide no accommodation for the small number of their operatives. "Housing of factory employees will do great good to the labourers; and be a means to increasing their physical, moral and social status."
12. *The Napier Foundry.*—Employees 149. "The labour could be controlled better if housing is provided." 30
13. *The Nesbit Bros. Iron Works.* } Employees about 500.
The Byculla Iron Works. } " " 1,100.
- "Being situated in a populous neighbourhood there has been no difficulty, so far as we are aware, in the matter of housing."
14. *The G. I. P. Railway Workshops at Matunga.*—Employees 5,496. Provide accommodation for Fire Brigade, watch and ward staff. Expenditure on land in round figures 1,000 and on buildings Rs. 20,000; rents Rs. 400; gross return 2 per cent. "Consider it would be advantageous to provide more living accommodation near the shops, but the dwellings must not be costly. Experimental houses erected in the neighbourhood have not been altogether successful, chiefly due to their isolated position, etc. What would probably be more attractive would be a fairly large residential area of cheap but well arranged houses provided with suitable bazaar, school, etc., etc." 35
15. *The G. I. P. Railway Locomotive Works, Parel.*—Employees 5,197. Provide no housing accommodation for operatives. "In favour of having the staff housed in comfortable and sanitary quarters, as close as possible to their work. They are thus kept healthy and in a better condition to do their work. They are also relieved of the exactions of rapacious landlords and therefore not so liable to move away to another neighbourhood necessitating them to change their employments." 45
16. *The Century Mills.*—Employees 3,309. } Provide no accommodation. "If one
The Zenith Mills. Do. 1,547. } desires to house one's own employees one must be prepared to house 3 outsiders per every worker in the mill. The employees do not recognise the benefit of clean housing or regulations regarding sanitation and overcrowding. Unless they can be educated to appreciate the benefits of good housing and reasonable regulations, any habitations put up for their welfare are not utilised until all the filthy tenements in the neighbourhood are filled to their utmost capacity." 50
17. *The Empire Dyeing and Manufacturing Co., Ltd.*—Employees 67. "The housing of operatives should be done on the principle of native military quarters. These should be in extensive lines with broad verandahs and open spaces in front. There should be no stories. The principle of chawls to be completely avoided. This cannot be done in proximity of mills: which means taking them to some distance. Rents should be very low and specially cheap, and tram and railway facilities given. The habit of herding together of operatives belonging to one caste and one village is so inherent that it should be eradicated by education and patience, and hence the direst of necessity for education." 55

APPENDIX C—continued.

18. *The New City of Bombay Manufacturing Mill, Ltd.*—Employees 1,289. Provide no accommodation. "The only sanitary way of housing mill operatives is not in chawls but in lines same as Railways do for their menial staff." 5
19. *The Bombay Electric Supply and Tramways Co., Ltd.*—Employees 544. "We have made provision for housing a portion of our traffic employees, but not at present for those of the workshops. Our workshops are shortly to be removed from Colaba to Kingsway, where we propose erecting a chawl for the employees, plans for which are already before the Directors." 10
- "Are strongly in favour of the provision by companies of residential accommodation for their factory employees, both in the interest of the employees themselves and of the employers. Such provision improves the health and moral of the former, and helps to attract them to the service. But the fact must be faced that properly constructed chawls, without overcrowding, cannot be made self-supporting in Bombay. Also there are often difficulties in getting the men to inhabit them, some of whom prefer their great independence of bazar life. But I think this is largely due to ignorance and prejudice and can be overcome." 15
20. *The Garlick's Foundry.*—Employees 208. Provide 25 tenements. Cost of land Rs. 10,800; buildings Rs. 5,000; gross rents Rs. 720; and expenditure Rs. 600. Net annual return $\frac{1}{2}$ per cent. "The average skilled mechanic or turner is a 'bird of passage.' Firms have no hold over their men as long as Railways and Port Trusts pay exorbitant wages when they are busy. Small firms cannot keep good men all along." 20
21. *The Jacob Sassoon Mill.*—Employees 5,016. Contemplate to erect a 5-storied chawl in place of the small one existing. "We are of opinion that the proper sanitary housing of factory operatives either in the mill compound or in close proximity to their daily work is a matter of pressing necessity. It will conduce to their health and they will be enabled to earn better wages since they will be at their machines at starting time and commence work fresh, without being fatigued by a long walk from distant parts of the town." 25
22. *L. A. P. & Sons Metal Stamping Works.*—Employees 26. "It will be a relief to employees if housing were provided."
23. *The Burma Oil Co., Ltd.* (Bulk Oil Installation).—Employees 436. "In our particular installation we do not consider it either advisable or necessary to provide accommodation for our employees." 30
24. *The Dastur Ashkar Printing Press.*—Employees 70. Provide no accommodation. "Workmen generally complain of high rents."
25. *The Caxton Printing Works.*—Employees 245. "Our works being situated in the Fort we are unable to give consideration to the provision of tenements to our employees." 35
26. *His Majesty's Mint.*—Employees 1,162. Provide no accommodation. "The housing of Mint employees is not practicable in view of the situation of the Mint."
27. *The Bombay Flour and Oil Mills Co., Ltd., Nos. I and II.*—Employees 119 and 149. Provide no accommodation. "Housing would not be feasible in the case of our mills, as our staff is constantly changing." 40
28. *The Chhoi Silk Mills Co., Ltd.*—Employees 295. Provide no accommodation because there are many chawls in the neighbourhood of the mill which could accommodate their small number of operatives. "We believe housing scheme is advisable to be put through."
29. *The Alexandra, and The E. D. Sassoon, Mills, and The E. D. Sassoon Turkey Red Dye Works.*—Employees 2,112, 2,770, and 367 respectively. "Have no space available for building purposes, and ground in the neighbourhood is difficult to obtain." 45
30. *The Hongkong Spinning and Weaving Mill Co., Ltd.*—Employees 867. "It is better to have house accommodation for employees working in the mills as it greatly helps them to be more attentive and regular in their work." 50
31. *The Swadeshi Mills Ltd., Kurla.*—Employees 2,994. Provide 365 rooms. Expenditure on land Rs. 23,500; expenditure on buildings Rs. 1,39,000; gross rents Rs. 5,400; gross expenditure about Rs. 3,800. Net return a little over 1 per cent. "We believe that the mill companies should in their own interests as well as in those of their employees, provide suitable sanitary accommodation for the operatives." 55
32. *The Kohinoor Mills, Ltd., Nos. I and II, Dadar.*—Employees 3,079. Provide no accommodation; negotiations were opened with the Improvement Trust in 1914 previous to outbreak of war, but the question has since been dropped, owing to excessive increase in cost of materials. Will certainly open the question again later on."
33. *The Coorla Spinning and Weaving Mills Co., Ltd.*—Employees 1,762. Provide no accommodation. Previous arrangements did not succeed. "It has generally been the experience that mill hands do not choose to live in chawls owned by agents as it entails a certain amount of supervision which is resented by them." 60

APPENDIX C—continued.

34. *The Textile Mill.*—Employees 3,084. Provide 8 chawls with 266 rooms. Expenditure on buildings Rs. 1,09,236; gross annual rents Rs. 8,460; approximate annual expenditure Rs. 500. Net return from building alone 7 per cent. "Most difficult to keep the accommodation sanitary: the least restriction to ensure better healthful conditions is resented as unwarrantable interference."

35. *The Dye Works, Dadar.*—Employees 480. Provide 96 rooms for 100 persons. Expenditure on building, Rs. 32,570; gross rents Rs. 2,100; gross return from building alone over 6 per cent. "Housing accommodation provided to the work people on sanitary principle would be advantageous in regard to health and regular attendance at work."

36. *The Lord Reay Mills.*—Employees 1,064. Provide no accommodation. "In our opinion the employees should be housed as near as possible to the factory, and the accommodation must be both cheap and in healthy surroundings. There is a tendency of overcrowding which should be checked as far as possible. Being naturally dirty in their habits, it will not take long even for the healthiest locations to get dirty and therefore it is necessary to consider this point side by side with housing accommodation. The need for housing employees is great; but it is open to question whether factory owners could take up the work with advantage. It is found that employees are reluctant to occupy a house where there is compulsory recovery of rents, as would be the case in factory-owned houses, being accustomed to evade payments on account of general indebtedness amongst them. It is impossible to compel them to occupy particular houses, as by doing so we would be scaring them away. Without educating them no scheme would be quite successful."

37. *The Alliance Cotton Manufacturing Co., Ltd.*—Employees 1,186. Provide 48 rooms. Expenditure on land not stated; on building Rs. 20,000; gross rents Rs. 1,500; gross expenditure Rs. 600. Net return on building alone $4\frac{1}{2}$ per cent. "It would be a beneficial act to house them."

38. *The Colaba Land and Mill Co., Ltd.*—Employees 1,689. Provide 7 chawls containing 318 rooms. Expenditure on building Rs. 95,202; gross rents Rs. 17,860; gross expenditure Rs. 3,476. Net return on building 15 per cent. Offer no remarks.

Broach.

1. *The Broach Industrial Cotton Spinning and Weaving Co., Ltd.*—Employees 713. Provide accommodation. "It is in the interest of the factory owners that they should provide for the housing of their employees and should spread among them simple principles of sanitation, morals and brotherhood, and should inculcate on them the duties they owe to the Country and Crown. By providing for them sanitary housing the employees will be tempted to remain permanently in the service. Provision should also be made for the education of children in the service of mills."

2. *The Broach City Press Co., Ltd.*—Employees 48. Provide free accommodation for 8 families. Expenditure on land Rs. 40; building Rs. 1,200; gross expenditure Rs. 35. "The accommodation is much liked by the employees for the better sanitation available."

3. *The Mofussil Cotton Manufacturing Co., Ltd., Broach.*—Employees 827. Provide 150 rooms for 423 persons. Land held on lease. Expenditure on building Rs. 11,000; gross rents Rs. 900, just cover the charges on upkeep. "Provided the accommodation is occupied by low caste upcountry people—eight annas per month is the maximum rent we can expect to get."

4. *The Whittle Spinning and Weaving Co., Ltd., Nos. 1, 2 and 3.*—Employees 1,493. Provide 349 rooms. Land held on lease. Expenditure on building about Rs. 10,000. Gross rents Rs. 1,301. Gross expenditure Rs. 700; net return on buildings 6 per cent.

5. *The Narandas Rajaram and Co. Ginning Factory.*—Employees 113. Provide free accommodation for 8 families. Expenditure on land Rs. 90; building Rs. 1,200; gross expenditure Rs. 50.

6. *The Palej Lal Gin Factories Nos. 1, 2 and 3.*—Employees 172, 63 and 149 respectively. Provide free accommodation of 15, 12 and 8 tenements. Expenditure on land Rs. 1,500, Rs. 50 and Rs. 2,000; on building Rs. 1,200, Rs. 800 and Rs. 2,500; gross expenditure Rs. 50, Rs. 30 and Rs. 200 respectively.

Dharwar.

1. *The Victoria Cotton Press Co., Ltd., Hubli.*—Employees 10 permanent. Provide free accommodation for the Manager and Engineer. Land held on lease; expenditure on building about Rs. 6,000. "It would be advantageous for a big factory owner to provide his employees with suitable accommodation as generally the poor have to live in most insanitary portions of a big city and are liable to diseases prevalent in those portions. A factory is virtually a gainer if its employees are housed in chawls built on sanitary principles as the attendance would be regular, resulting in greater output."

APPENDIX C—continued.

2. *The George V Ginning Factory, Guttal.*—Employees 36. Provide 12 rent-free quarters for permanent staff. Expenditure on land and building Rs. 15,000; on upkeep and repairs Rs. 300 annually. "We procure our skilled labour from large towns and unless they are housed, there is no likelihood of their ever being readily available."

3. *The Gadag Cotton Spinning and Weaving Mill.*—Employees 389. Provide 61 tenements for 150 persons. Land on perpetual lease. Expenditure on building Rs. 8,000; gross rents Rs. 225; gross expenditure Rs. 50; net return on building 2 per cent.

4. *The Ranabennur Ginning and Trading Co., Ltd.*—Employees 36. Provide rent-free quarters for permanent staff. Expenditure on land and building Rs. 20,000; gross expenditure Rs. 200. "Free quarters in the factory compound are a sure inducement to skilled workmen and employees of superior grades who have always to be imported from larger towns and cities."

5. *The Alexandra Press Factory.*—Provide rent-free accommodation for their Engineer. Expenditure on building Rs. 2,000; annual expenditure Rs. 50 for upkeep.

6. *The West's Patent Press Co., Ltd., Gadag.*—Permanent employees 17. Provide free accommodation for 10 of them. Expenditure on building Rs. 1,000; gross expenditure Rs. 15.

7. *The M. and M. S. Railway Press.*—Employees 309. "It is certainly better and more profitable to house factory staff nearer to the factory in bustees provided with good sanitary arrangement and pure water supply. But the advantage is generally availed of by those who join the factory from outside stations. The men whose family dwellings are near the factory do not like to live in bustees, however good the arrangements may be. I think it is advisable to arrange for them health lectures by experts from time to time in order to impress upon them the advantage and necessity as well as the ways and means of observing sanitary rules. Even in bustees I have noticed some of the inmates live in such a dirty state and use such unwholesome food that the best possible sanitary arrangements afford them very little help. I, therefore, think that they must be taught the best ways of keeping their health."

"Facilities should be given to the factory staff for exercise and other recreations and amusements on holidays. I think they might be trained to do drilling like the policemen, which gives a good deal of exercise to the whole system and at the same time makes them useful in various other ways."

"Arrangements should be made to give some sort of education to the factory people. My experience is that a man with some education is more useful and more amenable to discipline, and can give better output and execute the work in a more intelligent way than one with no education at all. But at the same time I must say that the facility for educating the men should be given free of cost; otherwise it will not induce men to take advantage of the same. It is better to make it compulsory."

"The most important thing, both for the employer and the employee, is to improve the moral status of the men. By this means I have managed to improve the output wonderfully."

"The factory men should be given occasional increments by way of encouragement for good work: otherwise all good men will lose heart. The increment should be based on merits and not on seniority to ensure a better output. I have seen good workmen turned into useless men for want of encouragement."

Karachi.

1. *The McLeod Road Iron Works.*—Employees 150. Provide no accommodation. "Whilst the Karachi Municipal authorities are we believe doing their utmost to improve the condition of working class dwellings, we consider a lot more could and ought to be done. Both employees and employers would benefit thereby as the men would become more physically fit for their work."

2. *The Commissioner's Printing Press.*—Employees 164. Provide no accommodation. "The housing of factory employees would tend to improve their physical status and increase their earning power."

3. *The Daily Gazette Press, Ltd., Karachi.*—Employees 110. Provide no accommodation. "We are being forced to provide expensive mechanical means of labour in the absence of human labour. The schools are educating boys with an eye solely to the examinations instead of with an eye to the future careers of the boys. The school authorities are entirely out of touch with employers of (skilled) labour and with the (skilled) labour market."

4. *The Burmah Oil Co. (Bulk Oil Installation), Karachi.*—Employees 187. "In our case it is not possible to provide housing on account of restricted space."

5. *The Engineering Co., Karachi.*—Employees 82. Accommodation not necessary as their works are located within half a mile from the bazars. "If labour is imported the men should be housed. A good control can be had on the employees when housed."

6. *The Asiatic Petroleum Co. (India), Ltd.*—Employees 136. Provide accommodation for night and day watchmen only.

APPENDIX C—continued.

Kathiawar.

1. *The Shri Lakhaji Raj Mills Co., Ltd., Rajkot.*—Employees 100. "Housing in the mill premises is necessary, which we intend to do in future." 5
2. *The Sir Waghji Wadhawan Camp Manufacturing Co., Ltd.*—Employees 550. Provide no housing accommodation because no land is available in the vicinity. "Our Board think that housing accommodation to be given by the Company is advantageous as it keeps labour steady." 5

Khandesh (East).

1. *The Pratap Spinning, Weaving and Manufacturing Co., Ltd., Amalner.*—Employees 997. Provide 180 tenements for 552 persons. Expenditure on land Rs. 3,500, building Rs. 39,000, gross rents Rs. 3,000; gross expenditure Rs. 400; net return 6.1 per cent. "Housing is most essential and is in the interest of the employer. If practicable there should come into existence some sort of a standard for rooms and chawls in conformity with which all accommodation be built by factory owners." 10
2. *The Ramchand Hukunchand Ginning Factory, Dhamangaon.*—Employees 82. Provide rent-free accommodation for 50 persons. Expenditure on land Rs. 600; on building Rs. 400; gross expenditure Rs. 50. "The employees must be provided with clean and ventilated houses. There should be no overcrowding." 15
3. *The Khandesh Spinning and Weaving Mills Co., Ltd.*—Employees 1,327. Provide 270 tenements. Expenditure on land Rs. 10,000; buildings Rs. 45,000; gross rents Rs. 2,700; gross expenditure Rs. 1,000; net return 3 per cent. "Only the outstation employees live in the accommodation we have provided, which, being more than enough, has to be let out to others not working in our factory." 20
4. *The Faizpur Cotton Press Co.*—Employees 80. Provide rent-free accommodation for 20 families of upcountry workmen. Expenditure on land Rs. 5,000; building Rs. 7,000; gross annual expenditure Rs. 250. 25
5. *The Motilal Manickchand Gin Factory.*—Employees 172. Provide accommodation for 90 persons. Expenditure on building Rs. 9,000; gross annual expenditure Rs. 300. 30
6. *The Mohamedally Essabhoj Gin Factory.*—Employees 135. Provide 35 rooms for upcountry employees. No rent is charged. Expenditure on land (Rs. 300 rent); building Rs. 5,000; gross expenditure Rs. 200 annually. 30
7. *The Nowroji Pestonji Gin Factory, Varangaon.*—Employees 102. Provide rent-free accommodation for 12 families of upcountry employees. Expenditure on building Rs. 4,000; gross expenditure about Rs. 250 annually. 35
8. *The Express Gin Factory.*—Employees 150. Provide accommodation for 15 families. Expenditure on building Rs. 4,000; gross expenditure Rs. 200. 40
9. *The Nowroji Pestonji Gin Factory, Bodwad.*—Employees 160. Provide 16 blocks for upcountry workmen. No rent is charged. Expenditure on building Rs. 3,500. Land free hold. Expenditure on upkeep Rs. 200 annually. 40

Khandesh (West).

1. *The Dhunji Govindji Ginning Factory, Shirud.*—Employees 95. Provide 7 rent-free quarters for forty persons. Expenditure on land rupees one thousand; building 8 to 9 thousand; annual repairs Rs. 100. "It would be a blessing for the poor labourers if provision of housing were made by the factory owners." 45
2. *The Deboo Ginning Factory, Parola.*—Employees 99. Provide 5 tenements for 15 of their permanent employees. 45
3. *The Dvarkadas Ramdas Ginning Factory and Press, Shirpur.*—Employees 85 and 65 respectively. Provide rent-free accommodation. Expenditure on land Rs. 500; building Rs. 5,000 and that on upkeep very trifling in each case. 50
4. *The Volkart United Press Co., Ltd., Dhulia.*—Employees 80. Provide no accommodation. "Consider that it would be impossible to arrange accommodation for the housing of labourers such as are required in (seasonal) cotton presses." 50

Nawabshah.

1. *The Ralli Bros.' Cotton Press, Tando Adam.*—Employees 101. Provide free accommodation for 23 persons. Expenditure on land Rs. 375; building Rs. 5,000; gross expenditure Rs. 200. "It is advisable to house as many employees as possible as in the event of an epidemic of infectious or contagious character in the Town, the employees thus housed can be cut off 55

APPENDIX C—continued.

from the affected parts more easily, and as their quarters are, or should be, periodically inspected as to cleanliness there is less chance of disease springing up amongst them. The fact of being in close vicinity of the factory gives the employees a better chance of receiving their food regularly and in comfort, the result being that they work better and are more contented." 5

2. *The Manghammal Wadhmal Ginning Factory, Tando Adam.*—Employees 160. Provide 25 tenements. Charge no rent. Expenditure on land Rs. 600; building Rs. 900; gross expenditure Rs. 300. "The employees being in properly built houses keep better health." 5

3. *The Volkart Bros.' Ginning Factory.*—Employees 130. Provide 4 separate groups of huts and rooms. Figures as to the cost of land and building not stated. "In our factory we have separate coolies' quarters, of which however only a very small number of our labourers avail themselves." 10

4. *Madandas Shiroomal's Ginning Factory, Tando Adam.*—Employees 130. Provide rent-free accommodation of 20 rooms. Expenditure on land Rs. 200; building Rs. 500; gross expenditure Rs. 300. "The employees being near the factory have more time for rest." 15

5. *Madandas Shiroomal's Ginning Factory, Bhiria Road.*—Employees 60. Provide rent-free accommodation of 15 rooms. Expenditure on land Rs. 400; building Rs. 700; gross expenditure Rs. 200. "The employees being near the factory have more time for rest." 15

Poona.

1. *The Poona Municipal Works.*—Employees 40. Provide no accommodation. "Consider that the employers of labour should preferably make provision for the housing of employees for the reason that the staff could be kept under control. The employees in their turn would necessarily be kept aloof from the temptations that they would otherwise be subject to, for under the present arrangement no provision is made for their housing, the employees are as a rule given to excessive drinking and they consequently are entirely under the thumb of the money-lenders who charge exorbitant interest for the money advanced. Consequently the major portion of the wages are taken over by the money-lender, leaving the unprotected employees to run into heavier debts." 20

"If provision of housing of the employees is made by the factory owners with effective control over them in the initial stages, the position of the employees would be greatly improved and the employers of labour would also have at their command a willing and contented labour." 25

2. *The G. I. P. Railway Locomotive Works, Lonavla.*—Employees 285. Provide accommodation for European and Anglo-Indian Shop fitters. "Generally it would be more satisfactory to provide menials with housing accommodation at a moderate rent so that they could be better looked after by authorities in point of sanitation and health." 30

3. *The Yeravda Prison Press.*—Employees 300 convicts, and 62 paid hands. Provide accommodation of 24 rooms. "As an inducement to steady and efficient service the provision of quarters suitably built to suit various caste needs, and the position of the occupier in the works concerned is a distinctly good investment." 35

"The great drawback to most of the quarters erected in this district is the skimpy verandahs provided. Verandahs should be wide and open at the top, but so arranged that every privacy is secured to those using them." 40

4. *The Aryabhushan and Dnyan Prakash Printing Press.*—Employees 214. No accommodation is provided. "If it is possible to have two classes of tenements provided in the near vicinity of the factory, the factory hands will be under proper supervision of the managing staff who will be able to look after their education, health, habits, etc. If some capitalists will take up the question they will be doing immense good to the poor." 45

Sholapur.

1. *The Lakshmi Cotton Manufacturing Co., Ltd.*—Employees 3,590. Provide some accommodation and allow the operatives to settle in huts on their land. "Our best workers come from a neighbouring village and are probably happiest living in their own village dwellings. For the town dwellers we consider it best to provide good accommodation on our own land, for such as have no houses of their own." 50

The Vishnu Cotton Mills, Ltd.—Employees 2,700. Provide some accommodation and allow the operatives to settle in huts on their land. "Our best workers come from a neighbouring village and are probably happiest living in their own village dwellings. For the town dwellers we consider it best to provide good accommodation on our own land, for such as have no houses of their own." 55

2. *The Goculdas Cullianjee Barsi Cotton Press.*—Provide accommodation for the Engineer and Manager. "Labourers do not prefer living in the mill premises." 60

The Goculdas Cullianjee Barsi Ginning Factory.—Provide accommodation for the Engineer and Manager. "Labourers do not prefer living in the mill premises." 60

APPENDIX C—continued.

3. *The Karmala Ginning Factory*.—Employees 94. Provide 15 tenements. "It is better to make provision of good accommodation to employees to keep them healthy."

4. *The Barsi Light Railway's Locomotive, Carriage and Wagon Department*.—Employees 135. Provide accommodation. Figures of expenditure on land and buildings not stated. Rents are charged at 5 per cent. on the capital expenditure on buildings, and that the amount payable by the occupant is restricted to 10 per cent. of his salary. "Where labour is not obtainable locally, suitable arrangements for housing employees should be made."

5. *The Narsingirji Manufacturing Co., Ltd.*—Employees 2,050. Provide one chawl of 156 rooms. Expenditure on land Rs. 2,332; building Rs. 44,573; gross rents; Rs. 2,654; gross expenditure Rs. 493. Gross return 4.6 per cent.

Sukkur.

1. *The North-Western Railway, Sukkur*.—Employees 596. Provide accommodation for 92 families. Receipt and expenditure not stated. "Every man should live in the way it suits him best."

2. *The Century Flour Mills Co., Ltd., Shikarpur*.—Employees about 110. Provide complete set of lines for all the employees. Expenditure and receipt not stated. Charge no rent. "To get best work from the employees every factory should provide ample and comfortable accommodation, where possible."

Surat.

The Mission Press, Surat.—Employees 64. Provide 21 tenements. Figures as to expenditure on land and buildings not available. Gross annual rents Rs. 120. "Employees ought to be housed suitably by the factory."

BENGAL.

1. *The Standard Jute Mills, Tittaghar*.—Employees 3,929. Provide 671 tenements for housing 2,514 persons. Charge no rent. Annual expenditure Rs. 250 on upkeep. Have spent Rupees two lakhs (land Rs. 60,000 and buildings Rs. 1,40,000). "Consider accommodation is as necessary as the factory. Workers will go where best accommodation is offered, provided they are able to obtain at the premises food stuffs at same price as at other similar places."

2. *The Northbrooke Jute Mills, Hooghly*.—Employees 3,290. Provide 46 lines of 736 rooms for 2,944 persons. Make no charge for accommodation, water or electric light. Investment on land Rs. 30,000; on buildings Rs. 40,000. "Good housing for the employees is necessary if they are to settle down to be permanent hands. Hands who are constantly changing are, as a rule, inferior. Good housing accommodation tends to keep them satisfied and contented."

3. *The Dalhousie Jute Mills, Bhadreswar*.—Employees 4,164. Provide 2 pucca lines and kutcha huts for housing 2,800 persons. Expenditure on land and building 15 and 38 thousand rupees, respectively; annual rent from pucca lines Rs. 720; no rent charged for kutcha huts. Rs. 2,000 spent annually on upkeep. Annual loss Rs. 1,280 on Rs. 53 thousand investment, equivalent to little over 2 per cent. "It is to the advantage of the companies to house as many of their employees as possible as it not only helps to keep the employees permanently in the service, but also enables the company to generally supervise and keep the accommodation in good and sanitary condition, which from a health point of view is most necessary and assists greatly in keeping down disease. It also keeps the Company in touch with the workers in case of any trouble."

4. *The South Union Jute Mills*.—Employees 3,700. Provide 1,000 kutcha and 48 pucca rooms for 2,327 persons. Charge no rent. Spend Rs. 2,000 annually on upkeep. Total investment nearly 1½ lakhs of rupees.

"The housing of mill employees is a matter of extreme importance, both from the mill owners' and mill managers' points of view, as it is now well known that a mill cannot expect to either get or keep its labour unless the workers are properly housed. When new mills were being built some 15 to 20 years ago, the question of cooly lines received little, if any, consideration. But latterly, while mills have been springing up so rapidly, and there has been a certain amount of competition for labour, mill managers have discovered that the proper housing of their employees is a most important matter and that they must provide as good, if not better, lines than the surrounding mills if they wish to get or keep labour of good quality."

"In our opinion workers' lines should be pucca built with brick work or coke breeze walls, an ideal roofing being of Asbestos cement corrugated sheeting, while the floors should be of patent stone raised to a height of not less than one foot above road level. Pucca made drains

APPENDIX C—continued.

should run between double rows of lines and provision made for running a constant stream of water through same while pucca drains should run into those main drains from either side of each line of rooms."

5. *The Gauripore Jute Mills*.—Employees 9,357. Provide 720 rooms for housing 4,000 persons. Cost of land Rs. 29,000; building Rs. 1,60,000; gross annual rents Rs. 4,836; expenditure Rs. 3,000. Net return rather less than 1 per cent. "Where the mill is not situated near any big town, it is necessary to have a certain number of houses to lodge the up-country workers. Such accommodation must be attractive and sanitary."

"Such workers as take up their permanent residence near the mill prefer to buy a small plot of ground and establish their own home there. It might pay a mill to buy land for this purpose and let or sell it cheap to their employees."

6. *The Reliance Jute Mills Co., Ltd., Bhatpara*.—Employees 6,600. Provide 140 tenements. Cost of land Rs. 8,200; of building Rs. 13,500; gross rents Rs. 1,245; expenditure Rs. 954. Net return rather over 1 per cent. "In a large district like Kankinnarrah, I consider it is not so essential that the Mill authorities should provide housing accommodation to any extent, for the reason that the majority of the workers prefer to live outside in the bazar in houses provided either by their own Sirdars or headmen from their own country. It is only a small minority who avail themselves of houses provided by the mills."

7. *The Alliance Jute Mills, Jagatdal*.—Employees 6,858. Provide 1,052 rooms for 3,146 persons. Have spent from 3 to 4 lakhs of rupees on housing. In the absence of accurate figures net return cannot be calculated. "We find it advantageous to house our work-people; owing to the better sanitary arrangements and the plentiful free supply of filtered water, the health and consequently the capacity for work of those living in the company's lines are greatly enhanced."

8. *The Albion Jute Mills, Budge-Budge*.—Employees 3,707. Provide 6 lines of 242 rooms. Cost of land Rs. 2,681; of building Rs. 53,000; gross rents Rs. 1,440; and expenditure Rs. 1,300. Net return ¼ per cent. No opinion or remarks.

9. *The Kamarhati Jute Mills Co.*—Employees 8,908. Provide 1,429 rooms for 5,734 persons. Expenditure on land ½ lakh; on buildings 3½ lakhs of rupees; gross rents Rs. 17,148; expenditure Rs. 2,000. Net return 3½ per cent. "Consider the provision made for housing the labour at the mills beneficial to the employers in many ways. Ample accommodation in the labour at the mills, well lighted and sanitary surroundings, where a thorough drainage scheme exists and filtered water is distributed throughout, are all responsible for well-organised labour, besides safeguarding of factories to the general health of the employees."

10. *The Clive Jute Mills, Calcutta*.—Employees 5,370. Provide 550 rooms in lines for 2,500 persons. Expenditure on land ½ lakh and on building 1½ lakh of rupees; gross annual rents Rs. 5,000; and expenditure Rs. 1,000. Net return 2 per cent. "It is in the interest of factories to have housing accommodation adjacent."

11. *The Landsdowne Jute Mills, Dakshindari*.—Employees 4,056. Provide 150 tenements. Expenditure on upkeep Rs. 100 per annum. No rent is charged; however accommodation lies vacant. "The workers preferably house themselves; there are facilities for doing so. This mill is situated in the midst of bustee villages and the workers prefer dwelling outside the mill premises."

12. *The Hastings Jute Mills, Hooghly*.—Employees 7,766. Provide 236 tenements for 800 persons. Charge no rent. Spend Rs. 1,500 annually on upkeep. Total expenditure Rs. 15,000. "Provision of housing is advantageous. Mill-owned lines are better ventilated and have greater free air space surrounding them than private lines. They are also well-drained and provided with filtered drinking water and electric light. They also tend to keep workers in one locality."

13. *The Lawrence Jute Mills, Howrah*.—Employees 4,100. Provide 47 lines of 940 rooms for 2,870 persons. Expenditure on building one lakh of rupees and on land Rs. ten thousand. Charge no rent; spend Rs. 7,000 annually on upkeep. "Provision of housing keeps the operatives within easy reach of the mills and ensures a more regular attendance at work. The lines being under European supervision and being kept as sanitary as possible enables the early detection of any disease which may arise so that it is possible to be treated immediately by the mill doctor and prevented from spreading seriously."

14. *The Ganges Jute Mills Co., Seebpore*.—Employees 9,853. Provide 615 rooms for housing 1,971 persons. Expenditure on land Rs. 91,000; buildings Rs. 1,17,641; gross rents Rs. 9,113; and expenditure Rs. 2,000. Net return 3.4 per cent. "It is a great benefit to be able to house all the labour you possibly can."

15. *The Delta Jute Mills, Manickpore*.—Employees 4,420. Provide nearly 700 tenements for housing 2,800 persons. Expenditure on land one lakh and on buildings 1½ lakh of rupees; gross rents Rs. 3,600; and expenditure Rs. 3,000. Net return less than ½ per cent. "Should house the workers as comfortably as possible."

APPENDIX C—continued.

16. *The Belvedere Jute Mills Co., Ltd., Howrah.*—Employees 3,210. Provide 444 houses for 1,600 persons. Expenditure Rs. 6,000 on land alone. Rent Rs. 2,500 per annum: just covers the annual expenditure on upkeep. "The question requires more attention than we are financially able to give. The class of residents in all cases is according to the sanitary conditions existing."

17. *The Hooghly Mills, Calcutta.*—Employees 3,523. Provide 805 rooms for 2,235 persons. Expenditure on building Rs. 1,00,000; gross rents Rs. 9,600; expenditure Rs. 6,000. Net return on building alone 3·6 per cent. "It is impossible to get or keep labour without supplying accommodation."

18. *The Khardah Jute Mills Co., Ltd., Calcutta.*—Employees 9,884. Provide accommodation for 1,782 persons or about $\frac{1}{4}$ th of their labour in 594 tenements at a cost of land Rs. 20,000 and buildings Rs. 2,25,000. Rent Rs. 7,128 per annum, i.e., 1 rupee per room per month. Annual expenditure not stated. Allowing 16 $\frac{1}{2}$ per cent. per annum of gross rent, the net return is 2·4 per cent. (value of land Rs. 2,500 per acre approximately). "Our views generally on the housing of factory employees are that circumstances alter cases according to district and locality. In a district such as our factory is in, with open surrounding country, we experience no difficulty in the housing arrangements, for the reason that a large percentage of our workers come in from the surrounding villages. The housing of factory employees in our case is only for the upcountry people whom we employ to make provision for any labour shortage in the local labour who in certain seasons are employed on their land."

19. *The Angus Jute Works, Bhadreswar.*—Employees 4,166. Provide accommodation for 2,500 to 3,000 employees in 640 rooms in tiled bamboo houses having pucca drains around. Expenditure on land Rs. 28,000, on building Rs. 52,000. In addition to this expenditure a mosque costing Rs. 15,000, a school costing Rs. 10,000 and a pucca bazar costing Rs. 75,000 are provided; also five large tanks, cost not stated. Intend to replace the existing lines by pucca built houses at a cost of about Rs. 2,00,000. Charge no rent. Annual expenditure Rs. 3,000. "Comfortable housing, with sanitary and pleasant surroundings, adequate bathing facilities and a clean bazar controlled by the Company, are important factors in the maintenance of a steady and adequate supply of labour."

20. *The Victoria Jute Works, Telinpara, Hooghly.*—Employees 7,447. Provide accommodation for 1,110 persons. Charge rent for 92 rooms only; the remaining 184 rooms are allowed rent-free to selected employees. Have spent Rs. one lakh on buildings and Rs. 30,000 on land. "The subject of housing factory employees is of the very first importance from the owner's and Manager's points of view. A plentiful supply of healthy and contented labour is more than half the battle in the running of the mill, and the best way to obtain this is to see that the workers' life outside the mill is as comfortable as possible. The provision of good clean houses that are dry in the rains and fairly cool in the hot weather, is greatly appreciated and tends to popularise the mill. Workers going home speak of the accommodation provided and in many cases influence others to seek work there."

21. *The Titagur Jute Factory Mill No. 1.*—Employees 5,936. Provide accommodation for (1,218) nearly one-fifth of their labour. Expenditure on land not stated, on buildings Rs. 1,82,003; annual rents Rs. 7,800; expenditure Rs. 1,870. Net return on buildings alone 3 per cent. "There is no doubt the less sickness there is, the better the supply of labour will be maintained. Anything in the nature of an epidemic always has a tendency to frighten away the workers, and the best way to prevent this occurring or to combat with it in the event of its occurring, is to keep as clean as possible, and this can be most effectively done where there are properly constructed brick houses with a plentiful supply of filtered water for drinking and facilities for bathing with an ample supply of water, besides proper latrine accommodation."

22. *The Titagur Jute Factory Mill No. 2.*—Employees 7,002. Provide 368 pucca rooms in lines with up-to-date sanitary arrangements, accommodating 1,560 persons. Expenditure on buildings Rs. 1,62,010. Annual rents Rs. 7,274; expenditure Rs. 1,674. Net return on buildings alone 3 $\frac{1}{2}$ per cent. "The provision of bathing tanks, filtered water, surface drains and the installation of sanitary arrangements in the lines go to mitigate to a great extent the diseases and epidemics so prevalent in native quarters, giving a more uniform and regular supply of labour."

23. *The India Jute Mills Co., Serampore.*—Employees 6,633. Provide accommodation for 1,238 persons in 6 lines. Expenditure on land not stated; on buildings Rs. 50,000; gross annual rents Rs. 2,000; gross annual expenditure Rs. 900; net return on buildings alone 2·2 per cent. "Where labour has to be imported housing is necessary. It gives the management a better control over imported labour and it is desirable to keep this class together."

24. *The Fort Gloster Jute Mills, Howrah.*—Employees 8,018. } Provide 2,000 and 90
The Fort William Jute Mills, Howrah. " 6,135. } rooms for 5,407 and 345 persons. Expenditure on land Rs. 2 $\frac{1}{2}$ lakhs and Rs. 30,000; building
 Rs. 2 lakhs and Rs. 5,000; gross annual rents Rs. 40,000 and Rs. 1,800; gross annual expendi-

APPENDIX C—continued.

ture Rs. 36,000 and Rs. 1,600 respectively; net annual return less than one per cent. in each case. "The Indian worker prefers to live in a house he has built himself, but nevertheless undoubtedly appreciates modern lines where water, drainage, etc., are provided; any mill which is in a position to accommodate its labour in this way would unquestionably benefit thereby."

25. *The Empire Jute Mill, Titagur.*—Employees 2,566. } Provide 44 and 53 coolie lines
The Kelvin Jute Mill, Titagur. " 3,950. } comprising 490 and 1,000 rooms, accommodating 1,326 and 2,550 persons respectively.
 Expenditure on land Rs. 36,000 and Rs. 60,000; building Rs. 50,000 and Rs. 1,00,000; gross annual rents Rs. 2,200 and Rs. 4,400; gross annual expenditure Rs. 1,500 and Rs. 2,000; net annual return 0·8 per cent. and 1 $\frac{1}{2}$ per cent. respectively. "When circumstances allow, comfortable healthy quarters under good sanitary conditions, with a plentiful supply of good water, should be provided."

26. *The Samuggar Jute Factory Co., Ltd. (North Mill), Bhadreswar.*—Employees 5,382. Provide pucca coolies' lines comprising 970 rooms, and kutchas lines comprising 416 rooms. Expenditure on land Rs. 54,371, on buildings Rs. 4,75,796. Charge only nominal rent from employees earning Rs. 20 and upwards per month. Coolies are given rooms rent-free. Rents collected Rs. 3,500 roughly per annum against Rs. 6,320 of expenditure. "Notwithstanding the provision of paved roads, bathing tanks, ample filtered water, and electric light the lines do not prove attractive to men who bring their wives and families to the colony, as they prefer the native busters where there is more privacy about the dwellings and where sanitary rules are not enforced. Our experience is that the workers prefer the kutchas to the pucca built lines as these lines are more in keeping with what they have been accustomed to at their homes."

27. *The Samnuggar Jute Factory Co., Ltd.*—Employees 6,191. Provide 429 pucca rooms in lines for 1,294 persons. Expenditure on land Rs. 7,000, on buildings Rs. 1,07,250. Annual rents Rs. 3,032, expenditure Rs. 1,772; net annual return a little over 1 per cent.

28. *The Champdani Jute Mills, Champdani.*—Employees 4,000. } Provide rent-free
The Willington Jute Mills, Rishra. " 4,710. } accommodation of 630 and 280 rooms for 2,420 and 826 persons respectively. Expenditure on land not stated; on building Rs. not stated and Rs. 15,000; annual expenditure Rs. 1,000 and Rs. 600 respectively. "It is very desirable that so far as possible provision should be made for housing employees in close proximity to the Factory premises. The squalor and insanitary conditions which very often obtain where labour otherwise unprovided for finds a dwelling place, must tend to undermine health and reduce efficiency."

29. *The Anglo-India Jute Mills (3 mills), Jagatdal and Kankinara.*—Employees 12,250. Provide 1,533 tenements for 5,300 persons. Expenditure on land Rs. 51,500; building Rs. 3,21,930; gross annual rents Rs. 8,000; gross annual expenditure Rs. 6,000; net annual return $\frac{1}{2}$ per cent. "We are in favour of the principle as tending to better control of sanitary arrangements and greater steadiness of labour."

30. *The Soorah Jute Mills, Calcutta.*—Employees 1,235. Provide accommodation for 150 persons. Expenditure on land Rs. 6,000, on building Rs. 7,692; gross annual rents Rs. 200; expenditure Rs. 300. "Given good houses, plenty of water and reasonable rents, there will always be a demand for houses."

31. *The Barnagore Jute Mills, near Calcutta.*—Employees 14,600. Provide 2,226 rooms for 7,500 persons. Figures as to expenditure on land, building, etc., not stated. "In favour of provision of housing by employers of labour."

BURMA.

1. *The Dunneedaw Saw Mill, Rangoon.*—Employees 973. Provide free quarters for nearly the whole of their labour. Expenditure on land, etc., not stated. "House rents in Rangoon being high we should have to pay higher wages if free housing were not provided. Housing on the premises ensures much better attendance and in every way is most desirable."

2. *The Burmah Oil Works, Dunneedaw.*—Employees 1,528. Provide accommodation for 396 persons. Expenditure on land, etc., not stated. "By providing free accommodation for selected workmen we find that they are more regular in attendance, are very free from sickness and remain longer in our service."

3. *The Burmah Oil Works, Syriam.*—Employees 5,670. Provide accommodation of 25 lines for 1,499 persons (over $\frac{1}{4}$ of their labour). Land leasehold. Expenditure on building Rs. 1,71,600; gross annual rents Rs. 4,200; allowing 16 $\frac{1}{2}$ per cent. for expenses on upkeep net return nearly 2 per cent. Rented accommodation remains mostly unoccupied. "We are of opinion that the proper housing of factory employees is from every point of view very desirable."

APPENDIX C—continued.

4. *The Mergui Crown Rubber Estates, Ltd., Sandawut.*—Employees 50. Provide some accommodation. Give land to Burmese employees to build on. "As our rubber factory is small and run in conjunction with and on the Estate, the circumstances are exceptional. All the employees are provided with rice and certain other commodities at very low rates. The buildings put up by the Burmese are the usual jungle houses, the coolies are provided with lines in which between 25 to 50 coolies can live comfortably. A doctor is kept on the Estate."
5. *The Government Central Press, Rangoon.*—Employees 671. Provide no accommodation. "Workmen are subject to all kinds of infectious diseases owing to their living in congested insanitary quarters. This would perhaps be avoided if houses built on sanitary principles were provided for them."
6. *The Foucar & Co., Ltd., Saw Mill, Moulmein.*—Employees about 260. Provide 5 tenements for 22 skilled employees. Make no provision for housing unskilled labour. Expenditure on land about Rs. 4,000; building Rs. 1,500; gross rents Rs. 500; gross expenditure Rs. 100; net annual return a little over 7·2 per cent. "More particularly the coolies form here a moving population, are most independent, and it is doubtful whether it is of any benefit or advantage to us to house them or it would assist in retaining them; in fact they seem to prefer to live away from the mill premises."
7. *The Rangoon Foundry, Rangoon.*—Employees 850. Provide two tenements of 35 rooms each accommodating 389 persons. Expenditure on land, etc., not stated. "Owing to the scarcity of suitable accommodation outside, anywhere within the close proximity of works, provision of housing is necessary, but we would prefer to have all employees housed outside."
8. *The Jamal Bros. Co., Ltd., Rice Mill, Poosondoung, Rangoon.*—Employees 1,200. Provide 13 tenements for housing the whole of their labour. Charge no rent. Expenditure on land Rs. 8,000; building Rs. 1,50,000; expenditure on upkeep Rs. 200. "In Rangoon where the men are in a great majority the best and healthiest lines are those in which there are fewest partitions. Where the trouble comes in is when they divide up the lines into cubicles where they keep females, then filth collects and one is sure to have disease. The ideal line would probably be to give each man a house to himself but the cost would be prohibitive."
9. *The Bulloch Bros. & Co. Rice Mill, Akyab.*—Employees 438. Provide 13 houses and 13 temporary barracks for all their employees free of any rent. Expenditure on land Rs. 45,000 approximately; on building Rs. 6,000. Gross expenditure Rs. 2,000. "The provision of free accommodation reduces all difficulty of securing labour, the general drawback being that relations and friends of employees when sick show a preference for accommodating themselves in our lines to going to hospital."
10. *The Bulloch Bros. & Co., Ltd., Rangoon.*—Employees 1,023. Provide 5 rent-free barracks for 643 persons. Investment on building Rs. 95,000. "We consider they are very well accommodated, especially as we employ a large staff of sweepers and watchmen. The rooms are large and airy with a good water supply."
11. *The Irrawaddy Flotilla Co., Ltd., Rangoon.*—Details as to employees and housing provided not stated. House labourers in barracks on lot of spare land. "We are in sympathy with Mr. Mirams' object and we thoroughly believe in housing workers comfortably and sanitarily."
12. *The Locomotive Shops, Insein (Burma Railway Co.).*—Employees 1,166
The Carriage and Wagon Shops, Myitnge (Burma Railway Co.).—Employees 1,577. Provide 383 and 860 living rooms for 460 and 1,280 persons respectively. Expenditure on land, etc., not stated. "It is desirable to provide sanitary quarters and supply pure water. Men are more contented and keep better time. Also there is less difficulty in obtaining labour."

CENTRAL PROVINCES AND BERAR.

1. *Jubbulpore Pottery Works.*—Employees 569. Have erected 180 rooms in barrack style and provided materials for 216 separate dwellings. Charge no rent for dwelling accommodation but the low rate of wages 5 annas and 2 annas 6 pies per diem for men and women is a set-off against this. The firm makes the interesting statement that the separate dwellings are always full, whereas the "barrack lines" type of occupant immediately moves into the separate dwelling if one is available. This firm expresses their willingness to build a better type of "lines," but adheres to the statement that the individual dwelling is much preferred.
2. *The Perfect Pottery Co., Jubbulpore.*—Employees 231. Provide 216 tenements for housing all their employees. Charge no rent. Part of the accommodation is vacant owing to shortage of labour. "It is noticed that some contractors come to our labour colony and succeed in taking away some of our employees by making them monetary advances."

APPENDIX C—continued.

3. *The Rai Saheb Reckchand Mohota Spinning and Weaving Mills, Hinganghat.*—Employees 1,180. Make no housing provision because the bustee is not so far off the mill and the mill employees make their arrangements cheaper on the Nazul land given to them by the Municipality on temporary leases. But remark: "It is most essential to make arrangements for housing the mill employees where the labour is scarce, which is advantageous to the mill owners as they get the labourers always at hand and thereby increase their production. On the other hand, the employees also are benefitted and enjoy good health by living in houses specially prepared for them on sanitary principles and in good locality."
4. *The Akola and Middle India Spinning and Weaving Co., Ltd.*—Employees 1,342. Has erected 302 tenements accommodating 572 persons. Cost of land not being given net rent cannot be calculated. From investment on buildings alone the net return is 3½ per cent. "It is beneficial to workmen as well as the owner of the factory to give good accommodation to the work people."
5. *The Bengal-Nagpur Railway Workshops, Nagpur.*—Employees 652. Provide 4 blocks of 67 units occupied by their running staff amounting to 63. Total persons housed 166. Gross rents Rs. 920-13-0. Figures as to cost of land, buildings, etc., not stated. "It is most desirable, if not absolutely necessary, that suitable quarters should be available for the employees within easy distance of the works at moderate rentals with good sanitary arrangements and water supply."
6. *The Manager, Empress Mills, Nagpur.*—Employees 7,249. "We have no housing arrangements for our work people in Nagpur as they generally prefer to live in their own huts built by themselves in different localities in the neighbourhood of their own friends, relations, caste or country people."
7. *The Berar Manufacturing Co., Badnera.*—Employees 881. Provide 216 tenements at a cost of Rs. 17,100 on buildings. Gross rents Rs. 1,100, expenditure Rs. 700. Net return 2½ per cent. "The standard of the mill worker in this district is very much lower than in the district of Howrah—I refer to the industries near and around Budge Budge—and I am confident that drunkenness and its associated evils are responsible for 90 per cent. of the decline in stamina of the working or unskilled labouring class in Berar."
8. *The Burhanpur Tapti Mills, Burhanpur.*—Employees 1,306. Provided 300 tenements at a cost of Rs. 40,000. Net return 7·35 per cent. from investment on buildings alone. No data given as to land value. "We believe there will be enormous improvement in the condition of workmen in the district if Government co-operated with the employer of labour by granting land at only a nominal value so that the employer may be encouraged to more freely lay out his moneys in building suitable houses for the workmen."

MADRAS.

1. *The Krishna Jute and Cotton Mills Co., Ltd., Ellore.*—Employees 753. Provide accommodation of about 12 tenements for maistries only. "It is desirable to provide accommodation to the factory employees free to ensure prompt attendance and permanent interest in the factory on which they depend. Being work-a-day men, they would like to be close to their industry, live as economically and peaceably as possible, far away from the buzz and bustle of the town; and hence factory owners are expected to pay particular attention to the housing and comforts and medical attendance of their employees to extract good and faithful service from them, to the advantage of the factory owners and their employees alike. To this end Government may be pleased to grant vacant land free of taxes if industries and their progress form the chief integral in their administration."
2. *Shri Chidambara Vinayakar Mills, Ltd., Koilpatti, Tinnevely District.*—Employees 675. Provide 216 tenements. Investment on land Rs. 4,500, on buildings Rs. 15,000; total Rs. 19,500. Net returns Rs. 360 per annum: equivalent to a net return of 1·6 per cent. "It is generally very essential that employees should be provided with houses except when they live within a radius of one mile from the mill."
3. *The Coimbatore Mill Mills Co., Ltd.*—Employees 256. Provide no housing accommodation. "If the people could be taught cleanliness and to value property as their own, a proper state of affairs could be brought about. I am convinced if cleanliness were taught the work people and also compulsory education came about, it would greatly pave the way to a solution of housing factory employees."
4. *The Chittivasa Jute Mills.*—Employees 1,514. Provide a line of 20 houses. "Accommodation provided at the mill even when provided free is not appreciated by the better class of workers, especially by families who already have a home of their own; and although their home may be several miles from the mill they prefer to walk that distance rather than live in lines well built and with every convenience provided at the mill."

APPENDIX C—continued.

5. *The Buckingham Mill Co., Ltd., and the Carnatic Mill Co., Ltd., Perambore.*—Employees 5,284 and 4,568 respectively. Are preparing to make experiments for the provision of housing their employees. "We are of opinion that Mill owners who are prepared to invest money for the purpose of improving the housing of operatives should receive all the assistance it is possible for Government to give in the way of title and acquisition of suitable land and by Corporations in the way of sanitation on roads, water and lighting. We are of opinion that legislation is undesirable and calculates to restrict industrial expansion."

6. *The Basel Mission United Weaving Establishment, Calicut.*—Employees 542. Provide 12 houses and a hostel. Land and building Rs. 13,000; rents Rs. 486; expenditure Rs. 645; loss 1·2 per cent. "A former system of housing employees which is no more maintained was provided in our 'Sick Fund' rules, according to which the value of a plot of ground and costs to erect a tiled house could be advanced from that fund provided that the applicant had already put aside by saving a sum amounting to 1/3rd of the cost required, 2/3rds to be paid back by instalments with interest. This scheme could only concern the better earning classes. During the course of years 22 family heads still now employed have become house-owners."

"However, it is not always easy here to find cheap ground for such a scheme and the classes with lower pay could never afford houses as their property. In this respect the scheme of rented houses offers better advantages. Both systems met with success. The majority of our work people have their dwellings not provided by the firm."

UNITED PROVINCES.

1. *The Elgin Mills Co., Cawnpore.*—Employees 2,186. Provide 210 tenements for 810 persons. Expenditure on land Rs. 6,572, buildings Rs. 22,148. Gross annual rents Rs. 1,100 and expenditure Rs. 400. Net return 2·4 per cent. "We desire to provide accommodation for every workman. It shall be the best possible, kept in a clean and sanitary condition. We should also provide medical staff to deal with simple ailments and provide simple medicines. We do this but do not go far enough."

2. *Messrs. A. John Company's (5) Mills, Agra.*—Employees 2,506. Provide 560 tenements in chawls for 1,641 persons. Expenditure on land Rs. 16,000 and building Rs. 28,000. Gross annual rents Rs. 2,520 and expenditure Rs. 1,120. Net return little over 3 per cent. "The employees do not take kindly to accommodation provided by us where sanitary rules are strictly enforced."

3. *The Swadeshi Cotton Mill Co., Cawnpore.*—Employees 618. Provide 20 tenements for 11 families. Cost of land Rs. 500 and building about Rs. 8,000. Charge no rent; annual expenditure Rs. 25. "The employee is more contented and works more efficiently when he can live in a good house with sanitary surroundings, and as a proof that the few work people we are able to house appreciate it we may say that no less than 2/3rds of our employees would be glad to have houses near to the mill. If we could only obtain land adjoining our factory at a reasonable figure, we should at once arrange to house more of our work people."

4. *The Bengal and N.-W. Railway Locomotive Carriage and Wagon Workshops, Gorakhpur.*—Employees 3,270. Provide nearly 50 blocks for 500 persons. Land received free from Government. Expenditure on building Rs. 46,943. Gross annual rents Rs. 1,716 and expenditure Rs. 511. Net return on buildings alone 3 per cent. "The houses are in great demand. A few shops for sale of food-stuffs should be inaugurated. The employee-purchaser, being distinguished by a token, should receive concession rates."

5. *The Locomotive Carriage and Wagon Workshops, G. I. P. Railway, Jhansi.*—Employees 4,384. Provide 94 quarters for Europeans and Anglo-Indians, and Indians. Accommodate 245 persons (192 Europeans and Anglo-Indians, and 53 Indians). Collect Rs. 7½ thousand annually as rents. Capital expenditure on land and buildings not being given, net return cannot be calculated. "We have always endeavoured to house our European, Anglo-Indian and Indian staff, but find Indians prefer living among their own people."

"Twelve out of the 23 quarters allotted to Indian staff are vacant, due to men preferring to live outside."

6. *The Upper India Couper Paper Mills Co., Ltd.*—Employees 660. Provide accommodation rent-free, but the employees being the residents of near villages do not like to live in them.

7. *The Moradabad Spinning and Weaving Mills Co., Ltd.*—Employees 284. Provide 71 tenements for 150 persons. Cost of building about Rs. 15,000. Gross annual rents Rs. 250, expenditure Rs. 500. Loss on building 1·7 per cent. "It is a great advantage to the mill owners if they supply quarters to their employees on very moderate rents."

APPENDIX C.—continued.

8. *The Purbapore Sugar Factory, Gorakhpur.*—Seasonal factory. Employees not stated. Provide accommodation for staff and maistries. "We are continually adding to and improving our housing accommodation as we find it advantageous to do so. We do not require to provide accommodation for general labour as it all comes from 1 to 1½ mile radius."

9. *The L. H. Brothers' Sugar Factory, Pilibhit.*—Employees 283. Provide 10 barracks for coolies and 24 separate quarters for 135 persons. Charge no rent. Investment on building Rs. 15,000, annual expenditure on repairs and maintenance Rs. 500. "It is of the utmost importance that arrangements should invariably be made for housing factory employees."

10. *The Sri Gangaji Cotton Mills Co., Ltd., Mirzapur.*—Employees 373. Provide no accommodation. "Our attempt some years ago to house the workmen and make a colony failed. Work people like to live outside the mill premises. They live with their friends and relations. They do not wish to go under discipline and no attempt has ever been made to house them by compulsion."

11. *The Canal Foundry and Engineering Works, Roorki.*—Employees 538. Provide 26 tenements for 52 persons. Capital expenditure not known. Gross rents Rs. 150 per annum against an expenditure of Rs. 250. "It is desirable that the employees be well housed. It would be an advantage for men to have a plot of land or plots of land for several workmen so that they could retain their 'love for their land' and not live at villages miles away, necessitating a weary walk from and to every day."

APPENDIX D.

BEING A LIST OF THE PRINCIPAL QUESTIONS PUT ORALLY TO EMPLOYEES.

(See page 3, line 44 of evidence.)

1. What is your name and age?
2. What is your native place?
3. How long have you been in this town and how many mills have you served?
4. Where do you live?
5. What rent do you pay? Any taxes? Will you be able to pay more for better accommodation and to what extent?
6. What accommodation have you got? Are you satisfied with it? What are your inconveniences? What is the number of inmates in the house? Do you all sleep in the room or some in verandah?
7. Is your family staying with you or are you alone; how many of you are earning?
8. Do you own any land or house? Are you all the year here? If not, how many months do you spend at your native place and for what purpose?
9. Do you know reading and writing? Do your children attend school?
10. How many children have you? How many have died?
11. What are your average monthly wages?
12. What are your average expenses on food per head per month? So also expenses on clothing; pan, biddi and tea; and drink?
13. Do you obtain monthly supplies on credit or cash?
14. How do you spend Sunday and other holidays?
15. Have you any debts? Why and when were they incurred? What interest do you pay? Who is your creditor? How much do you repay per month?
16. Are you able to save anything per month?

APPENDIX E.

The following account of a mill-hand's life is given by an educated Maratha who is of the same class as the former and comes from the Konkan. He was a clerk for many years in one of the biggest mills in Bombay. He did not write this note for publication but has since consented to its being translated, at my special request.—A. E. M.

INCREASED POVERTY AMONGST EMPLOYEES AND THE WAYS TO REMEDY IT.

Most of the employees in mills hail from the Konkan. They love their native places and are devoted to their motherland. They are compelled to come to Bombay owing to debt, the absence of any means of livelihood there and the hopes of finding a livelihood in Bombay. At first the employee comes alone and boards and lodges in private inns where the rate is rather low. After some six months or so he is able to earn Rs. 8 to Rs. 10 per mensem. At this time had he no other expenses to meet with than those of his daily necessities it is possible he could save something without running into debt. But this state of affairs does not last long. The Konkan is by nature a poor country: the people there all the while look forward to their relative in Bombay for remittances of money. They are ignorant of the conditions of Bombay. They calculate expenses in Bombay on the basis of expenses in Konkan; and are unable to realize the high cost of living and the many other difficulties there. They are already stricken with poverty and are besides oppressed by creditors. They consequently press their relative in Bombay to send them remittances home. The employee has by this time not saved enough to send them; and borrows the necessary amount of some marwari with the help of some friend. It will be found on enquiry that nearly 75 per cent. of debts are incurred to meet the demands of families in Konkan. The employee, of course, tries to repay the sum he borrowed but scarcely has he paid half of it than a further demand is made on him. Whilst the employee is trying to meet this demand, his wife and children run down to Bombay. His expenses thus go up and at the same time he is unable to pay regularly the instalments in repayment of the debt incurred. This class of people can secure accommodation only in dirty and insanitary localities and consequently some one of the family is always ill. The instalments being delayed the creditor begins pressing him with his demands and to meet them he seeks a second creditor and then a third and so on. Various documents for the loans and interests are executed. But with all this the employee is always cautious to hide his indebtedness. In this manner an employee contracts on an average a debt of Rs. 100. The rate of interest charged is not less than one anna in the rupee and so the average interest that he pays comes to Rs. 6-4-0 per month against the monthly earnings of Rs. 22. Again, the mill-hand cannot for want of time earn anything in addition to his earnings in the mill. In these circumstances, to maintain a family consisting of himself, his wife and two children, he has to spend Rs. 3-4-0 for half a maund of rice, Rs. 2-8-0 for half a maund of bajri and patni, annas eight for oil, Re. 1 for chilly, salt, etc., Rs. 2 for firewood, Re. 1 for tea, etc., Re. 1 for biddi and pan, Re. 1 for noon tiffin for children (at the rate of half anna daily), annas six for soap for washing clothes, etc., Re. 1 for drink, Rs. 2 for clothes, Re. 1-8-0 guest charges, Re. 1 vegetables and Rs. 3-8-0 house rent. These all total to Rs. 21-10-0. This might lead one to infer that these people do not pay back their debts. But this is wrong. These people are God-fearing and are always careful to maintain their good reputation. Again, the marwari creditors are timid in character, and had they lost the loans advanced surely they would not have been able to extend their business as they have done at present; and also the marwari, who on his arrival in Bombay some 4 years back used to go about the town saying "मोडतोड तांवा पितळ" (the cry of a purchaser of old and broken pots of copper and brass), would not have been able to put on a gold necklace today. There comes then the question as to how the employees repay their debts when they cannot save anything. The solution is—as soon as they find that their debts are heavy they get their wives employed in mills and so obtain an aid of Rs. 10 or so per month, and when they find that even then they cannot pay back their debts they send back their families to Konkan. Of course, they are required to remit something home for the maintenance of their families, but the expense incurred there is comparatively small. As soon as they send their families the accommodation they rented is given up and they could thereby make a saving of about Rs. 4 or so. They are thus in a position to pay back the debts, their expenses having gone down. The members of the family who are sent home do not remain in the Konkan for more than six months or a year as they cannot bear the poverty and hardships there. Thus, when the labourer has paid about half his debt the members of his family return. He has to hire a room and maintain a family in Bombay again. Besides, whilst paying off debts in Bombay, the savkars in Konkan are not paid anything; and they too begin pressing their claims at this time. So the employee has again to borrow. In this way the labouring class remains always in debt. Thus to borrow, to repay a part and to borrow again is the usual order of things. Even boys are put to work as "half-timers" when they are about eight or nine years old. This brings in an additional four rupees a month, which go to maintain the boy, and give some relief to his father. Again, one might say that if the employee dies in debt the marwari would

• APPENDIX E—continued.

not be paid. But this is not the case. His wife and children undertake to repay it, for they look upon the debt as Hell and are anxious to get out of it. Some hand over their ornaments or any other such valuables to the marwari creditor and then return to their native places. If that is so, the question arises as to why courts of law are crowded with marwaris. It is not because the labouring class is dishonest but because poverty is increasing. Even an honest man in constant poverty and debt, having tried his utmost to be free, becomes desperate and refuses payment to all and prepares himself to suffer the consequences. In such cases, the marwaris who have the blank bonds signed, alter the figures and make 50 of 5 and 100 of 10 and so on, and lodge their complaints. The employee cannot leave the place nor evade payment and so undertakes to pay by instalments. It is said that such a situation is created by the employees themselves by being addicted to drink. But many that drink do so to find relief from all these hardships and worries of life in Bombay. The number of drunkards is comparatively very small and yet when returning to their native places after years of work, to meet the expenses of the trip they have to incur debts. However, this class continues to bear the poverty and hardships in the hope that they would be happy some day in the future, that their sons would earn and so on.

The reason of all this poverty is, that the rates of wages fixed some 50 years ago are still continued without any substantial increase or change, in spite of the increased prices and house rents, etc.

The main remedies are to release the properties in Konkan at present mortgaged and hand them over to the respective labourers. To do this co-operative credit societies should be started in all villages. A Mill-hands' Association should be started in Bombay and the ways of bettering the condition of the labouring class should be considered by such a body. At present mill-owners look upon the employees as very low beings. This attitude of theirs must be changed. Every mill-owner must provide housing accommodation for his employees at low rents: and must arrange for loans to his employees on a low interest. A provident fund must be opened and managed by mills for the benefit of employees. Mill-owners should give bonuses or rewards to the employees out of their profits. The daily rates of wages should be increased considering that the present earnings are insufficient to meet expenses. In order to compel mill-owners to do this there should be sufficient co-operation in the Mill-hands' Association and also the necessary funds to help each other to strike work and remain at home, if need be. When this is possible or when the mill-owners realize the pitiable state of the mill-hands then only will their state be improved.

APPENDIX F.

STATEMENT SHEWING THE PROGRESS OF MILL INDUSTRY AND FACTORIES IN INDIA AND THE BOMBAY PRESIDENCY.

Serial No.	Particulars.	Years.		Percentage of increase during years 1897—1915 (18 years).	
		1897.	1915.		
<i>Mills.</i>					
1	Mills	India	173	272	57·22
		Bombay Presidency ..	122	184	50·82
2	Looms	India	37,584	1,08,009	187·38
		Bombay Presidency ..	28,993	85,388	194·51
3	Spindles	India	40,65,618	68,48,744	68·45
		Bombay Presidency ..	28,49,395	48,03,932	68·59
4	Employees	India	1,44,335	2,65,346	83·84
		Bombay Presidency ..	96,815	1,83,701	89·74
<i>Factories in Bombay Presidency.</i>					
5	Total number	343	786	129·15	
6	Working Factories	322	727	125·77	
7	Total number of employees	1,40,379	2,80,566	99·86	
8	Total males	1,06,780	2,10,822	97·43	
	Percentage of males to total number of employees	70·06	75·14	(a)—00·92	
9	Total females	26,930	53,110	97·21	
	Percentage of females to total number of employees	19·19	18·93	(a)—00·26	
10	Total number of children	6,669	16,634	149·42	
	Percentage of children to total number of employees	4·75	5·93	1·18	

(a) — This sign indicates a decrease in percentage.

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APPENDIX G.
COMPARATIVE TABLE SHOWING EXPORT OF COTTON AND YARN FROM INDIA AND THE BOMBAY PRESIDENCY.

Particulars.	Years.			Percentage of increase during years.		
	1897.	1911.	1915.	1897-1911 (14 years).	1911-15 (4 years).	1897-1915 (18 years).
1 Total export of cotton from India ..	14,60,486	24,32,192	28,97,732	66.53	19.14	98.41
2 Total export of cotton from Bombay Presidency ..	9,41,057	14,09,895	20,38,422	49.82	44.58	116.61
3 Export of cotton to Japan from Bombay Presidency ..	3,70,543	5,98,489	15,37,761	61.52	156.94	315.02
4 Export of cotton to China from Bombay Presidency ..	28,675	13,064	91,835	-54.44	602.96	220.20
5 Export of yarn to Japan from Bombay Presidency ..	645	<i>Nil.</i>	<i>Nil.</i>	....	....	....
6 Export of yarn to China from Bombay Presidency ..	3,61,221	2,75,087	3,58,777	-23.84	30.42	-0.67

The figures in the table represent number of bales of 400 lbs. each.

—Sign prefixed to figures indicates decrease.

Note.—This table forms an interesting study in conjunction with the previous Appendix

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APPENDIX H.
RENTS IN BOMBAY.

ACCOMPANIMENT TO MEMORANDUM OF EVIDENCE SUBMITTED TO THE INDUSTRIES COMMISSION BY THE CONSULTING SURVEYOR TO THE GOVERNMENT
OF BOMBAY IN CONNECTION WITH THE HOUSING OF FACTORY EMPLOYEES.

Bombay City Municipal wards.	1901.			1915.												Increase during the 14 years 1901-1915.									
	Number of buildings in each ward.	Total gross annual rental value of build- ings in each ward.	Average gross an- nual rental value per building.	Number of buildings in each ward.	Total gross annual rental value of buildings in each ward.	Average gross an- nual rental value per building.	Density of population per acre.	Percentage of increase of population.	Buildings.		Rental value.		Average gross annual rental value per building.	Percentage of increase.	Remarks.										
									Number.	Percentage of increase.	Amount.	Percentage of increase.													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16										
A	3,909	*1,14,49,268	2,928	4,147	2,48,23,741	5,985	48.6	26.00	238	6.0	Rs. 1,33,74,473	116	Rs. 3,057	104	*Inclusive of all Government, Rail- way and Trust buildings where- ever situate in the Island of Bombay.										
B	5,038	46,13,102	915	5,379	69,19,205	1,286	214.7	0.24	341	6.7	23,06,103	50	371	40											
C	7,873	59,78,964	759	7,911	1,05,96,745	1,339	384.5	18.00	38	0.5	46,17,781	77	580	76											
D	4,240	33,44,254	788	5,335	69,15,002	1,296	69.6	43.00	1,095	25.0	22,70,748	67	508	64											
E	6,527	35,18,756	539	7,828	74,07,773	946	108.9	25.00	1,301	20.0	38,89,022	110	407	75											
F	2,896	12,65,269	437	3,722	28,33,920	761	17.9	40.00	826	28.0	15,68,651	126	324	74											
G	4,417	16,42,012	371	6,153	39,19,800	637	39.5	64.00	1,736	39.0	22,77,288	121	266	71											
Total for all Wards ..	34,900	3,18,11,625	911	40,475	6,34,16,191	1,566	63.8	26.27	5,575	13.0	3,16,04,566	100	655	72											

See also Appendix I.

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APPENDIX I.

DETAILS OF INSTANCES, TAKEN HAPHAZARD, OF RENTS OF PROPERTIES IN BOMBAY WHICH HAVE UNDERGONE NO MATERIAL ADDITION OR ALTERATION AND ARE OCCUPIED BY POOR PEOPLE.

Ward No.	S. No.	Road.	Owner.	Gross annual rent in year.		Increase in 14 years.	
				1901.	1915.		
G.48-7A	F. A. 48	Clerk Road	Haji Ismail Gul-Mahomed	1,800	2,808	1,008	56%
G.48-8	G. 48	Do.	Abdul Satar Omar	528	858	330	62.5%
G.48-9	H. 48	Do.	Do.	378	661	283	74.8%
G.48-10	D. 48	Do.	Do.	378	665	277	73%
G.48-11	I. 48	Do.	Do.	288	798	510	177%
G.2503-1	15	Elphinstone Rd.	Dhanji Kalidas Kapadia	693	1,380	687	99%
G.2503-2	15A	Do.	Deccan Bank	432	960	528	122%
G.2503-3	15B	Do.	Do.	1,152	1,695	543	47%
F.302-1	59	Currey Road	Haji Ahmed Ebrahim	900	2,201	1,301	144%
F.303-1	60	Do.	Do.	1,134	2,229	1,095	96%
F.303-2	60A	Do.	Do.	1,296	2,053	757	58%
Average increase				..	..	..	70%

The investigation which the above figures represent was made with the object of testing how far the figures in gross for the whole of Bombay could be relied upon as showing the ratio of increase of rental value of properties, apart from any increase due to structural alterations.

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(Compare with Appendix H.)

APPENDIX J.

STATEMENT SHOWING DISPLACEMENT AND RE-HOUSING ON BOMBAY IMPROVEMENT TRUST ESTATES SINCE THE COMMENCEMENT OF THE TRUST.

Year.	Number of persons disboused during the year.			Number of persons re-housed during the year.					Total.			
	Number of buildings demo- nished.	Number of tenements demo- nished.	Total.	In Board's Chawls.		In Police Chawls.	In new private buildings on Trust estates.			Number of people transferred to vacant rooms in acquired buildings.		
				Perma- nent.	Semi- perma- nent.		One- room tenements.	Two-room tenements.			Larger tenements.	Servants' quarters.
1898-99	No record available.	No record available.	.....	.....	.....	.....	.....	.....	.....	.....		
1899-1900	No record available.	No record available.	3,432	.....	.....	.....	.....	.....	.....	.....	.....	
1900-01	No record available.	No record available.	3,877	.....	.....	.....	.....	.....	.....	.....	.....	
1901-02	No record available.	No record available.	8,135	.....	.....	.....	.....	.....	.....	.....	.....	
1902-03	No record available.	No record available.	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1903-04	No record available.	No record available.	1,965	.....	.....	.....	.....	.....	.....	.....	.....	
1904-05	No record available.	No record available.	1,225	.....	.....	.....	.....	.....	.....	.....	.....	
1905-06	No record available.	No record available.	6,259	.....	.....	.....	.....	.....	.....	.....	.....	
1906-07	No record available.	No record available.	8,970	.....	.....	.....	.....	.....	.....	.....	.....	
1907-08	No record available.	No record available.	6,531	.....	.....	.....	.....	.....	.....	.....	.....	
1908-09	No record available.	No record available.	6,699	.....	.....	.....	.....	.....	.....	.....	.....	
1909-10	No record available.	No record available.	1,461	.....	.....	.....	.....	.....	.....	.....	.....	
1910-11	No record available.	No record available.	1,593	.....	.....	.....	.....	.....	.....	.....	.....	
1911-12	No record available.	No record available.	1,186	.....	.....	.....	.....	.....	.....	.....	.....	
1912-13	No record available.	No record available.	1,478	.....	.....	.....	.....	.....	.....	.....	.....	
1913-14	No record available.	No record available.	1,240	.....	.....	.....	.....	.....	.....	.....	.....	
1914-15	No record available.	No record available.	4,204	.....	.....	.....	.....	.....	.....	.....	.....	
1915-16	No record available.	No record available.	3,752	.....	.....	.....	.....	.....	.....	.....	.....	
Total	762	6,304	67,732	14,935	1,392	2,065	13,140	4,195	8,260	3,436	(a) 3,018	
											50,441	

(a) Temporary occupation only.

APPENDIX K.

STATEMENT SHOWING HOUSING ACCOMMODATION PROVIDED BY THE BOMBAY IMPROVEMENT TRUST FOR PERSONS OF THE WORKING CLASS, WITH DEATH-RATE FIGURES.

Serial No.	Name of accommodation.	Accommodation provided.		Number of floors.	Number of living rooms.	Number of adults provided for.	Average population for years 1912-15.	Area covered by buildings.	Total area of site.	Average rate of land value per sq. yd.	Total.		Gross monthly rent per living room.	Total rent per annum.	Percentage of net annual return on capital expenditure on land and works, etc.	Death-rate per 1,000.			
		Year of completion.	Number of buildings.								Estimated value of land.	Works including cost of management and establishment.				1912.	1913.	1914.	1915.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Agripada A chawls	1901	4	3	294	1,545	1,171	3,206	7,285	Rs. a. p.	Rs.	Rs.	Rs. a. p.	Rs.	3.75	47.8	37.8	39.7	33.5
2	Agripada B chawls	1905	12	4	912	3,216	2,674	6,001	11,925	6 0 0	71,550	5,39,171	3 8 0	39,900	4.25	45.7	40.1	32.7	26.9
3	Agripada C chawls	1911	6	4	413	2,160	1,581	3,426	6,251	6 0 0	37,506	2,77,415	3 8 0	19,134	3.95	45.7	40.1	32.7	26.9
4	Nagpada A chawls	1905	2	4	144	648	464	1,059	2,569	7 0 0	17,983	81,905	4 0 0	6,912	4.50	43.6	18.8	12.5	26.8
5	Nagpada B chawls	1910	1	4	144	648	466	977	2,099	7 0 0	14,693	99,320	4 0 0	6,912	3.94	37.3	28.2	23.6	23.7
6	Chandanwadi chawls	1907	6	4	664	2,352	2,283	4,299	9,664	15 0 0	1,44,969	3,72,692	5 0 0	41,274	5.18	29.0	19.5	28.6	21.3
7	Imamwade A chawls	1911	6	4	876	3,504	2,773	5,585	13,442	13 8 0	1,81,467	4,95,426	4 0 0	42,186	4.05	31.9	23.7	24.7	
8	Imamwade B chawls	1912	1	2	30	150	140	361	949	13 8 0	12,811	10,368	4 0 0	1,440	(a) 2.91	42.1	29.2	30.8	28.4
9	Princess Street chawls	1908	1	4	64	256	224	438	1,480	30 0 0	44,400	42,217	5 0 0	3,840	2.88	37.3	26.0	12.9	17.6
10	Mandvi Koliwada chawls	1910	5	4	222	1,110	715	3,276	4,169	75 0 0	3,12,675	2,74,781	5 0 0	38,292	4.24	28.4	25.9	18.9	17.7
11	Superibag chawls	1911	6	4	480	2,400	1,479	2,924	8,081	4 8 0	36,364	3,36,818	3 4 0	18,720	3.26	32.8	30.3	22.2	27.0
12	Matunga workmen's cottages	1915	1	1	15	75	..	370	944	5 0 0	4,720	11,708	3 8 0	630	(b) 2.40	46.5	35.9	25.3	23.4
13	Chinchbunder chawls	1916	4	4	372	1,860	..	3,883	8,496	26 10 8	2,26,560	3,65,500	5 0 0	44,100	4.84	34.1	19.4	21.5	15.7
	(c) Total	..	55	..	4,630	19,924	13,970	35,800	77,354	..	11,56,684	31,00,981	..	2,76,924	..	35.49	24.70	25.25	23.51
												42,57,665				40.39	34.59	29.19	24.65

(a) The buildings cost approximately Rs. 845 per room and the land value is about 40 per cent of whole cost or double the economic value.

(b) The buildings were erected at a cost of approximately Rs. 900 per room.

(c) These figures are up to end of 1916.

N.B.—Figures in italics show death-rate in general in the locality.

APPENDIX L.

MINIMUM EXPENSES OF A FAMILY OF A HUSBAND AND WIFE AND TWO CHILDREN OF THE LABOURING CLASS IN BOMBAY.

	(For the month.)		(For the year.)	
	Rs.	a. p.	Rs.	a. p.
Rice, $\frac{1}{2}$ phara	..	3 4 0	Dhoties, 2 pairs	.. 3 0 0
Patni, $\frac{1}{2}$ phara	..	2 8 0	Shirts, 2	.. 1 8 0
Oil, sweet	..	0 8 0	Head-dress	.. 1 0 0
Salt, chilly, kernel, jagery, onion, vegetables, etc.	..	1 0 0	Lugdas, 2	.. 7 0 0
Tea, occasionally	..	1 8 0	Cholies	.. 2 0 0
Sweets for children	..	0 4 0	Cloth for children	.. 2 0 0
Shaving, and washing clothes	..	0 4 0		
Sundries including pan, bidi and liquor	..	3 0 0	Total	Rs. 16 8 0
	Rs. 12 4 0			
Fuel	..	1 8 0	Average per month	Rs. 1 6 0
Clothes	..	1 6 0		
House rent	..	3 8 0		
	Rs. 18 10 0			

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* These people have probably borrowed from relatives.

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