215 P W – 6-7-88
1655 W – 5-6-88

Read 31-7-88.

P 2153 W 16-9-88

No 2455 W 4/5 August

B Communicated to
Communicated
the S & E V Circle &
the S. E. V Circle
the Exer Bl. Accts
the Surv Wd

Sdn
4/8/88

Dy 14/8

S & E V Circle

Exer. Bl. Accts

Dy 17/8. Abst Wd

Dy 11/8/88

S & E V Circle

S. E. V Circle

Exer. Bl. Accts

Dy 17/8. Abst Wd

COURT OF WARDS OFFICE
MADRAS.

Proceedings of the Court of Wards.

Dated 23rd July 1888.

No. 602.

READ A. S. Thomas Esqre F. L. S; F. Z. S:
the following letter from the Collector
of Tanjore, 27th July '88 No. 3029.

I have the honor to submit for the Court's Sanction and return an Estimate amounting to Rs 690 for improvements to the manager's house at Khallikot, received from the Superintending Engineer 1st Circle.

2. The house is the property of the Estate and such rent as the Engineer may determine will be charged for its use.

Resolution

The Estimate for Rs 690 – a – a is Sanctioned.

/True copy & Extract/

Ag. Secretary

To
The Collr of Tanjore
The S. W. D. Thro Govt R.D.
The Accts Genl.

Dy 27th July 1888.

Dy

Ent
7074/88

P.W.C. No 7070

Revenue 1888. Dept.

Court of Wards,

MADRAS.

(57) No. 5010.

No 2454-10 dt 13 August 1888

Communicated to the Supdg Engineer Cuddapah and the Examiner of P.W. Accounts.

8/8/88

To

The P. W. D. through the Secy to Govt.

Rec'd 4-8-88

Rd 25 JUL 88

Proceedings, dated 23 July 1888.

No. 602.

Enclosures.

Subject.

Sanctioning Estimate for Rs 690 for improvements to the Manager's house at Khallihot Estate.

No 2454-10 dt 13 August 1888

Endorsement—No 4405.

Forwarded to the Public Works Department.

Chettur
Asst Secretary

Ordered accordingly
27 July 1888.

15 8/13/8

Cu/

The Supdg Engr I Circle
" Examiner of P.W.A.

Old 42/8 8.8.88

Dr 17 Aug 14/8

GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

READ—the following paper :—

Despatch from the Right Honorable Lord CROSS, Her Majesty's Secretary of State for India, to His Excellency the Right Honorable the Governor-General of India in Council, dated India Office, London, 3rd May 1888, No. 30 (Statistics and Commerce).

I forward, for your information, 12 copies of the report of the Chief Inspector of Factories for the year 1886-87. At pages 112-123 of that report is a memorandum concerning the Indian Factory Act and Bombay Factories by Mr. Jones, who was for some time Inspector of Factories under the Government of Bombay. I learnt from the despatch of the Government of Bombay, No. 14 (General), of 16th October 1887, that it was not intended at present to appoint any successor to Mr. Jones, and that the work of inspecting factories would be performed by the Assistant Collector in Bombay and by District Magistrates in the interior of the country.

2. You will observe that Mr. Jones remarks upon—

(1) the long hours of work and few holidays in Bombay factories ;
(2) the occasional withholding of wages from hands ;
(3) the incompetency of mill managers, the dangerous character of many mills, and the inadequate fencing of machinery ;
(4) the ill-ventilated and filthy state of many work-rooms.

At the same time, he states in the same memorandum—

(*a*) that the long hours of work are often for only a part of the month or for one season of the year, and that the holidays and their sequelæ are a cause of loss to millowners ;
(*b*) that mill hands are better off, better fed, better clothed, and better protected than ordinary Native laborers ;
(*c*) that half the Bombay factories compare favorably in respect of machinery, management, and construction with similar establishments in England, and that serious accidents are not more numerous than in corresponding works at home ;
(*d*) that suggestions for the amelioration of mill hands are nearly always acted upon by mill managers.

3. I desire to receive a report at an early date upon the working of the Indian Factory Act in Bombay, Bengal, Burma, and in any other province where many factories exist. I should be glad to learn how the plan of placing the duty of inspecting factories in the hands of Magistrates or of Government Engineers has answered ; and whether it is proposed to modify the Factory Act of 1881 in the direction of additional stringency. A statement should be given as far as may be practicable of accidents, fatal or otherwise, that have been reported to, or investigated by, inspectors ; and reference should be made to the four shortcomings summarised in the second paragraph of this despatch on which Mr. Jones dwells.

4. I desire to draw your attention to the conclusions expressed with regard to Birmingham (page 52), which also applies generally to other parts of the United Kingdom, that, partly as the result of steady inspection, "year by year factories and workshops are becoming more and more salubrious; * * * low, ill-ventilated * * * workrooms are being gradually replaced by fine lofty buildings * * * tending to add greatly to the happiness and well-being of the workers."

No. 1034.

Copy forwarded to the Government of Madras with a request that the report asked for in paragraph 3 of the despatch may be submitted to this department at an early date for transmission to Her Majesty's Secretary of State.

(By order.)

HOME DEPT., JUDL.,
SIMLA, 21*st June* 1888.

(Signed) J. P. HEWETT,
Under Secy. to the Govt. of India.

ORDER—dated 10th July 1888, No. 1477, Judicial.

Communicated to the District Magistrates noted in the margin, the Consulting Engineer for Railways, and the Commissioner of Police, Madras, who will submit remarks on the four points summarised in paragraph 2 of the Secretary of State's despatch and an opinion on the question whether the Indian Factories Act, 1881, should be modified in the direction of additional stringency, and, if so, in what manner.

Ganjam.	Bellary.
Vizagapatam.	South Arcot.
Godávari.	Tinnevelly.
Kistna.	

2. The reply to this reference should reach the Government by the 15th August.

(True Extract.)

J. F. PRICE,
Ag. Chief Secretary.

To the District Magistrate, Ganjam.
" " " Vizagapatam.
" " " Godávari.
" " " Kistna.
" " " Bellary.
" " " South Arcot.
" " " Tinnevelly.
" Public Works Department.
" Consulting Engineer for Railways.
" Commissioner of Police.

APPENDIX.

Report of Mr. Jones, late Inspector of Factories under the Bombay Government.

In accordance with your wish, I have the honor to send you a few remarks as the result of my observations during the four years I have held the post of Inspector of Factories under the Bombay Government. As my connexion with this Government only ceased last May, the position and prospects of the cotton trade in that Presidency cannot have undergone much change, and some of the facts I am going to state may possibly interest the many readers of your valuable yearly Factory Report.

Shortly after I arrived in Bombay, I found that my inspection duties were confined to the Presidency of Bombay, and that the great majority of the factories had been established on the eastern side of India.

The remainder were situated in or near Calcutta, in the Madras Presidency, and in the North-West Provinces.

I fully expected that badly-constructed mills, driven by second-rate engines, indifferent management, and an overwhelming number of hands for the output, would come under my inspection; but I was astonished to find nearly all my ideas were based on false foundations, and had to come to the conclusion that at least half the concerns could compare in most respects favorably with mills spinning the same counts at home.

The Factory Act which I was instructed to enforce was of the most primitive character, having only two important clauses—one being the protection of juvenile labor, forbidding the employment of children from 7 to 12 years of age for more than nine hours a day, and the other the proper fencing of engines, mill gearing, hoists, and machinery. Some time before I arrived, an agitation was started by a few native gentlemen, warmly seconded by the then Governor, Sir James Fergusson, having the amendment of the Act in view.

Resulting from this, Mr. Meade King, one of Her Majesty's Inspectors of Factories, was invited to come to India and institute an inquiry. His admirable and comprehensive report, the outcome of six months' investigations, decided the Government of Bombay to appoint a commission of European and native gentlemen to amend the Act on the lines of his suggestions and recommendations.

Mr. Meade King having returned to England, I was appointed, in September 1883, to carry out the law as it existed, and to assist in such further inquiries as might be necessary.

The first meeting of the commission was held in the Secretariat, Bombay, on the 21st of July 1884, and the last (the 27th) on the 6th of January 1885. I was appointed Secretary.

Throughout the proceedings the great anxiety of the majority seemed to be rather to protect the interests of trade, fearing that an amendment of the Act would hamper its growth, than any urgent desire on their parts to secure the well-being of the mill operatives. There were honorable exceptions to the rule who throughout the sittings warmly espoused the cause of the work-people.

The result of the inquiry ended in many valuable and important additions to the Act being recommended, and the report was forwarded to the Bombay Government, who in their turn, having given the propositions their hearty support, submitted it to the Supreme Council then at Simla. After some time an answer was received to the effect that the Supreme Council did not consider the time had arrived for interfering with the factory laws.

From my point of view I think that the English Factory Acts could not with fairness be put in force in India, the conditions of the country, climate, and people being so widely different; but the questions of Sunday labor, long hours of work for

children, sanitation, and more regular meal hours, ought to receive the prompt attention of the Home Government, for in these particulars under the present system glaring hardships are inflicted on the hands.

I also cordially agree with the widely-expressed wish of the public in Bombay, that the provisions of the Act should be extended to smaller works, which require more inspection than the larger factories. The law at present only touches mills where 100 hands are employed for more than four months in the year, and only those within the limits of the Bombay Presidency. On my first visit to some of the mills up-country, gearing wheels of mule carriages boxed up and iron bars fixed between carding engines were pointed out, showing the useless expense the masters had been put to, and the inconvenience caused to the hands by instructions given by former inexperienced Inspectors. The millowners of the Bombay Presidency, although so lightly dealt with in the way of factory legislation, complain bitterly that their competitors in other parts of India are not hampered with any Act, but I think the English millowner may with greater reason find fault with the more stringent restrictions placed upon him, in comparison with his Indian fellow-manufacturer.

The working hours in the Indian mills are from daybreak to sunset (a period of nearly 14 hours in the summer months), with 20 minutes to half an hour for meals at breakfast and dinner time; no half holiday being given on the Saturday.

Sundays are working days, although some firms, especially European, stop alternate Sundays, and in some cases one Sunday a month.

On these stopping days, however, the hands are required to come to clean their frames, being allowed to leave the mill at different times varying from 10 A.M. to 1 P.M.

Native holidays vary greatly in different districts, and also owing to the castes of the preponderating workpeople. The average native holidays given are 15 in the year; but on only five of these are the hands allowed to remain away the whole day, on the remainder they are kept the usual time to do the necessary cleaning.

The question of factory legislation has been shelved, and some time must elapse before another effort will be made, unless pressure be brought to bear from the Home Government. The moving spirit in promoting improved Indian factory legislation is a Mr. Sorabjee S. Bengallee, a Parsee merchant, who is always to the front in every good work, but I am sorry to say he has not a great following in this particular movement.

You are aware, from the few clauses contained in the Act I had to carry out, my time was in a great measure taken up in recommending sanitary and economical alterations in the working of the mills, which I had no power to enforce, but which, I may state, were eagerly welcomed and carried out by both managers and proprietors. Since I resigned the inspection of the mills, the work has been handed over to the Collectors of the various districts; but this arrangement can only be of a temporary nature, as these gentlemen have other far more important duties to attend to, and cannot be expected to devote the requisite time to this work, nor have they the technical knowledge necessary to direct what parts of the mill-gearing and machinery should or should, not, be protected.

Very few of the mills employ half-timers (if they can be so called, seeing that children 7 to 12 years of age are allowed to work nine hours a day), and as the fencing of machinery is now generally in a satisfactory state, so that my duties were comparatively light.

The modern mills are of the most approved designs, being provided with rope-drawing engines by the best makers, shafting and gearing and machinery which could vie with any mill in England. Ring throstles are very popular, and several large concerns have filled their spinning rooms with these frames.

None of the mills are lighted with gas. Two or three some years ago were worked by electric light, but during my stay I never saw it used.

There is, as is to be expected, a wide difference in the management of the various mills. Some are superintended exclusively by native managers, engineers, and spinning and carding masters.

Parsees are, as a rule, employed in the better-paid situations. A few factories, especially in the city of Bombay, are conducted with great ability; but in others, where the proprietor has little or no knowledge of the business, he often on the score of economy discharges his European overlookers, putting in their place incompetent natives, who soon bring about a lamentable result in the way of inferior and lessened production and a rapid depreciation of the machinery. I have known in one mill four changes of managers in six months, each more incapable than the preceding, and having only the most superficial knowledge of his duties. I remember going my rounds through the many rooms of the mill with one of these managers, and at the close of my inspection I entered various recommendations relating to fencing mule quadrants, driving wheels, and upright shafts in a book kept in the office for that purpose. He read my remarks and begged me to return with him into the mill and explain what I wanted guarding, as he did not know the names of any of the machines, excusing his want of knowledge on the ground of having only just been made manager, being promoted to this responsible position from a seat in a lawyer's office.

A common and curious trait in the character of the native mill proprietor is his seeming indifference to the first cost of the plant and his intense dislike to spend a single rupee afterwards for necessary repairs. Owing to this (fortunately for the English machinist), the life of machinery in an Indian mill is not so long as it would be in an English mill.

Many native speculators, with no conception of spinning, but with wild ideas of the fortunes to be made by starting a mill under any circumstances, will buy worn-out frames by all manner of makers, filling their rooms with machines which will hardly turn, and soon come to grief. Many of these have come to me with open mouth, expressing the greatest astonishment at the result, and praying me to explain the reason of their failure.

Regarding the profits made by these cotton-spinning and manufacturing concerns, it will doubtless make the English masters envious when I say I know of more than one concern in the Presidency which has paid back all the subscribed capital in four years to the delighted and fortunate shareholders.

Generally speaking, with fair management a good profit can be made every year, unless there has been a deficient cotton crop throughout the country. The greatest curse to the trade is the abominable system so generally followed by the native mill agents of deducting a percentage for management on the *output*, whether the goods have been made to a profit or loss. Added to this injustice he frequently charges a commission on all coal and mill stores which are supplied to the factory, leaving the poor shareholder nothing except the knowledge that the agent is waxing rich whilst he is growing poor. In the face of these results, it seems beyond comprehension that very little inducement seems requisite to persuade the native capitalist to take shares in ventures conducted on this basis.

Until this iniquitous system is abolished, the cotton trade in India must always be subject to over-production, and no united action can be taken to check a supply beyond a legitimate demand so long as these men hold the power they possess; their sole thought being to fill their own pockets at the expense of the shareholders, none being given to the condition and future prospects of the trade. The largest millowner is a Parsee millionaire, Sir Dinshaw Maneckjee Petit; he runs seven mills, all well managed, many of them superintended without the aid of any European foreman. The factories owned by Mussulmen are seldom, if ever, insured, and one which has been built 20 years has never had a coat of paint applied to any of the woodwork. There is great speculation continually going on in mill shares, and, with the exception of a few native concerns, those under European management and direction find the most favor.

Many of the mills up-country use wood for fuel, but several masters recently have laid down coal-burning boilers as the country round is becoming denuded of timber. All the coal consumed is imported from England.

The position of the Indian cotton-spinners and manufacturers is undoubtedly a strong one, owing to the many advantages which their situation affords.

In a few words I may mention some—cheap and abundant labor, the raw material close at hand, many of the factories being in the heart of the cotton-growing districts, a ready market being found in the neighbourhood for all cloth without the intervention of middlemen, few strikes, and those of an unimportant nature, and trifling factory legislation not curtailing the working hours and employment of juvenile labour.

The disadvantage may be summed up in the increased cost of engines, gearing, machinery, and coals owing to freight and carriage, more hands being required per spindle, although the ratio is ever on the decrease, restricted choice of competent overlookers, and occasional stoppage of the whole mill owing to a few of a certain caste taking their religious holiday. Twenty years ago 14 winders and pressers were employed on a pair of mules where seven or eight are now considered sufficient. The dry, electric state of the atmosphere during the hot season in parts of the Mofussil renders damp cloths thrown over the laps at the back of carding engines and running water in troughs in every room necessary to carry the cotton through the preparations.

A curious feature in the management of a native mill is the large number of watchmen employed, often poor relations belonging to proprietors or managers, 14 to 16 being no uncommon complement for a single mill.

Added to these there is the same trouble in getting hands together after a holiday as exists in England, and immense damage caused by damp to machinery which is obliged to stand during the monsoon. Unless the premises be properly fitted with heating apparatus, a single night's rain will cause every atom of steel and polished iron to be coated with rust.

I should recommend inventors and makers of coal-saving appliances to pay special attention to Indian mills as a profitable field for the extension of their business, as the price of fuel is a great item in expenses, and any reduction in the consumption is hailed with delight by the large consumer.

There is an immense difference in the yarn and cloth manufactured in the Presidency; some being equal to the turn-out of our best English concerns, and others so outrageously bad and defective that how any firm can be induced to purchase it, at any price, exceeds my comprehension.

With regard to the mill hands, there is no doubt in my mind that their hours of work are too protracted, their meal hours too short, and their holidays too few, but their lot compared with the average outdoor laborer is to be envied. They earn much better wages and are protected from the great heat of the sun and the heavy rains of the monsoon during the hours of work.

Owing to the higher scale of income, they are naturally better fed and clothed than the general run of natives. The great cause for apprehension is, that by allowing children to commence work at such a tender age, and for such long hours, the factory operative race may, in course of time, sadly deteriorate in physique.

In 1884 there were 44 cotton mills in Bombay city, containing 1,217,730 spindles, 12,135 looms employing 40,879 hands; and in the Mofussil, 17 mills containing 274,404 spindles, 2,232 looms employing 9,049 hands.

Since that time, about 10 mills have been opened in Bombay and four in the Mofussil, making a total of 75 for the whole Presidency. The factories up-country are situated as follows:—Ahmedabad nine, Surat four, Broach three, Nadiad one, Jalgaon one, Sholapur one, Hubli one, and Veramgaum one. The tendency now is to erect mills near the sea-coast, as the dry air up-country renders spinning and weaving a difficult operation at certain seasons of the year.

All the factories in the Presidency are built within easy distance of a line of railway; but the ground to be covered by an Inspector is very great, as one may judge, when I mention that it takes 32 hours by rail to reach the mill at Hubli from Bombay.

Labor is abundant, and I see no difficulties ahead in the way of getting any number of workpeople, for the average native will work any number of hours for a trifling increase in his pay, and the conditions under which he is employed do not

seem to be the matter of consideration to him even though they may materially affect his health. Women work usually shorter hours than men, beginning about 7 A.M. and leaving off at 5-30 P.M. Wages vary in different districts (Bombay paying more than inland stations). The average wages of a man in a cotton mill is from 10 to 20 rupees per month, and woman's from 7 to 9.

Women are principally employed in reeling, winding, and cotton-picking, and it is the exception to find them either in the card room or weaving shed. The native operative seems, whether from overwork or from natural aptitude, to be able to fall asleep at a moment's notice. I have seen hands fast asleep on the mill floor directly they have thrown the strap off their machines and before some of their fellow-hands have been able to get out of the mill doors.

The meal question is a difficult one to legislate on owing to caste prejudice. Some are obliged by their religious tenets to eat at stated times, and if that opportunity is denied, they are obliged to fast for a long period.

Different castes will not eat together. I have always been obliged to be exceedingly careful whilst walking between frames during meal hours to avoid touching the person who might be taking his meals in the room, for if by accident I came in contact with them, they would not hesitate to throw their untasted food away.

The general run of hands will not work with lower castes, and the latter have to be kept in certain parts of the room to themselves, and in some cases in a separate building.

Many of the hands employed in Guzerat are so exceedingly dirty in their habits that I have been obliged to ask the proprietors to order them out of the mill in batches, not allowing them to return until they were more decent and presentable. Washing seems actually to be a once-a-year business, and their hair is so matted that combing is out of the question. Their clothes, if they can be so called, are simply filthy rags. These people belong to a gipsy tribe called Wagris, and are largely employed in reeling in the towns of Ahmedabad, Broach, Surat, and Neriad. Skin diseases and ophthalmia are very prevalent amongst this class, I have seen as many as 30 sufferers at work in one room. Scores of cotton ginning and pressing factories are scattered over the cotton-growing districts, but do not come under inspection, as 100 hands are not employed for more than three months in the year, the extremely busy season only lasting about seven weeks. Many of these places are a scandal as regards want of ventilation, awful dust, unprotected prime movers, and the protracted hours of work.

I will here give a few particulars of the evidence given before the Factory Commission by Rustomjee Framjee Wadia, manager of the Pachora Press and Ginning Factory at Khándish:—

"I know of one ginning factory of 40 gins where there are only four doors and no windows. The length of this factory (the walls of which are chunam) is 120 feet, and the doors 7 feet by 4.

"The management of the engines is generally not in competent hands. They are chiefly worked by those who only know how to produce steam, and who know absolutely nothing about proper level, soundness, the proper fitting of the several parts, steadiness, cleaning of the boiler, &c.

"I myself know several factories where the person in charge is quite unfit for his duties.

"The engines also are often worked when out of order, and, being under 10-h.p., they are never examined by the boiler inspector. The boilers often are not fit for use. In many cases, boilers rejected by the larger factories are bought and used by the smaller factories. I deal in machinery, and have got a large establishment in Bombay. I have disposed of some of these rejected boilers which were quite unfit for use, but I got my money. The ——— Mill has just rejected a boiler which has been bought by my firm. Both I and the consulting engineer in my office examined this boiler, and we found a plate absolutely curved in the dome where the water stands. It was most fortunate we made this examination. I have rejected this boiler as being unfit

to work at 40 lb. pressure. I tested it with both water and steam. I have not sold this boiler, but it is now on sale.

"It is my opinion that five-sevenths of these small ginning factories are in a dangerous condition.

"In ordinary seasons, that is when work is not very pressing, the engine starts between 4 and 5 A.M. and 7, 8, or 9 P.M. without any stoppage during the day. The hands work continuously all these hours, and are relieved by one another for meals. In busy seasons, that is in March and April, the gins and presses sometimes work day and night, and the same set of hands work both night and day, with half an hour's rest in the evening. The same set continue working day and night for about eight days. When the hands have been working day and night for about eight days, and it is impossible to go on longer, another set of hands are procured from Bombay, if they can be found. In this case the work is distributed between the old and new sets of workers, half working all night and half working all day.

"More women are employed in gins than in presses. Both the men and the women come to the factory at 3 A.M. as they have no idea of the time, and they wish to make sure that they are at the factory door by the time it opens at 4 A.M. I have 40 gins in one of my factories at Pachora, and I have only 40 women attending to these 40 gins. I have only eight spare women, I never allow these women off the gins. I am not alone in this respect, it is the general system. There is no change of hands except at meal hours. The women, who work from 4 A.M. to 10 P.M., are paid 3 to 4 annas per day. (There are 16 annas in a rupee, which is equivalent to 2*s*.) All the factories pay at this rate; sometimes we pay our hands 6 pies as a bonus (12 pies to one anna). There is no work in the district at which these poor women can get employment.

"We work these long hours from the 15th of November till the 31st of May, but only about 10 days in each month. Sometimes we work day and night for two months, but in this case we employ two sets of laborers. We employ no children. When the wages are so low for the adults, there is no advantage in employing children. I certainly would recommend that legislation should be extended to these factories. I am personally largely interested in this matter, being a proprietor, secretary, and treasurer. I should like to see these ginning factories worked only 12 hours a day, as we could then charge double rates for ginning the cotton, and, of course, we could pay our laborers better wages; but if the Government forced us to pay our laborers more wages, without restricting our hours, we should be obliged to charge the merchants higher rates. The bands who work these long hours frequently die."

The above evidence speaks for itself, and needs no words of mine to convince the public that legislation is needed for this class of factories.

Mills are increasing at a great pace. During my stay in Bombay—a period of four years—about 18 new ones were started, and a great number of concerns enlarged those already erected, or built sheds for reeling or warehouses, to enable them to turn out these departments in order to make room for more spinning and carding.

Other industries are springing up in all directions. Flour mills have been started so rapidly that the supply has greatly exceeded the present demand, and shares in these concerns have become a drug on the market.

Seed crushing, oil mills, foundries, and dye works are increasing in the Presidency; but no machinists have any footing, and all the cotton machinery has to be imported. Very little use has, up to the present time, been made of the enormous water power which is available in many parts, although the Government, alive to these advantages, have offered great inducements to promoters of new works, but they are slow to seize the opportunity.

I foresee in the future huge fortunes to be made by adventurous and plucky manufacturers, who will turn these great natural means of motive power to a practical use. My remarks do not, of course, apply to those wide, tearing torrents which for three months only during the year would be available, but to those rivers which are always flowing, and never fail in the driest season.

The position of many of the English managers in India is an enviable one, and would surprise men in like situations at home. Some receive 1,000*l*. a year with free

bungalow, gas, water, coal, and medical attendance, and many from 400*l*. to 750*l*. with like perquisites. I should, however, wish the English manager, who has any idea of trying his luck in India, to understand that it is not all gold that glitters.

Many have to return with broken health, not being able to stand the climate; others have to pay away half and sometimes all their savings in sending for and sending back their families, for it is the exception when wives and children can remain for any considerable time without returning to England to recruit. We will not allude to those who are carried off, with a rapidity which would startle the good folks at home, by cholera, heat apoplexy, and other sudden and fatal diseases. There are expenses which must be incurred, such as a carriage and horse, frequent journeys to the hill stations to avoid the heat of the plains, and lastly, the reduced value of the rupee, which, from a buying value of 2*s*. in India, is worth only 1*s*. $4\frac{3}{4}d$. when it reaches England. All managers, engineers, carding and spinning masters, who think of engaging for India, should be careful to have their agreements properly drawn up, and not forget that the items of passage to and from India, medical attendance, free bungalow, part of wages to be sent home at full rates of exchange, should be included or left out according to the terms agreed upon.

Some of the men who have engaged have been driven away from their situations owing to the native masters requiring them to make so much overtime, besides insisting on their devoting their holidays to overlooking repairs being made in the mill.

I give these hints hoping that they may have the effect in the future of leading to proper understandings between employer and employed.

I cannot refrain from here acknowledging the kind reception I met with at the hands of masters and managers; no obstacles were ever thrown in my way, and every facility afforded me in the prosecution of my duties. I seldom, if ever, made any recommendation which I thought would tend to the better conduct of the mill or amelioration of the condition of the workpeople which did not at once receive the sanction and adoption of the master.

Difficulties would arise in the way of prosecution; I give one instance. On my way to inspect a mill in Guzerat, I noticed a group of small children squatting on the roadside. As I approached them, the leader of the band presented me with a written petition asking me to inquire into their grievances.

The paper stated that these lads, whose ages varied from eight to twelve, had been for months employed over hours, and had not been allowed the legal time for meals. It went on to say that the master, a well-known rich miser, had deducted half the amount due to them in wages on various pretexts, and that he was then owing them the remainder. I took the children to the Government bungalow, where the children separately made their statements to the Assistant Collector, he taking down the particulars. A prosecution followed in due course, and when in court I called these children as my witnesses to prove the case, they one and all swore that their former declarations were entirely false, and that their master was a kind and good man who always treated them with the greatest consideration. There was no doubt in the minds of the magistrate, my own, and the police that these children had all been frightened into making this denial of their first statements; but as their master was the only large employer of labor in the district, a quarrel with him meant semi-starvation.

Fortunately, I was able to prove one case of overtime, and got a substantial fine; but no conviction in the 14 others was possible under the circumstances.

Jute manufacturing is carried on almost exclusively in Calcutta; the only jute mill in Bombay being converted during my stay into a cotton-godown and the machinery shipped to Calcutta. Many of the hands are provident and put together sufficient to buy a small piece of land in their native country, leaving it to be cultivated by some members of their family; whilst others, having put by their savings for long weary months, go to their birth-place, feed a lot of lazy Brahmins for the edification of their souls, returning (having spent their all on these drones) to their work again without a rupee. The great proportion of the mill hands of Bombay are drawn from the Southern Marathi country, and are a quiet, harmless, hard-working

lot, falling an easy prey to the grasping native money-lender or marwaris, who lies in waiting for them at the mill door, making tempting offers, and who, once on the track, does not leave his victim until he has dispoiled him of his all. They charge as interest from one to three annas per rupee per month, there being 16 annas to a rupee.

Three-quarters of the yarn spun in India is sent to China in the bundle, the remainder being manufactured into cloth and disposed of in various parts of the country. In case of a war with China, the cotton industry in India would for the time utterly collapse, as there are so few markets open to their goods. The Chamber of Commerce in Bombay is now directing its efforts to remedy this position of affairs. The temperature in some of the mills, especially just before the burst of the monsoon, is very oppressive. I have seen 117° registered in a spinning room in Broach.

In Bombay city, besides the cotton mills and foundries, there are two immense dyeing establishments and one silk mill, making goods for the Rangoon market. Several of the mills manufacture towels, sheets, hosiery, &c.

Another hint to managers intending to take up a situation in India.

I should not advise any man to think of emigrating who has not a perfect control over himself in the way of drink. Living in such a furnace, the enforced solitary life as regards meeting with his fellow-countrymen, frequent periods of depression owing to being separated from his family, and the effects of the trying climate, all conduce to habits of intemperance, and the many loafers whom one meets with and is pestered by prove how many have succumbed who have started with fair and even bright prospects.

I do not think that more serious accidents are reported than at home from a work of the same size, but the slight accidents are of more frequent occurrence. It is often found impossible, owing to the superstition of the relatives, to keep an injured person in the hospital, and several have been removed who were rapidly recovering from their injuries by a mob who have hurried the patient to the magic man. He, having waved a few peacock feathers over him and plastered the wound with dung, saying at the time a few prayers, often leaves him to die.

Exd. A. Raitt.

Govt. of {1888} Madras.

JUDICIAL.

Issued

Recd. *Encl.*

G.O., 10th July 1888, No. 1477.

JULY.

Indian Factories Act.

Communicating to officers concerned, for report, Government of India endorsement forwarding copy of Secretary of State's despatch calling for a report on the working of the — in certain provinces.

GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

READ—the following paper :—

Despatch from the Right Honorable Lord CROSS, Her Majesty's Secretary of State for India, to His Excellency the Right Honorable the Governor-General of India in Council, dated India Office, London, 3rd May 1888, No. 30 (Statistics and Commerce).

I forward, for your information, 12 copies of the report of the Chief Inspector of Factories for the year 1886-87. At pages 112-123 of that report is a memorandum concerning the Indian Factory Act and Bombay Factories by Mr. Jones, who was for some time Inspector of Factories under the Government of Bombay. I learnt from the despatch of the Government of Bombay, No. 14 (General), of 16th October 1887, that it was not intended at present to appoint any successor to Mr. Jones, and that the work of inspecting factories would be performed by the Assistant Collector in Bombay and by District Magistrates in the interior of the country.

2. You will observe that Mr. Jones remarks upon—

(1) the long hours of work and few holidays in Bombay factories ;
(2) the occasional withholding of wages from hands ;
(3) the incompetency of mill managers, the dangerous character of many mills, and the inadequate fencing of machinery ;
(4) the ill-ventilated and filthy state of many work-rooms.

At the same time, he states in the same memorandum—

(*a*) that the long hours of work are often for only a part of the month or for one season of the year, and that the holidays and their sequelæ are a cause of loss to millowners ;
(*b*) that mill hands are better off, better fed, better clothed, and better protected than ordinary Native laborers ;
(*c*) that half the Bombay factories compare favorably in respect of machinery, management, and construction with similar establishments in England, and that serious accidents are not more numerous than in corresponding works at home ;
(*d*) that suggestions for the amelioration of mill hands are nearly always acted upon by mill managers.

3. I desire to receive a report at an early date upon the working of the Indian Factory Act in Bombay, Bengal, Burma, and in any other province where many factories exist. I should be glad to learn how the plan of placing the duty of inspecting factories in the hands of Magistrates or of Government Engineers has answered ; and whether it is proposed to modify the Factory Act of 1881 in the direction of additional stringency. A statement should be given as far as may be practicable of accidents, fatal or otherwise, that have been reported to, or investigated by, inspectors ; and reference should be made to the four shortcomings summarised in the second paragraph of this despatch on which Mr. Jones dwells.

4. I desire to draw your attention to the conclusions expressed with regard to Birmingham (page 52), which also applies generally to other parts of the United Kingdom, that, partly as the result of steady inspection, "year by year factories and workshops are becoming more and more salubrious; * * * low, ill-ventilated * * * workrooms are being gradually replaced by fine lofty buildings * * * tending to add greatly to the happiness and well-being of the workers."

No. 1034.

Copy forwarded to the Government of Madras with a request that the report asked for in paragraph 3 of the despatch may be submitted to this department at an early date for transmission to Her Majesty's Secretary of State.

(By order.)

HOME DEPT., JUDL.,
SIMLA, 21*st June* 1888.

(Signed) J. P. HEWETT,
Under Secy. to the Govt. of India.

ORDER—dated 10th July 1888, No. 1477, Judicial.

Communicated to the District Magistrates noted in the margin, the Consulting Engineer for Railways, and the Commissioner of Police, Madras, who will submit remarks on the four points summarised in paragraph 2 of the Secretary of State's despatch and an opinion on the question whether the Indian Factories Act, 1881, should be modified in the direction of additional stringency, and, if so, in what manner.

Ganjam.	Bellary.
Vizagapatam.	South Arcot.
Godávari.	Tinnevelly.
Kistna.	

2. The reply to this reference should reach the Government by the 15th August.

(True Extract.)

J. F. PRICE,
Ag. Chief Secretary.

To the District Magistrate, Ganjam.
" " " Vizagapatam.
" " " Godávari.
" " " Kistna.
" " " Bellary.
" " " South Arcot.
" " " Tinnevelly.
" Public Works Department.
" Consulting Engineer for Railways.
" Commissioner of Police.

APPENDIX.

Report of Mr. Jones, late Inspector of Factories under the Bombay Government.

In accordance with your wish, I have the honor to send you a few remarks as the result of my observations during the four years I have held the post of Inspector of Factories under the Bombay Government. As my connexion with this Government only ceased last May, the position and prospects of the cotton trade in that Presidency cannot have undergone much change, and some of the facts I am going to state may possibly interest the many readers of your valuable yearly Factory Report.

Shortly after I arrived in Bombay, I found that my inspection duties were confined to the Presidency of Bombay, and that the great majority of the factories had been established on the eastern side of India.

The remainder were situated in or near Calcutta, in the Madras Presidency, and in the North-West Provinces.

I fully expected that badly-constructed mills, driven by second-rate engines, indifferent management, and an overwhelming number of hands for the output, would come under my inspection; but I was astonished to find nearly all my ideas were based on false foundations, and had to come to the conclusion that at least half the concerns could compare in most respects favorably with mills spinning the same counts at home.

The Factory Act which I was instructed to enforce was of the most primitive character, having only two important clauses—one being the protection of juvenile labor, forbidding the employment of children from 7 to 12 years of age for more than nine hours a day, and the other the proper fencing of engines, mill gearing, hoists, and machinery. Some time before I arrived, an agitation was started by a few native gentlemen, warmly seconded by the then Governor, Sir James Fergusson, having the amendment of the Act in view.

Resulting from this, Mr. Meade King, one of Her Majesty's Inspectors of Factories, was invited to come to India and institute an inquiry. His admirable and comprehensive report, the outcome of six months' investigations, decided the Government of Bombay to appoint a commission of European and native gentlemen to amend the Act on the lines of his suggestions and recommendations.

Mr. Meade King having returned to England, I was appointed, in September 1883, to carry out the law as it existed, and to assist in such further inquiries as might be necessary.

The first meeting of the commission was held in the Secretariat, Bombay, on the 21st of July 1884, and the last (the 27th) on the 6th of January 1885. I was appointed Secretary.

Throughout the proceedings the great anxiety of the majority seemed to be rather to protect the interests of trade, fearing that an amendment of the Act would hamper its growth, than any urgent desire on their parts to secure the well-being of the mill operatives. There were honorable exceptions to the rule who throughout the sittings warmly espoused the cause of the work-people.

The result of the inquiry ended in many valuable and important additions to the Act being recommended, and the report was forwarded to the Bombay Government, who in their turn, having given the propositions their hearty support, submitted it to the Supreme Council then at Simla. After some time an answer was received to the effect that the Supreme Council did not consider the time had arrived for interfering with the factory laws.

From my point of view I think that the English Factory Acts could not with fairness be put in force in India, the conditions of the country, climate, and people being so widely different; but the questions of Sunday labor, long hours of work for

children, sanitation, and more regular meal hours, ought to receive the prompt attention of the Home Government, for in these particulars under the present system glaring hardships are inflicted on the hands.

I also cordially agree with the widely-expressed wish of the public in Bombay, that the provisions of the Act should be extended to smaller works, which require more inspection than the larger factories. The law at present only touches mills where 100 hands are employed for more than four months in the year, and only those within the limits of the Bombay Presidency. On my first visit to some of the mills up-country, gearing wheels of mule carriages boxed up and iron bars fixed between carding engines were pointed out, showing the useless expense the masters had been put to, and the inconvenience caused to the hands by instructions given by former inexperienced Inspectors. The millowners of the Bombay Presidency, although so lightly dealt with in the way of factory legislation, complain bitterly that their competitors in other parts of India are not hampered with any Act, but I think the English millowner may with greater reason find fault with the more stringent restrictions placed upon him, in comparison with his Indian fellow-manufacturer.

The working hours in the Indian mills are from daybreak to sunset (a period of nearly 14 hours in the summer months), with 20 minutes to half an hour for meals at breakfast and dinner time; no half holiday being given on the Saturday.

Sundays are working days, although some firms, especially European, stop alternate Sundays, and in some cases one Sunday a month.

On these stopping days, however, the hands are required to come to clean their frames, being allowed to leave the mill at different times varying from 10 A.M. to 1 P.M.

Native holidays vary greatly in different districts, and also owing to the castes of the preponderating workpeople. The average native holidays given are 15 in the year; but on only five of these are the hands allowed to remain away the whole day, on the remainder they are kept the usual time to do the necessary cleaning.

The question of factory legislation has been shelved, and some time must elapse before another effort will be made, unless pressure be brought to bear from the Home Government. The moving spirit in promoting improved Indian factory legislation is a Mr. Sorabjee S. Bengallee, a Parsee merchant, who is always to the front in every good work, but I am sorry to say he has not a great following in this particular movement.

You are aware, from the few clauses contained in the Act I had to carry out, my time was in a great measure taken up in recommending sanitary and economical alterations in the working of the mills, which I had no power to enforce, but which, I may state, were eagerly welcomed and carried out by both managers and proprietors. Since I resigned the inspection of the mills, the work has been handed over to the Collectors of the various districts; but this arrangement can only be of a temporary nature, as these gentlemen have other far more important duties to attend to, and cannot be expected to devote the requisite time to this work, nor have they the technical knowledge necessary to direct what parts of the mill-gearing and machinery should or should, not, be protected.

Very few of the mills employ half-timers (if they can be so called, seeing that children 7 to 12 years of age are allowed to work nine hours a day), and as the fencing of machinery is now generally in a satisfactory state, so that my duties were comparatively light.

The modern mills are of the most approved designs, being provided with rope-drawing engines by the best makers, shafting and gearing and machinery which could vie with any mill in England. Ring throstles are very popular, and several large concerns have filled their spinning rooms with these frames.

None of the mills are lighted with gas. Two or three some years ago were worked by electric light, but during my stay I never saw it used.

There is, as is to be expected, a wide difference in the management of the various mills. Some are superintended exclusively by native managers, engineers, and spinning and carding masters.

Parsees are, as a rule, employed in the better paid situations. A few factories, especially in the city of Bombay, are conducted with great ability; but in others, where the proprietor has little or no knowledge of the business, he often on the score of economy discharges his European overlookers, putting in their place incompetent natives, who soon bring about a lamentable result in the way of inferior and lessened production and a rapid depreciation of the machinery. I have known in one mill four changes of managers in six months, each more incapable than the preceding, and having only the most superficial knowledge of his duties. I remember going my rounds through the many rooms of the mill with one of these managers, and at the close of my inspection I entered various recommendations relating to fencing mule quadrants, driving wheels, and upright shafts in a book kept in the office for that purpose. He read my remarks and begged me to return with him into the mill and explain what I wanted guarding, as he did not know the names of any of the machines, excusing his want of knowledge on the ground of having only just been made manager, being promoted to this responsible position from a seat in a lawyer's office.

A common and curious trait in the character of the native mill proprietor is his seeming indifference to the first cost of the plant and his intense dislike to spend a single rupee afterwards for necessary repairs. Owing to this (fortunately for the English machinist), the life of machinery in an Indian mill is not so long as it would be in an English mill.

Many native speculators, with no conception of spinning, but with wild ideas of the fortunes to be made by starting a mill under any circumstances, will buy worn-out frames by all manner of makers, filling their rooms with machines which will hardly turn, and soon come to grief. Many of these have come to me with open mouth, expressing the greatest astonishment at the result, and praying me to explain the reason of their failure.

Regarding the profits made by these cotton-spinning and manufacturing concerns, it will doubtless make the English masters envious when I say I know of more than one concern in the Presidency which has paid back all the subscribed capital in four years to the delighted and fortunate shareholders.

Generally speaking, with fair management a good profit can be made every year, unless there has been a deficient cotton crop throughout the country. The greatest curse to the trade is the abominable system so generally followed by the native mill agents of deducting a percentage for management on the *output*, whether the goods have been made to a profit or loss. Added to this injustice he frequently charges a commission on all coal and mill stores which are supplied to the factory, leaving the poor shareholder nothing except the knowledge that the agent is waxing rich whilst he is growing poor. In the face of these results, it seems beyond comprehension that very little inducement seems requisite to persuade the native capitalist to take shares in ventures conducted on this basis.

Until this iniquitous system is abolished, the cotton trade in India must always be subject to over-production, and no united action can be taken to check a supply beyond a legitimate demand so long as these men hold the power they possess; their sole thought being to fill their own pockets at the expense of the shareholders, none being given to the condition and future prospects of the trade. The largest millowner is a Parsee millionaire, Sir Dinshaw Maneckjee Petit; he runs seven mills, all well managed, many of them superintended without the aid of any European foreman. The factories owned by Mussulmen are seldom, if ever, insured, and one which has been built 20 years has never had a coat of paint applied to any of the woodwork. There is great speculation continually going on in mill shares, and, with the exception of a few native concerns, those under European management and direction find the most favor.

Many of the mills up-country use wood for fuel, but several masters recently have laid down coal-burning boilers as the country round is becoming denuded of timber. All the coal consumed is imported from England.

The position of the Indian cotton-spinners and manufacturers is undoubtedly a strong one, owing to the many advantages which their situation affords.

In a few words I may mention some—cheap and abundant labor, the raw material close at hand, many of the factories being in the heart of the cotton-growing districts, a ready market being found in the neighbourhood for all cloth without the intervention of middlemen, few strikes, and those of an unimportant nature, and trifling factory legislation not curtailing the working hours and employment of juvenile labour.

The disadvantage may be summed up in the increased cost of engines, gearing, machinery, and coals owing to freight and carriage, more hands being required per spindle, although the ratio is ever on the decrease, restricted choice of competent overlookers, and occasional stoppage of the whole mill owing to a few of a certain caste taking their religious holiday. Twenty years ago 14 winders and pressers were employed on a pair of mules where seven or eight are now considered sufficient. The dry, electric state of the atmosphere during the hot season in parts of the Mofussil renders damp cloths thrown over the laps at the back of carding engines and running water in troughs in every room necessary to carry the cotton through the preparations.

A curious feature in the management of a native mill is the large number of watchmen employed, often poor relations belonging to proprietors or managers, 14 to 16 being no uncommon complement for a single mill.

Added to these there is the same trouble in getting hands together after a holiday as exists in England, and immense damage caused by damp to machinery which is obliged to stand during the monsoon. Unless the premises be properly fitted with heating apparatus, a single night's rain will cause every atom of steel and polished iron to be coated with rust.

I should recommend inventors and makers of coal-saving appliances to pay special attention to Indian mills as a profitable field for the extension of their business, as the price of fuel is a great item in expenses, and any reduction in the consumption is hailed with delight by the large consumer.

There is an immense difference in the yarn and cloth manufactured in the Presidency; some being equal to the turn-out of our best English concerns, and others so outrageously bad and defective that how any firm can be induced to purchase it, at any price, exceeds my comprehension.

With regard to the mill hands, there is no doubt in my mind that their hours of work are too protracted, their meal hours too short, and their holidays too few, but their lot compared with the average outdoor laborer is to be envied. They earn much better wages and are protected from the great heat of the sun and the heavy rains of the monsoon during the hours of work.

Owing to the higher scale of income, they are naturally better fed and clothed than the general run of natives. The great cause for apprehension is, that by allowing children to commence work at such a tender age, and for such long hours, the factory operative race may, in course of time, sadly deteriorate in physique.

In 1884 there were 44 cotton mills in Bombay city, containing 1,217,730 spindles, 12,135 looms employing 40,879 hands; and in the Mofussil, 17 mills containing 274,404 spindles, 2,252 looms employing 9,049 hands.

Since that time, about 10 mills have been opened in Bombay and four in the Mofussil, making a total of 75 for the whole Presidency. The factories up-country are situated as follows:—Ahmedabad nine, Surat four, Broach three, Nadiad one, Jalgaon one, Sholapur one, Hubli one, and Veramgaum one. The tendency now is to erect mills near the sea-coast, as the dry air up-country renders spinning and weaving a difficult operation at certain seasons of the year.

All the factories in the Presidency are built within easy distance of a line of railway; but the ground to be covered by an Inspector is very great, as one may judge, when I mention that it takes 32 hours by rail to reach the mill at Hubli from Bombay.

Labor is abundant, and I see no difficulties ahead in the way of getting any number of workpeople, for the average native will work any number of hours for a trifling increase in his pay, and the conditions under which he is employed do not

seem to be the matter of consideration to him even though they may materially affect his health. Women work usually shorter hours than men, beginning about 7 A.M. and leaving off at 5-30 P.M. Wages vary in different districts (Bombay paying more than inland stations). The average wages of a man in a cotton mill is from 10 to 20 rupees per month, and woman's from 7 to 9.

Women are principally employed in reeling, winding, and cotton-picking, and it is the exception to find them either in the card room or weaving shed. The native operative seems, whether from overwork or from natural aptitude, to be able to fall asleep at a moment's notice. I have seen hands fast asleep on the mill floor directly they have thrown the strap off their machines and before some of their fellow-hands have been able to get out of the mill doors.

The meal question is a difficult one to legislate on owing to caste prejudice. Some are obliged by their religious tenets to eat at stated times, and if that opportunity is denied, they are obliged to fast for a long period.

Different castes will not eat together. I have always been obliged to be exceedingly careful whilst walking between frames during meal hours to avoid touching the person who might be taking his meals in the room, for if by accident I came in contact with them, they would not hesitate to throw their untasted food away.

The general run of hands will not work with lower castes, and the latter have to be kept in certain parts of the room to themselves, and in some cases in a separate building.

Many of the hands employed in Guzerat are so exceedingly dirty in their habits that I have been obliged to ask the proprietors to order them out of the mill in batches, not allowing them to return until they were more decent and presentable. Washing seems actually to be a once-a-year business, and their hair is so matted that combing is out of the question. Their clothes, if they can be so called, are simply filthy rags. These people belong to a gipsy tribe called Wagris, and are largely employed in reeling in the towns of Ahmedabad, Broach, Surat, and Neriad. Skin diseases and ophthalmia are very prevalent amongst this class, I have seen as many as 30 sufferers at work in one room. Scores of cotton ginning and pressing factories are scattered over the cotton-growing districts, but do not come under inspection, as 100 hands are not employed for more than three months in the year, the extremely busy season only lasting about seven weeks. Many of these places are a scandal as regards want of ventilation, awful dust, unprotected prime movers, and the protracted hours of work.

I will here give a few particulars of the evidence given before the Factory Commission by Rustomjee Framjee Wadia, manager of the Pachora Press and Ginning Factory at Khándish:—

"I know of one ginning factory of 40 gins where there are only four doors and no windows. The length of this factory (the walls of which are chunam) is 120 feet, and the doors 7 feet by 4.

"The management of the engines is generally not in competent hands. They are chiefly worked by those who only know how to produce steam, and who know absolutely nothing about proper level, soundness, the proper fitting of the several parts, steadiness, cleaning of the boiler, &c.

"I myself know several factories where the person in charge is quite unfit for his duties.

"The engines also are often worked when out of order, and, being under 10-h.p., they are never examined by the boiler inspector. The boilers often are not fit for use. In many cases, boilers rejected by the larger factories are bought and used by the smaller factories. I deal in machinery, and have got a large establishment in Bombay. I have disposed of some of these rejected boilers which were quite unfit for use, but I got my money. The ——— Mill has just rejected a boiler which has been bought by my firm. Both I and the consulting engineer in my office examined this boiler, and we found a plate absolutely curved in the dome where the water stands. It was most fortunate we made this examination. I have rejected this boiler as being unfit

to work at 40 lb. pressure. I tested it with both water and steam. I have not sold this boiler, but it is now on sale.

"It is my opinion that five-sevenths of these small ginning factories are in a dangerous condition.

"In ordinary seasons, that is when work is not very pressing, the engine starts between 4 and 5 A.M. and 7, 8, or 9 P.M. without any stoppage during the day. The hands work continuously all these hours, and are relieved by one another for meals. In busy seasons, that is in March and April, the gins and presses sometimes work day and night, and the same set of hands work both night and day, with half an hour's rest in the evening. The same set continue working day and night for about eight days. When the hands have been working day and night for about eight days, and it is impossible to go on longer, another set of hands are procured from Bombay, if they can be found. In this case the work is distributed between the old and new sets of workers, half working all night and half working all day.

"More women are employed in gins than in presses. Both the men and the women come to the factory at 3 A.M. as they have no idea of the time, and they wish to make sure that they are at the factory door by the time it opens at 4 A.M. I have 40 gins in one of my factories at Pachora, and I have only 40 women attending to these 40 gins. I have only eight spare women, I never allow these women off the gins. I am not alone in this respect, it is the general system. There is no change of hands except at meal hours. The women, who work from 4 A.M. to 10 P.M., are paid 3 to 4 annas per day. (There are 16 annas in a rupee, which is equivalent to 2*s*.) All the factories pay at this rate; sometimes we pay our hands 6 pies as a bonus (12 pies to one anna). There is no work in the district at which these poor women can get employment.

"We work these long hours from the 15th of November till the 31st of May, but only about 10 days in each month. Sometimes we work day and night for two months, but in this case we employ two sets of laborers. We employ no children. When the wages are so low for the adults, there is no advantage in employing children. I certainly would recommend that legislation should be extended to these factories. I am personally largely interested in this matter, being a proprietor, secretary, and treasurer. I should like to see these ginning factories worked only 12 hours a day, as we could then charge double rates for ginning the cotton, and, of course, we could pay our laborers better wages; but if the Government forced us to pay our laborers more wages, without restricting our hours, we should be obliged to charge the merchants higher rates. The hands who work these long hours frequently die."

The above evidence speaks for itself, and needs no words of mine to convince the public that legislation is needed for this class of factories.

Mills are increasing at a great pace. During my stay in Bombay—a period of four years—about 18 new ones were started, and a great number of concerns enlarged those already erected, or built sheds for reeling or warehouses, to enable them to turn out these departments in order to make room for more spinning and carding.

Other industries are springing up in all directions. Flour mills have been started so rapidly that the supply has greatly exceeded the present demand, and shares in these concerns have become a drug on the market.

Seed crushing, oil mills, foundries, and dye works are increasing in the Presidency; but no machinists have any footing, and all the cotton machinery has to be imported. Very little use has, up to the present time, been made of the enormous water power which is available in many parts, although the Government, alive to these advantages, have offered great inducements to promoters of new works, but they are slow to seize the opportunity.

I foresee in the future huge fortunes to be made by adventurous and plucky manufacturers, who will turn these great natural means of motive power to a practical use. My remarks do not, of course, apply to those wide, tearing torrents which for three months only during the year would be available, but to those rivers which are always flowing, and never fail in the driest season.

The position of many of the English managers in India is an enviable one, and would surprise men in like situations at home. Some receive 1,000*l*. a year with free

bungalow, gas, water, coal, and medical attendance, and many from 400*l*. to 750*l*. with like perquisites. I should, however, wish the English manager, who has any idea of trying his luck in India, to understand that it is not all gold that glitters.

Many have to return with broken health, not being able to stand the climate; others have to pay away half and sometimes all their savings in sending for and sending back their families, for it is the exception when wives and children can remain for any considerable time without returning to England to recruit. We will not allude to those who are carried off, with a rapidity which would startle the good folks at home, by cholera, heat apoplexy, and other sudden and fatal diseases. There are expenses which must be incurred, such as a carriage and horse, frequent journeys to the hill stations to avoid the heat of the plains, and lastly, the reduced value of the rupee, which, from a buying value of 2*s*. in India, is worth only 1*s*. 4¾*d*. when it reaches England. All managers, engineers, carding and spinning masters, who think of engaging for India, should be careful to have their agreements properly drawn up, and not forget that the items of passage to and from India, medical attendance, free bungalow, part of wages to be sent home at full rates of exchange, should be included or left out according to the terms agreed upon.

Some of the men who have engaged have been driven away from their situations owing to the native masters requiring them to make so much overtime, besides insisting on their devoting their holidays to overlooking repairs being made in the mill.

I give these hints hoping that they may have the effect in the future of leading to proper understandings between employer and employed.

I cannot refrain from here acknowledging the kind reception I met with at the hands of masters and managers; no obstacles were ever thrown in my way, and every facility afforded me in the prosecution of my duties. I seldom, if ever, made any recommendation which I thought would tend to the better conduct of the mill or amelioration of the condition of the workpeople which did not at once receive the sanction and adoption of the master.

Difficulties would arise in the way of prosecution; I give one instance. On my way to inspect a mill in Guzerat, I noticed a group of small children squatting on the roadside. As I approached them, the leader of the band presented me with a written petition asking me to inquire into their grievances.

The paper stated that these lads, whose ages varied from eight to twelve, had been for months employed over hours, and had not been allowed the legal time for meals. It went on to say that the master, a well-known rich miser, had deducted half the amount due to them in wages on various pretexts, and that he was then owing them the remainder. I took the children to the Government bungalow, where the children separately made their statements to the Assistant Collector, he taking down the particulars. A prosecution followed in due course, and when in court I called these children as my witnesses to prove the case, they one and all swore that their former declarations were entirely false, and that their master was a kind and good man who always treated them with the greatest consideration. There was no doubt in the minds of the magistrate, my own, and the police that these children had all been frightened into making this denial of their first statements; but as their master was the only large employer of labor in the district, a quarrel with him meant semi-starvation.

Fortunately, I was able to prove one case of overtime, and got a substantial fine; but no conviction in the 14 others was possible under the circumstances.

Jute manufacturing is carried on almost exclusively in Calcutta; the only jute mill in Bombay being converted during my stay into a cotton-godown and the machinery shipped to Calcutta. Many of the hands are provident and put together sufficient to buy a small piece of land in their native country, leaving it to be cultivated by some members of their family; whilst others, having put by their savings for long weary months, go to their birth-place, feed a lot of lazy Brahmins for the edification of their souls, returning (having spent their all on these drones) to their work again without a rupee. The great proportion of the mill hands of Bombay are drawn from the Southern Marathi country, and are a quiet, harmless, hard-working

lot, falling an easy prey to the grasping native money-lender or marwaris, who lies in waiting for them at the mill door, making tempting offers, and who, once on the track, does not leave his victim until he has dispoiled him of his all. They charge as interest from one to three annas per rupee per month, there being 16 annas to a rupee.

Three-quarters of the yarn spun in India is sent to China in the bundle, the remainder being manufactured into cloth and disposed of in various parts of the country. In case of a war with China, the cotton industry in India would for the time utterly collapse, as there are so few markets open to their goods. The Chamber of Commerce in Bombay is now directing its efforts to remedy this position of affairs. The temperature in some of the mills, especially just before the burst of the monsoon, is very oppressive. I have seen 117° registered in a spinning room in Broach.

In Bombay city, besides the cotton mills and foundries, there are two immense dyeing establishments and one silk mill, making goods for the Rangoon market. Several of the mills manufacture towels, sheets, hosiery, &c.

Another hint to managers intending to take up a situation in India.

I should not advise any man to think of emigrating who has not a perfect control over himself in the way of drink. Living in such a furnace, the enforced solitary life as regards meeting with his fellow-countrymen, frequent periods of depression owing to being separated from his family, and the effects of the trying climate, all conduce to habits of intemperance, and the many loafers whom one meets with and is pestered by prove how many have succumbed who have started with fair and even bright prospects.

I do not think that more serious accidents are reported than at home from a work of the same size, but the slight accidents are of more frequent occurrence. It is often found impossible, owing to the superstition of the relatives, to keep an injured person in the hospital, and several have been removed who were rapidly recovering from their injuries by a mob who have hurried the patient to the magic man. He, having waved a few peacock feathers over him and plastered the wound with dung, saying at the time a few prayers, often leaves him to die.

Exd. A. Raitt.

Govt. of {1888} Madras.

JUDICIAL.

Issued

Recd. *Encl.*

G.O., 10th July 1888, No. 1477.

JULY.

Indian Factories Act.

Communicating to officers concerned, for report, Government of India endorsement forwarding copy of Secretary of State's despatch calling for a report on the working of the — in certain provinces.

GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

READ—the following papers:—

From the District Magistrate,	Madura,	dated	20th	January	1888,	No. 3.
,, ,, ,,	Chingleput	,,	14th	February	,, ,,	84.
,, ,, ,,	Trichinopoly	,,	3rd	March	,, ,,	23-2.
,, ,, ,,	Salem	,,	6th	,,	,, ,,	374.
,, ,, ,,	Anantapur	,,	9th	,,	,, ,,	183.
,, ,, ,,	Malabar	,,	26th	,,	,, ,,	769.
,, ,, ,,	Tanjore	,,	27th	,,	,, ,,	186.
,, ,, ,,	Coimbatore	,,	31st	,,	,, ,,	250.
,, ,, ,,	Nilgiris	,,	6th	April	,, ,,	373.
,, ,, ,,	Cuddapah	,,	19th	,,	,, ,,	356.
,, ,, ,,	South Canara	,,	19th	,,	,, ,,	1405.
,, ,, ,,	North Arcot	,,	24th	,,	,, ,,	259.

ABSTRACT.—Reporting that there are no factories in these districts that fall under the Factories Act.

From M.R.Ry. A. SURYANARAYANA NAIDU Garu, General Deputy Magistrate and Inspector of Factories in Goomsur Division, to the District Magistrate of Ganjam, dated Russellkonda, 10th January 1888, No. 25.

I have the honor to submit my report on the inspection of the Sugar Factory at Aska belonging to Messrs. Minchin Brothers and Co. for the year 1887.

2. During the year under review, I inspected this factory three times, viz., 27th April, 16th August and 10th December 1887. On these occasions, Mr. Kollman, the manager of the factory, was on the premises and gave me every facility in my work of inspection.

3. No children under the age of 12 years were employed.

4. All dangerous portions of the machinery were, in my opinion, securely fenced.

5. All the requisite notices were hung up conspicuously.

6. I found the factory, as usual, very clean and well ventilated.

7. Only one accident was reported during the year under review, against seven in 1886.

On the 20th September 1887 at 4-30 P.M. a man named Kodandy, aged 34 years, got his chest, hands and legs slightly scalded, while letting out a skip of treacle. This was due to his own carelessness.

8. With reference to paragraph 5 of G.O., dated 21st May 1887, No. 1090, Judicial, I beg to state that the manager of the factory has informed me that, of the 7 accidents mentioned in my report for 1886, No. 1 in the list was caused by the carelessness of a fellow-cooly and all the others were due to the carelessness of the injured persons themselves.

9. The factory is carefully supervised by the manager and his subordinates. There is a maistry for every kind of work, besides two head warders and two assistant warders who are specially in charge of the machines. These are also supervised by two head maistries. Moreover, two head gumastahs look after the whole work, while Mr. Kollman, the manager, supervises the entire factory.

10. I beg to append a statement showing the results of the inspections :—

Name of factory.	Date of inspection.	Number of persons employed.				Machinery whether fenced or not.	Ventilation and sanitation.
		Adults.		Children.			
		Men.	Women.	Males.	Females.		
Sugar Factory at Aska ..	27th Apr. 1887 ..	433	..	..	..	Securely fenced.	Clean and well ventilated.
	16th Aug. ,, ..	455	..	..	..	Do. ..	Do.
	10th Dec. ,, ..	404	..	..	..	Do. ..	Do.

No. 307.

Endorsement on the above.

Submitted to the Chief Secretary to Government, Judicial Department.

CHATRAPUR,
25*th January* 1888.

(Signed) H. HOWELL, Dy. Collr.,
for *Collector and District Magistrate.*

From G. F. T. POWER, Esq., Acting Joint Magistrate, to the Magistrate, Godávari District, dated Rajahmundry, 2nd February 1888, No. 21.

I have the honor to report on the working of the Factories Act XV of 1881 during the year 1887.

2. The Government Workshop at Dowlaishweram is the only factory in the division coming under the scope of the Act. It was inspected by my predecessors twice during the year. At the time of the first inspection by Mr. Miller on 25th July 1887, 124 males and 5 females were employed, besides 33 boys, of whom 26 were apprentices, one bellows boy, one fitter boy and five carpenter boys. They were all over 12 years of age. At the time of the second inspection by Mr. Hamnett on 10th October 1887, there were 180 males and 6 females. There were also 20 bellows boys, 4 fitter boys, 5 carpenter boys, and 34 apprentices. One of the boys in the smiths' shop, Inapakurti Malliah, a bellows boy, did not seem to Mr. Hamnett to be more than 12 years of age. The Superintendent promised to produce a certificate from the Civil Surgeon as to his age. D and E Registers were not maintained, on the ground that no children were employed in the factory.

3. There was proper ventilation and everything was in good order.

4. All dangerous machinery was properly fenced.

5. There were no accidents during the year.

6. The working hours were as usual from 6 A.M. to 12 noon and from 2 to 5 P.M.

7. The statement prescribed by Government in their Order, No. 1760, dated 7th July 1885, is enclosed.

ENCLOSURE.

STATEMENT showing the number of persons employed at the end of the year 1887 in the Government Workshop at Dowlaishweram.

Name of district.	Name of factory.	Number of persons employed at the end of the year 1887.				Machinery whether fenced or not.	Ventilation and sanitation.	Remarks.
		Adults.		Children.				
		Males.	Females.	Males.	Females.			
Godávari District.	Government Workshop.	205	6	*75	..	Fenced ..	Good.	39 Apprentices. 4 Fitter boys. 7 Carpenter boys. 25 Bellows boys. 75 *

No. 10.

Endorsement on the above.

Submitted to Government with the enclosure.

COCANADA,
13*th February* 1888.

(Signed) L. C. MILLER,
for *District Magistrate.*

From C. F. MACCARTIE, Esq., Acting District Magistrate of Tinnevelly, to the Chief Secretary to Government, dated Tinnevelly, 16th February 1888, No. 212.

Adverting to the Proceedings of Government, Judicial Department, No. 625, dated 5th March 1883, I have the honor to submit the annual report on the working of the Indian Factories Act (XV of 1881) in the district for the calendar year 1887.

2. During the year under review, there were only three factories falling under the provisions of the Act as detailed in the margin, the first two being situated in the Joint Magistrate's division and the third in the Head Assistant Magistrate's.

1. Tuticorin Cotton Press Company (Limited).
2. Cotton Press of Darley, Butler and Co.
3. Cotton-spinning Factory, Pápanásam.

3. The Cotton Press of A. and F. Harvey and Co. at Virudupati, which was the only registered factory in the General Charge Deputy Magistrate's division, has since been removed from the register of factories, as the number of hands daily employed was found never to have reached 100. In connection with this factory, the attention of the Division Officer has been drawn to paragraph 5 of G.O., dated 7th July 1885, No. 1760, Judicial, prescribing occasional visitation.

4. Besides the foregoing registered factories, there are cotton presses in the Joint and General Charge Deputy Magistrate's divisions which do not fall within the scope of the Act, as they do not fulfil the necessary conditions. Instructions have been issued to the Division Officers concerned to watch these undertakings, in view to their being brought under control and supervision, if ever the number of their employés should bring them within the definition of a "Factory."

5. The above-noted factories were visited by the respective inspectors during the year under review on the dates given in the subjoined statement :—

	Name of factory.	Date of inspection.	Number of times examined.
1	Tuticorin Cotton Press Company (Limited) ..	7th June, 18th November, and 10th December 1887.	3
2	Cotton Press of Darley, Butler and Co. ..	7th June, 15th November, and 6th December 1887.	3
3	Cotton-spinning Factory, Pápanásam ..	31st August, 18th November, and 10th December 1887.	3

6. The number of hands employed in the three factories on the date of each inspection, and the condition of the factories with reference to sanitation and ventilation, are described below :—

Name of factory.	Date of inspection.	Number of persons employed.				Machinery whether fenced or not.	Ventilation and sanitation.
		Adults.		Children.			
		Men.	Women.	Male.	Female.		
1. Tuticorin Cotton Press Company (Limited.)	7th June 1887 ..	131	13	..	..	Securely fenced.	Clean and properly ventilated.
	18th Nov. ,, ..	131	13	..	..		
	10th Dec. ,, ..	131	13	..	..		
2. Cotton Press of Darley, Butler and Co.	7th June ,, ..	126	8	..	..	Do. ..	Do.
	15th Nov. ,, ..	129	6	..	..		
	6th Dec. ,, ..	121	8	..	..		
3. Cotton-spinning Factory, Pápanásam.	31st Aug. ,, ..	350	167	..	..	Do. ..	Clean and well ventilated.
	18th Nov. ,, ..	318	108	..	..		
	10th Dec. ,, ..	344	104	..	..		

The defect noticed in the last report with regard to the machinery of Darley, Butler and Co.'s Cotton Press has been remedied.

7. In the Cotton-spinning Factory at Pápanásam, the Inspector found the rules, schedules, &c., posted in a conspicuous place as required by the rules, but such was not the case with the other two factories at Tuticorin, where the explanation forthcoming was that the manuscript copies originally posted up were mischievously torn off the boards. On the requisition of the Joint Magistrate, I have since supplied him with printed copies of the rules for distribution among the agents of the factories with necessary instructions. In all other respects, they comply with the rules and the provisions of the Act.

8. Two accidents occurred during the year under review in the Cotton-spinning Factory at Pápanásam—both slight ones—the details of which are given in the annexed statement.

9. These accidents were reported to the Inspector at once as required by the rules.

10. There were no prosecutions under the Act during the year under review, nor were children under 12 years of age employed in any of the factories.

Report on Railway Factories for the year 1887.

During the year under report, the Engineering Factory at the Trichinopoly junction station was brought under the scope of the Act, thus making three railway workshops on the register of factories, which were all inspected as required by the Act.

2. In the new factory at Trichinopoly where children are employed, the provisions of the Act for the regulation of child-labor are practically acted up to.

3. The machinery continues to be well and securely fenced.

4. A detailed statement of accidents reported during the year is herewith submitted with a list of factories.

5. None of the accidents were serious.

(Signed) K. A. JOPP, Colonel, R.E.,
Inspector of Railway Factories.

ENCLOSURE.

List of Factories.

Name of district.	Name of factory.	Number of hands ordinarily employed.				Machinery whether fenced or not.	Ventilation and sanitation.
		Adults.		Children.			
		Men.	Women.	Males.	Females.		
Madras	Perambur Railway Workshops.	2,727	..	..	..	Sufficiently fenced.	Good.
Trichinoply ..	South Indian Railway Engineering Factory.	233	..	28	..	Do.	Do.
Tanjore	South Indian Railway Locomotive and Carriage Shops.	1,553	..	..	..	Do.	Do.

No. 230.

Endorsement on the above.

Submitted to Government, in the Judicial Department, with reference to their Proceedings, No. 329, dated 9th February 1883.

(Signed) K. A. JOPP, Colonel, R.E.,
for *Consulting Engineer for Railways.*

To the Chief Secretary to Government, Judicial Department.

From J. H. MUNRO, Esq., Assistant Magistrate, to the District Magistrate, Bellary, dated Bellary, 14th January 1888, No. 20.

I have the honor to submit my report on the working of the Factories Act XV of 1881 for the calendar year 1887, together with the prescribed statement.

2. The only factory registered under the Act in the division is the Spinning and Weaving Mill of Messrs. A. Sabapathy Modeliar and Co. at Bellary. The engine is worked by steam and its moving power is 65 nominal and 300 actual horse-power.

3. The mill was inspected by Mr. Sami Iyer six times during the year, and the number of people employed on the dates of inspection was as detailed below :—

Date.	Number of men.	Number of females.	Young persons.
25th February 1887	170	70	172
9th May ,, ...	164	55	161
12th July ,, ...	217	83	167
15th September ,, ...	222	74	174
22nd ,, ,, ...	224	77	174
24th December ,, ...	219	59	157

They looked healthy and strong.

4. A file of certificates granted by the Civil Surgeon is maintained.

5. No registers in Forms D and E are kept, as no children are employed in the factory.

6. A printed copy of the rules, without forms, only in English, has been conspicuously placed on the entrance door. A Telugu translation of the rules and of the

	Name of factory.	Date of inspection.	Number of times examined.
1	Tuticorin Cotton Press Company (Limited) ..	7th June, 18th November, and 10th December 1887.	3
2	Cotton Press of Darley, Butler and Co. ..	7th June, 15th November, and 6th December 1887.	3
3	Cotton-spinning Factory, Pápanásam ..	31st August, 18th November, and 10th December 1887.	3

6. The number of hands employed in the three factories on the date of each inspection, and the condition of the factories with reference to sanitation and ventilation, are described below :—

Name of factory.	Date of inspection.	Number of persons employed.				Machinery whether fenced or not.	Ventilation and sanitation.
		Adults.		Children.			
		Men.	Women.	Male.	Female.		
1. Tuticorin Cotton Press Company (Limited.)	7th June 1887 ..	131	13	..	..	Securely fenced.	Clean and properly ventilated.
	18th Nov. „ ..	131	13	..	..		
	10th Dec. „ ..	131	13	..	..		
2. Cotton Press of Darley, Butler and Co.	7th June „ ..	126	8	..	..	Do. ..	Do.
	15th Nov. „ ..	129	6	..	..		
	6th Dec. „ ..	121	8	..	..		
3. Cotton-spinning Factory, Pápanásam.	31st Aug. „ ..	350	107	..	..	Do. ..	Clean and well ventilated.
	18th Nov. „ ..	318	108	..	..		
	10th Dec. „ ..	344	104	..	..		

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8. Two accidents occurred during the year under review in the Cotton-spinning Factory at Pápanásam—both slight ones—the details of which are given in the annexed statement.

9. These accidents were reported to the Inspector at once as required by the rules.

10. There were no prosecutions under the Act during the year under review, nor were children under 12 years of age employed in any of the factories.

———

Report on Railway Factories for the year 1887.

During the year under report, the Engineering Factory at the Trichinopoly junction station was brought under the scope of the Act, thus making three railway workshops on the register of factories, which were all inspected as required by the Act.

2. In the new factory at Trichinopoly where children are employed, the provisions of the Act for the regulation of child-labor are practically acted up to.

3. The machinery continues to be well and securely fenced.

4. A detailed statement of accidents reported during the year is herewith submitted with a list of factories.

5. None of the accidents were serious.

(Signed) K. A. JOPP, Colonel, R.E.,
Inspector of Railway Factories.

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ENCLOSURE.

List of Factories.

Name of district.	Name of factory.	Number of hands ordinarily employed.				Machinery whether fenced or not.	Ventilation and sanitation.
		Adults.		Children.			
		Men.	Women.	Males.	Females.		
Madras	Perambur Railway Workshops.	2,727	..	..	..	Sufficiently fenced.	Good.
Trichinoply ..	South Indian Railway Engineering Factory.	233	..	28	..	Do.	Do.
Tanjore	South Indian Railway Locomotive and Carriage Shops.	1,553	..	..	..	Do.	Do.

———

No. 230.

Endorsement on the above.

Submitted to Government, in the Judicial Department, with reference to their Proceedings, No. 329, dated 9th February 1883.

(Signed) K. A. JOPP, Colonel, R.E.,
for *Consulting Engineer for Railways.*

To the Chief Secretary to Government, Judicial Department.

———

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2. The only factory registered under the Act in the division is the Spinning and Weaving Mill of Messrs. A. Sabapathy Modeliar and Co. at Bellary. The engine is worked by steam and its moving power is 65 nominal and 300 actual horse-power.

3. The mill was inspected by Mr. Sami Iyer six times during the year, and the number of people employed on the dates of inspection was as detailed below :—

Date.	Number of men.	Number of females.	Young persons.
25th February 1887	170	70	172
9th May „	164	55	161
12th July „	217	83	167
15th September „	222	74	174
22nd „ „	224	77	174
24th December „	219	59	157

They looked healthy and strong.

4. A file of certificates granted by the Civil Surgeon is maintained.

5. No registers in Forms D and E are kept, as no children are employed in the factory.

6. A printed copy of the rules, without forms, only in English, has been conspicuously placed on the entrance door. A Telugu translation of the rules and of the

forms must also be kept there for reference. The manager has promised to supply this defect soon.

7. Notice in Form F in English and in the Vernacular showing the daily working hours is suspended at the entrance of the spinning and weaving rooms. The working hours were from 6 A.M. to 6 P.M., with a recess of half an hour for food and rest. The boys are permitted 15 minutes' rest for every four hours for recreation. Two Fridays in a month are allowed as holidays in addition to the Hindu and Muhammadan festival days. The Christians employed in the mill have got an extra holiday of half a day on Sundays.

8. The rates of wages paid to the coolies are—

Men—3 to 5 annas per diem.
Women—2 to 4 annas per diem.
Boys—2 to 3 annas per diem.

9. The machines have been carefully supervised by the factory engineer residing on the spot. The flywheel of the engine is in a room by itself, and only persons of experience engaged in the room are allowed to approach the flywheel. The room is always closed by a half door to prevent access to strangers. Arrangements, however, have been made to fence it round with wooden railings.

10. There were two accidents during the year:—

(1) On the 21st September, while the engine was at work, one of the leather straps in the spinning throstle room broke and a copper fastening attached to the broken piece struck cooly Nagappa below his eyelid and got stuck up therein. He was at once removed to the hospital, where he was under treatment, and returned to the factory for work after about 40 days.

(2) On the 8th December, a cooly named Appiah, who had been working in the mili for about 2 years, was engaged in the spinning room. The twine banding of one of the spindles broke. The cooly attempted, while the machine was in motion, to catch the broken piece without applying the brake and placed his right hand between the rollers and got it injured. He was at once removed to the hospital, where it is reported he is still under treatment.

11. The ventilation and sanitary arrangements are good.

12. There was no prosecution during the year.

Enclosure.

Name of the district.	Number of the factory in Register A.	Locality where situated.	Name of factory.	Number of persons employed on dates of inspection. Adults. Men.	Adults. Women.	Juveniles. Males.	Juveniles. Females.	Dates of inspection.	Machinery whether fenced or not.	Ventilation and sanitation.
								1887.		
Bellary ..	1	Bellary..	Bellary Spinning and Weaving Mill.	170	70	172	..	25th Feb.	Kept with care.	Good.
				164	55	161	..	9th May.		
				217	83	167	..	12th July.		
				222	74	174	..	15th Sept.		
				224	77	174	..	22nd ,,		
				219	59	157	..	24th Dec.		

Endorsement on the above.

Submitted to Government.

2. The District Magistrate has himself visited the mills lately and found things in good order.

27*th February* 1888.

(Signed) H. GOODRICH,
District Magistrate.

From C. MULLALY, Esq., Head Assistant Magistrate, to the District Magistrate, Kistna, dated Bezváda, 7th February 1888, No. 13.

I have the honor to submit a report under the Factories Act XV of 1881 for the calendar year 1887.

2. There is only one factory in the division, viz., Department of Public Works Workshops, Bezváda.

3. This factory was inspected by my predecessors on 31st March and 21st October.

4. The rule as to posting up in a conspicuous place notice of working hours and holidays, as also rules and forms in English and Telugu (*vide* Rule XXIII), was being properly observed.

5. The registers under Forms D and E were kept, and the certificates given in Form C by the certifying Surgeon were posted in a book.

6. A notice, giving particulars as to the intervals for food and rest to children, was also posted in front of the factory.

7. The hours fixed were from 6 A.M. to 6 P.M. with two hours' interval, that is, ten hours in all.

8. No prosecutions were ordered under the Act during the year.

9. No accidents were reported in the year.

10. I enclose a statement showing the number of persons employed at the time of inspection and the state of the factory with reference to sanitation and ventilation.

Enclosure.

Name of the division.	Name of factory.	Number of persons employed. Adults. Men.	Adults. Women.	Juveniles. Male.	Juveniles. Female.	Machinery whether fenced or not.	Ventilation and sanitation.	Date on which examined.
Head Assistant Magistrate's division.	Government Workshop, Public Works Department, at Bezváda.	202	..	3	..	..	Good ..	31st Mar. 1887.
		195	..	9	..	Fenced ..	Do. ..	21st Oct. ,,

No. 165.

Endorsement on the above.

Forwarded to Government, in the Judicial Department, with reference to G.O., dated 9th February 1883, No. 329.

2. This is the only factory in the district falling within the scope of the Act.

Vinukonda,
1*st March* 1888.

(Signed) A. T. ARUNDEL,
District Magistrate.

From M.R.Ry. K. PURUSHOTTAM, General Duty Deputy Magistrate, Vizianagrum Division, to the District Magistrate, Vizagapatam, dated Vizianagrum, 22nd February 1888, No. 17.

I have the honor to submit my report on the working of the Chittivalsa Factory for the year 1887.

2. This is a gunny factory belonging to Messrs. Arbuthnot and Co. During the year under report, my predecessor inspected the factory thrice on the dates mentioned below:—

(1) On the 9th July 1887 between 3 and 4 P.M.
(2) ,, 21st Oct. ,, ,, 7 and 8 A.M.
(3) ,, 15th Dec. ,, ,, 8 and 9 A.M.

Mr. George Will on the first occasion, and Mr. J. Innes on the next two occasions, were present at the time of the inspection.

3. In this factory jute is cleaned, turned and woven and eventually made into gunny bags. The engine is worked by steam, and its moving power is 77 nominal and 220 actual horse-power.

4. The factory was closed on Sundays as also on 8 English and 9½ Native holidays during the year. The working hours were the same as stated in the report for the previous year, viz., from 5½ A.M. to 6½ P.M., with an interval of 1½ hours from 12 to 1½ P.M. from November to the end of March and of two hours from 12 to 2 P.M. from April to October except on Saturdays, when the engine is stopped at 4½ P.M. with an interval of only an hour at noon.

5. The average number of persons employed daily during the year was 741, and the number of persons at work on the dates of inspection were as follows:—

Date.	Men.		Women.	
	Above 16.	12 to 16.	Above 16.	12 to 16.
9th July 1887	333	243	81	10
21st Oct. ,, ...	324	254	76	8
15th Dec. ,, ...	331	275	113	23

No children under 12 years were employed in the factory.

6. The factory is usually whitewashed and cleaned once a year. The whitewashing for 1886 was commenced on 25th December 1886 and was completed on the 27th January 1887. The whitewashing for the year under report was begun on 27th November 1887 and was completed before the 31st January 1888.

The latrines were being cleaned as usual by hot water that was let out from the engine. It is said that this arrangement answered the purpose well.

7. The rooms of the building were properly ventilated. In the preparing room, however, there is much dust, but the workmen are accustomed to work in it with a cloth over their mouths.

8. The temperature in the working room at the time of inspection was as follows:—

On the 9th July 1887 .. .. 90°
,, 21st Oct. ,, ... 82°
,, 15th Dec. ,, ... 74°

9. The machinery has been protected either by iron rails or by iron and wooden shields, so as to prevent all chances of accidents, and it is also fenced wherever it was necessary or possible. The calender rollers have been protected with small guide rollers, for the purpose of conducting the cloth to the in-running side of the upper calendering rollers. These are now worked safely and with ease.

10. Two accidents were reported during the year under report:—

(1) On the 19th October last at 7½ A.M. Dumpa Tatu, a boy of 14 years, got his left arm cut and bruised by a rope-stretching machine worked by himself.

(2) On the 19th November last, while a man named Jeru Dalidu was employed in entering a piece of cloth through calender rollers, his two fingers in each hand were bruised.

Both these were kept under medical treatment at the Bimlipatam dispensary and were recovered soon. The former of these, viz., the boy who was injured on the 19th October, returned to duty on 26th idem and the latter on 16th ultimo.

11. Certificates of age were granted to all young persons employed in the factory in Form C appended to the rules by the civil apothecary of the municipal dispensary, Bimlipatam, who is appointed certifying Surgeon under section 5 of the Factories Act XV of 1881. A file of these certificates is maintained as required by Rule XIV.

12. D and E Registers are not maintained in the factory, as no children under 12 years of age were employed.

13. A notice of daily working hours has been maintained in Form "K" as required by Rule XVI, as also a list of holidays, both of which were hung up in a conspicuous part of the office-room in the factory.

14. Printed copies of the rules and forms, with Telugu translations, have also been posted on the outer walls of the office room.

15. Many of the young persons employed in the factory were inspected by my predecessor, and were found cheerful and healthy.

16. Registers A and B, required to be kept in my office under Rule 2, have been properly maintained.

17. A statement showing the number of persons employed on the last working day of the year is herein enclosed, as required by paragraph 7, G.O., 7th July 1885, No. 1760, Judicial Department.

ENCLOSURE.

TABLE showing the number of persons employed at the end of the year and the state of the factory with reference to sanitation and ventilation.

Name of district.	Name of factory.	Number of persons employed at the end of the year.				Machinery whether fenced or not.	Ventilation and sanitation.
		Adults.		Juveniles.			
		Men.	Women.	Male.	Female.		
Vizagapatam ..	Gunny factory at Chittivalsa.	382	128	279	20	Properly fenced.	Good.

No. 256.

Endorsement on the above.

Submitted to the Chief Secretary to Government.

2. This is the only factory in the district falling within the scope of the Act. The two accidents reported were not of a very serious nature.

VIZAGAPATAM.
17*th March* 1888.

(Signed) T. RAMAMURTI, Deputy,
for *District Magistrate*.

From Colonel T. WELDON, Commissioner of Police, Madras, to the Chief Secretary to Government, dated Madras, 26th March 1888, No. 24.

I have the honor to submit the report of the Deputy Commissioner of Police, as Inspector of Factories in the City of Madras, for the year 1887.

2. The inspections have been regularly and carefully made. There were 59 accidents reported, being an increase of 28 over 1886, but only 12 of the 59 cases recorded were otherwise than trifling. Of the 12 serious cases, 2 were not, properly speaking, due to the machinery in any way, and the remaining 10 were due to the carelessness of the operatives, to which all the injuries also may be ascribed. Of 4

accidents reported from the Gunpowder Factory, only one was strictly a factory accident, that is, caused by the machinery. All the others might have occurred anywhere. So in the Harbour Works, of 7 accidents registered, only 3 were caused by the machinery; and in the Public Works Workshops, of 8 accidents registered, only one was caused by machinery.

3. The Southern India Spinning and Weaving Mills at Ráyapuram had a most fortunate escape from what might have been a very destructive fire endangering many lives on the premises and neighbouring property. The Deputy Commissioner remarks on the absence, not only of a fire-engine, but of any means for the rescue or escape of operatives who may be employed on the upper floors of the mill when a fire breaks out. Subsequent to the outbreak of the fire noted in the report, the managers have obtained a 300-feet hose to be attached to the donkey engine, but that being a stationary engine, there might be difficulty in using this expedient in parts of the building. The railway coal-yard adjoins the mill, and, in the event of a fire at the latter place, would be in great danger.

4. The Deputy Commissioner notes with satisfaction the re-employment of children at the Buckingham and Carnatic Mills, there being now 707 children so employed against 193 in 1886. Besides learning a useful trade, the wages earned by these children are a material help to the parents. The children are said to be well cared for.

ENCLOSURE.

From S. D. SIMPSON, Esq., Deputy Commissioner of Police and Inspector of Factories, Madras, to the Commissioner of Police, dated Madras, 22nd March 1888, No. 13.

I have the honor to report that the factories in the City of Madras were visited by me during the calendar year 1887 as stated below :—

Name of factory.	Dates of inspection.	Number of times visited.
Buckingham Mill	27-3-87 ; 31-8-87 ; 23-12-87	3
Carnatic ,, ...	27-3-87 ; 31-8-87 ; 23-12-87	3
Gun Carriage Factory	30-4-87 ; 25-8-87 ; 4-12-87	3
Gunpowder ,, ...	19-3-87 ; 19-8-87 ; 21-12-87	3
Southern India Spinning and Weaving Company.	15-3-87 ; 28-3-87 ; 4-6-87 ; 13-7-87 ; 15-11-87.	5
Madras Harbour Works	14-4-87 ; 13-8-87 ; 19-11-87	3
Massey and Co.	27-4-87 ; 26-7-87 ; 28-12-87	3
Public Works Workshops	25-4-87 ; 7-7-87 ; 4-12-87	3
The Arsenal	18-4-87 ; 20-8-87 ; 2-12-87	3
Madras United Spinning and Weaving Mill.	18-3-87 ; 27-3-87 ; 31-8-87 ; 7-12-87 ..	4
The Cement Works	27-4-87 ; 26-7-87 ; 28-12-87	3

2. *Accidents.*—I append a list of accidents during the year. Of these, there were 59 against 31 in 1886. Statement A shows in detail the number in each factory, how they occurred, and the extent and description of the injury in each case. It will be seen from this statement that the injuries sustained in all but 12 (*a*) cases were trivial, and that none proved fatal.

(*a*) Marked thus*

3. *Fires.*—On the 31st of October, about 11 A.M. a fire was discovered by the operatives in the blow room (ground floor) of the Southern India Spinning and Weaving Company's Mills (Ráyapuram). It seems to have originated in a machine called the Double Crighton Opener, cause being unknown; but it is surmised that some grit in the cotton coming in contact with the beaters, which in this machine revolve 1,100 times per minute, must have occasioned ignition. In a moment the cotton around the machine caught fire, but the alarm being immediately given, the men employed in the room succeeded in getting out uninjured. The room fortunately being-fire proof, the fire was confined to it, the other portions of the building remaining scathless. On the report of the fire reaching the operatives in the 2nd and 3rd floors, some of the hands came down by the ordinary stair case, while the others let themselves down by ropes, which they had fastened to the window bars, and thus all escaped without a scratch of any kind.

The number of men employed in this mill on that day is as follows:—

Blow room	12
Ground floor	147
Second ,, ...	162
Third ,, ...	157
Total ..	478

The Madras Railway steam fire-engine, with some 25 workmen, soon came on to the scene, but the fire was not got under until cotton and property to the value of Rs. 1,100 had been destroyed.

I regret to report that the mill has no fire-engine of any kind, although the manager promised some three years ago to provide one as early as possible. Neither had it any domestic fire-escape or portable ladder fire-escape to enable the men to get away from the building. Happily the fire was restricted, as I have already remarked, to one room; and the men in the upper floors, finding accidentally some cotton ropes lying about, utilized them with great presence of mind and thus effected a safe descent of some 35 feet.

Subsequent to the fire, a 300-feet length of hose and 250 buckets were obtained from Bombay. The hose is now fastened to the donkey engine, by which means it is proposed to pump water in case of another fire.

4. *Children.*—In my report for last year, paragraph 3, I referred to the objection on the part of the Buckingham and Carnatic Mills to employ children under 12 years of age and pointed out, with regret, that 192 (183 boys and 10 girls) children were refused employment in that year and that 740 children in all had been rejected since 1883. Now, however, I am very glad to be able to report that the bar has been removed, and that children are again admitted into the above-named mills (Buckingham and Carnatic), the result being that during the year under review 675 children were brought on the rolls. In 1886 there were 31 boys and 1 girl, being the children remaining since 1883, while 1887 closed with a registered * juvenile class of 623 boys and 84 girls in the two mills.

1884	210
1885	337
1886	193

	Boys.	Girls.	Total.
* Buckingham	331	45	376
Carnatic	292	39	331
Grand Total ..			707

These mills, as I remarked last year, are under European management (Agents, Messrs. Binny and Co.,) and the children are allowed the usual holidays and are well cared for.

5. *Gun Powder Factory.*—This factory was closed for work on the 4th June last year. On that day there were 96 men and 8 women employed in this establishment. Out of this number 38 persons have been retained for cleaning and repairing the machinery, &c., and the services of the others have been dispensed with.

6. The following table shows the number of persons employed at the end of the year and the state of the factories in regard to sanitation and ventilation :—

Name of factory.	Number of persons employed at the end of the year.				Machinery whether fenced or not.	Ventilation and sanitation.
	Adults.		Juveniles.			
	Men.	Women.	Male.	Female.		
Buckingham Mill	423	40	331	45	Yes.	Good.
Carnatic Mill	523	20	292	39	Do.	Do.
Gun Carriage Factory	424	2	..	..	Do.	Do.
Gun Powder Factory	35	1	..	..	Do.	Do.
Southern India Spinning and Weaving Mill.	437	13	..	..	Do.	Do.
Madras Harbour Works	665	103	..	..	Do.	Do.
Massey and Co.	270	..	..	..	Do.	Do.
Public Works Workshops	290	1	..	..	Do.	Do.
The Arsenal	547	3	..	..	Do.	Do.
Madras United Spinning and Weaving Mill.	502	12	..	..	Do.	Do.
The Cement Works	255	86	..	..	Do.	Do.

From H. SEWELL, Esq., District Magistrate, South Arcot, to the Chief Secretary to Government, dated Cuddalore, 26th March 1888, No. 22.

I have the honor, with reference to G.O., No. 625, dated 5th March 1883, Judicial, and paragraph 6 of G.O., No. 193, of the 9th February 1882, to forward herewith reports * from the Assistant Magistrate and Deputy Magistrate on General Duties on the working of the Factories Act XV of 1881 during the calendar year ending 31st December 1887.

* Assistant Magistrate's letter, No. 17, dated 3rd February 1888.
General Duty Deputy Magistrate's letter, No. 7, dated 10th January 1888.

2. The only factories falling within the definition of the Act which were in working order in this district during the year under report were those at Nellikuppam and Tiruvennanallúr. The latter establishment was under repair during some months of the year.

3. The factory at Nellikuppam is situated in the Assistant Magistrate's division. This officer, as well as his predecessor, the Temporary Deputy Magistrate, have inspected it on two occasions during the year. I have also inspected it myself once. The sanitary condition of the factory premises is reported to be good, and the buildings are fairly well ventilated.

4. The statement of accidents herewith submitted shows that there were 4 accidents in this factory. The injured persons in all cases were sent to the dispensary and cured.

5. The factory at Tiruvennanallúr was twice inspected by the General Deputy Magistrate and once by myself. He reports that the sanitary condition was tolerably good on the first occasion. The factory was not at work at the time of his second inspection, as the whole building, except the portion occupied by the distillery, was then under repair. There were two accidents (*vide* statement referred to in paragraph 4 *supra*) in this establishment, of which one proved fatal. The circumstances under which this happened are detailed below :—

A male cooly aged 18 fell into a vat of boiling sugar, and, though taken out promptly and sent to hospital, died the same night from the effects of the scalding. From inquiries made it appears that the accident was caused by the man's own fault as he was doing work for which he had not been told off and for which he was not fit, viz., removing the scum from the boiler with a wooden scoop, in doing which he overbalanced himself and fell in. His proper work was to carry away buckets full of the scum which ought to have been taken from the vat by another man employed on this work. No blame therefore attaches to those in charge of the factory. There was, however, an omission on the part of the manager to report this accident strictly according to the rules laid down. I had to pass proceedings calling his attention to this and I also sent copy to the owners, Messrs. Parry and Co., requesting them to impress on their agents the necessity of acting strictly in accordance with the provisions of the law.

6. As directed in paragraph 4 of G.O., dated 21st May 1887, No. 1090, Judicial, I beg to state that the factory at Tiruvennanallúr falls under the definition in section 2 of the Act, as more than 100 persons have worked in it on several days during the last 3 * years as shown in the margin.

* Number of days on which more than 100 coolies worked—

1885	92
1886	180
1887	152

7. The statement prescribed in G.O., dated 7th July 1885, No. 1760, is submitted.

ENCLOSURES.

From J. WALKER, Esq., Assistant Magistrate, to the District Magistrate, South Arcot, dated Cuddalore, 3rd February 1888, No. 17.

I have the honor to submit my report on the working of the Factory Act for 1887.

2. The factory at Nellikuppam, belonging to Messrs. Parry and Co., was inspected during the year by the Temporary Deputy Magistrate and myself on two occasions as specified in the margin, and the result of the inspection is shown in Statement B (enclosed).

10th September 1887 by Temporary Deputy Magistrate.
22nd December 1887 by me.

3. I found the sanitary condition of the factory premises good and the buildings fairly well ventilated. As no children are employed in the factory, no registers in the forms D and E (Rule XV) and no file of certificates in Form D (Rule XIV) were maintained during the year.

4. There were four accidents during the year. The injured persons were in all cases sent to the dispensary at Cuddalore and in no case were the results fatal. A statement showing the details of each case is herewith submitted.

5. The Sugar-cane Factory at Bandipoliem was brought on the register last year, but it was in operation for under four months in the year. I have therefore removed it from the register.

6. No prosecutions have been ordered during the year.

From KUNCHI SUBBA ROW PANTULU Garu, Deputy Magistrate on General Duty, to the District Magistrate, South Arcot, dated Tirukoilúr, 10th January 1888, No. 7.

I have the honor to submit my report on the working of the Factory Act in this division for 1887.

2. Of the two factories in this division, the Sugar and Arrack Distillery of Messrs. Parry and Co. at Tiruvennanallúr above is a registered one. The said factory has been under reconstruction for some months during the year, and there were two accidents in the earliest part of the year when sugar factory was at work. Of the two, one proved fatal. As a rule, juveniles are not employed in this factory. The factory was twice inspected by me during the year and I beg to send two extracts from the accounts—one showing the state of the factory, and the other exhibiting the particulars of the accidents.

3. The factory at Iruvalipatt was not at all at work during the year under report.

STATEMENT showing the number of persons employed on the dates of inspection and the state of the factories with reference to sanitation and ventilation during the year 1887.

Name of district.	Name of factory.	Date of inspection and by whom.	Number of persons employed.				Machinery whether fenced or not.	Ventilation and sanitation.
			Adults.		Children.			
			Men.	Women.	Male.	Female.		
South Arcot.	Sugar manufactory and refinery and spirit distillery at Nellikuppam.	10th Sept. 1887, Temporary Dy. Magistrate.	389	44	..	..	Fenced ..	..
		22nd Dec. 1887, Assistant Magistrate.	434	32	..	..	Fenced ..	Sanitary condition of the premises good and ventilation fair.
	Sugar factory at Tiruvennanallúr.	30th May 1887, Dy. Magistrate on Gl. Duties.	68	1	..	..	Fenced to some extent.	Tolerably good.
		5th Dec. 1887, Dy. Magistrate on Gl. Duties.	96	16	..	..	..	..

ORDER—dated 10th May 1888, No. 1090, Judicial.

The foregoing reports on the working of the Indian Factories Act, 1881, during the year 1887 show that the following changes took place. The Cotton Press at Virudupati, in the Tinnevelly district, was removed from the register, in accordance with the remarks made in paragraph 3 of G.O., dated 21st May 1887, No. 1090. The South Indian Railway Engineering Factory at Trichinopoly was, on the other

hand, brought under the operation of the Act, and consequently the total number of factories within the scope of the Act remained 24, as in the two previous years, equally distributed between the Presidency town and the mofussil.

2. The reports submitted by the Inspectors of Factories are for the most part full and satisfactory, and inspection seems to have been thorough, but in the Godávari and Kistna districts, the prescribed number of inspections was not made. In future reports the Inspector of Railway Factories will state the dates on which the factories subject to his supervision were inspected. The chief inaccuracy in the reports occurs in the employment of the term "juveniles," the objections to which were pointed out in the last paragraph of last year's review. The attention of the District Magistrates of Godávari, Bellary and Vizagapatam, and of the Deputy Commissioner of Police, Madras, will be again drawn to the instructions there given.

3. In the number of accidents which occurred—and which was 112, against 58 in 1886 and 77 in 1885—there is some ground for dissatisfaction, though the newly included factory at Trichinopoly accounts for 20. The Government particularly notice the excessive number of accidents in the three Railway factories, especially in that at Trichinopoly. A large proportion of these was due to the falling of timber or iron-work, and evidences the need of more careful supervision in the carrying out of such work. The attention of the agents will be drawn to the matter. The one fatal accident which occurred at Tiruvannánallúr, through a workman, who was scooping scum off a vat of boiling sugar, falling in, is stated to have been due to the man's own fault. The work must, however, be at all times dangerous, unless the vats are protected, and the expediency of taking measures to prevent the possibility of the recurrence of such an accident should be brought to the notice of the Manager by the District Magistrate. It is observed that the machinery at this factory is reported not to be completely fenced.

4. The narrow escape from a serious fire, which the Southern India Spinning and Weaving Company's Mills at Ráyapuram experienced, should convince the proprietors of the desirability of providing a fire-escape as well as an adequate fire-engine, and to improve the means of ordinary exit from the upper floors of the buildings. The matter does not, however, seem to be one with which the Government can deal under the Act. The re-employment of children in the Buckingham and Carnatic Mills is a satisfactory feature of the year, and the example thus set will, it may be hoped, be followed in other factories, only two in the mofussil having at present any child hands, viz., the Railway factory at Trichinopoly and the Government workshop at Bezváda.

(True Extract.)

H. E. STOKES,
Chief Secretary.

To all District Magistrates.
„ the Inspector-General of Police.
„ the Commissioner of Police.
„ the Public Works Department.
„ the Consulting Engineer for Railways.

Exd. A. Raitt.

APPENDIX.

District.		Name of Factory.	Number of hands employed.		Number of accidents.	Machinery, whether fenced or not.	Ventilation and sanitation.
Ganjam ..	Aska ..	Minchin Brothers' Sugar Factory.	Adults	404	1	Securely fenced.	Clean and well ventilated.
Godávari ..	Dowlaishweram.	Government Workshop ..	Adults	286	..	Fenced ..	Good.
Tinnevelly ..	Tuticorin ..	Tuticorin Cotton Press Co., Limited.	Adults	144	..	Securely fenced.	Clean and properly ventilated.
	Do. ..	Cotton Press of Darley, Butler and Co.	Do.	129	..	Do. ..	Clean and properly ventilated.
	Pápanásam .	Cotton-spinning Factory ..	Do.	448	2	Do. ..	Clean and well ventilated.
Madras ..	Perambur ..	Railway Workshop	Do.	2,727	12	Sufficiently fenced.	Good.
Trichinopoly.	Trichinopoly.	South Indian Railway Engineering Factory.	Do. Children	233 28	20	Do. ..	Do.
Tanjore ..	Negapatam ..	South Indian Railway Locomotive and Carriage Shops.	Adults	1,553	8	Do. ..	Do.
Bellary ..	Bellary ..	Messrs. A. Sabapathi Mudaliar and Co.'s Spinning and Weaving Mill.	Do.	435	2	Kept with care.	Do.
Kistna ..	Bezváda ..	Government Workshop, Public Works Department.	Do. Children	195 9	..	Fenced ..	Do.
Vizagapatam	Chittivalsa ..	Messrs. Arbuthnot and Co.'s Gunny Factory.	Adults	804	2	Properly fenced.	Do.
Madras ..	Madras ..	Buckingham Mill	Do. Children	463 376	7	Fenced ..	Do.
		Carnatic Mill	Adults Children	543 331	9	Do. ..	Do.
		Gun Carriage Factory	Adults	426	..	Do. ..	Do.
		Gun Powder Factory	Do.	36	4	Do. ..	Do.
		Southern India Spinning and Weaving Company.	Do.	450	11	Do. ..	Do.
		Madras Harbour Works ..	Do.	768	7	Do. ..	Do.
		Massey and Co.	Do.	270	9	Do. ..	Do.
		Public Works Workshops ..	Do.	291	8	Do. ..	Do.
		The Arsenal	Do.	550	..	Do. ..	Do.
		Madras United Spinning and Weaving Mill.	Do.	514	3	Do. ..	Do.
		The Cement Works	Do.	341	1	Do. ..	Do.
South Arcot.	Nellikuppam.	Messrs. Parry and Co.'s Sugar Manufactory and Spirit Distillery at Nellikuppam.	Do.	466	4	Do. ..	Sanitary condition of the premises good and ventilation fair.
		Messrs. Parry and Co.'s Sugar Manufactory and Spirit Distillery at Tiruvennanallúr.	Do.	112	2	Fenced to some extent.	Tolerably good.

No. 1653 dtd 5th June 88

Communicated to
Supdg Engineers for
information.

1st Sept Loose
W

Govt. of {1888} Madras.

JUDICIAL.

Issued

Recd. *Encl.*

G.O., 10th May 1888, No. 1090.

No. 1653 dtd 15th June 1888

MAY.

Supdg Engrs
(except W. & Penjaw)

Indian Factories Act, 1881.

Reviewing the reports on the working of the — during the year 1887.

10TH JULY 1888, No. 1477, JUDICIAL.

GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

READ—the following paper:—

Despatch from the Right Honorable Lord CROSS, Her Majesty's Secretary of State for India, to His Excellency the Right Honorable the Governor-General of India in Council, dated India Office, London, 3rd May 1888, No. 30 (Statistics and Commerce).

I forward, for your information, 12 copies of the report of the Chief Inspector of Factories for the year 1886-87. At pages 112-123 of that report is a memorandum concerning the Indian Factory Act and Bombay Factories by Mr. Jones, who was for some time Inspector of Factories under the Government of Bombay. I learnt from the despatch of the Government of Bombay, No. 14 (General), of 16th October 1887, that it was not intended at present to appoint any successor to Mr. Jones, and that the work of inspecting factories would be performed by the Assistant Collector in Bombay and by District Magistrates in the interior of the country.

2. You will observe that Mr. Jones remarks upon—

(1) the long hours of work and few holidays in Bombay factories;
(2) the occasional withholding of wages from hands;
(3) the incompetency of mill managers, the dangerous character of many mills, and the inadequate fencing of machinery;
(4) the ill-ventilated and filthy state of many work-rooms.

At the same time, he states in the same memorandum—

(*a*) that the long hours of work are often for only a part of the month or for one season of the year, and that the holidays and their sequelæ are a cause of loss to millowners;
(*b*) that mill hands are better off, better fed, better clothed, and better protected than ordinary Native laborers;
(*c*) that half the Bombay factories compare favorably in respect of machinery, management, and construction with similar establishments in England, and that serious accidents are not more numerous than in corresponding works at home;
(*d*) that suggestions for the amelioration of mill hands are nearly always acted upon by mill managers.

3. I desire to receive a report at an early date upon the working of the Indian Factory Act in Bombay, Bengal, Burma, and in any other province where many factories exist. I should be glad to learn how the plan of placing the duty of inspecting factories in the hands of Magistrates or of Government Engineers has answered; and whether it is proposed to modify the Factory Act of 1881 in the direction of additional stringency. A statement should be given as far as may be practicable of accidents, fatal or otherwise, that have been reported to, or investigated by, inspectors; and reference should be made to the four shortcomings summarised in the second paragraph of this despatch on which Mr. Jones dwells.

4. I desire to draw your attention to the conclusions expressed with regard to Birmingham (page 52), which also applies generally to other parts of the United Kingdom, that, partly as the result of steady inspection, "year by year factories and workshops are becoming more and more salubrious; * * * low, ill-ventilated * * * workrooms are being gradually replaced by fine lofty buildings * * * tending to add greatly to the happiness and well-being of the workers."

No. 1034.

Copy forwarded to the Government of Madras with a request that the report asked for in paragraph 3 of the despatch may be submitted to this department at an early date for transmission to Her Majesty's Secretary of State.

(By order.)

HOME DEPT., JUDL.,
SIMLA, 21*st June* 1888.

(Signed) J. P. HEWETT,
Under Secy. to the Govt. of India.

ORDER—dated 10th July 1888, No. 1477, Judicial.

Communicated to the District Magistrates noted in the margin, the Consulting Engineer for Railways, and the Commissioner of Police, Madras, who will submit remarks on the four points summarised in paragraph 2 of the Secretary of State's despatch and an opinion on the question whether the Indian Factories Act, 1881, should be modified in the direction of additional stringency, and, if so, in what manner.

Ganjam.	Bellary.
Vizagapatam.	South Arcot.
Godávari.	Tinnevelly.
Kistna.	

2. The reply to this reference should reach the Government by the 15th August.

(True Extract.)

J. F. PRICE,
Ag. Chief Secretary.

To the District Magistrate, Ganjam.
" " " Vizagapatam.
" " " Godávari.
" " " Kistna.
" " " Bellary.
" " " South Arcot.
" " " Tinnevelly.
" Public Works Department.
" Consulting Engineer for Railways.
" Commissioner of Police.

APPENDIX.

Report of Mr. Jones, late Inspector of Factories under the Bombay Government.

In accordance with your wish, I have the honor to send you a few remarks as the result of my observations during the four years I have held the post of Inspector of Factories under the Bombay Government. As my connexion with this Government only ceased last May, the position and prospects of the cotton trade in that Presidency cannot have undergone much change, and some of the facts I am going to state may possibly interest the many readers of your valuable yearly Factory Report.

Shortly after I arrived in Bombay, I found that my inspection duties were confined to the Presidency of Bombay, and that the great majority of the factories had been established on the eastern side of India.

The remainder were situated in or near Calcutta, in the Madras Presidency, and in the North-West Provinces.

I fully expected that badly-constructed mills, driven by second-rate engines, indifferent management, and an overwhelming number of hands for the output, would come under my inspection; but I was astonished to find nearly all my ideas were based on false foundations, and had to come to the conclusion that at least half the concerns could compare in most respects favorably with mills spinning the same counts at home.

The Factory Act which I was instructed to enforce was of the most primitive character, having only two important clauses—one being the protection of juvenile labor, forbidding the employment of children from 7 to 12 years of age for more than nine hours a day, and the other the proper fencing of engines, mill gearing, hoists, and machinery. Some time before I arrived, an agitation was started by a few native gentlemen, warmly seconded by the then Governor, Sir James Fergusson, having the amendment of the Act in view.

Resulting from this, Mr. Meade King, one of Her Majesty's Inspectors of Factories, was invited to come to India and institute an inquiry. His admirable and comprehensive report, the outcome of six months' investigations, decided the Government of Bombay to appoint a commission of European and native gentlemen to amend the Act on the lines of his suggestions and recommendations.

Mr. Meade King having returned to England, I was appointed, in September 1883, to carry out the law as it existed, and to assist in such further inquiries as might be necessary.

The first meeting of the commission was held in the Secretariat, Bombay, on the 21st of July 1884, and the last (the 27th) on the 6th of January 1885. I was appointed Secretary.

Throughout the proceedings the great anxiety of the majority seemed to be rather to protect the interests of trade, fearing that an amendment of the Act would hamper its growth, than any urgent desire on their parts to secure the well-being of the mill operatives. There were honorable exceptions to the rule who throughout the sittings warmly espoused the cause of the work-people.

The result of the inquiry ended in many valuable and important additions to the Act being recommended, and the report was forwarded to the Bombay Government, who in their turn, having given the propositions their hearty support, submitted it to the Supreme Council then at Simla. After some time an answer was received to the effect that the Supreme Council did not consider the time had arrived for interfering with the factory laws.

From my point of view I think that the English Factory Acts could not with fairness be put in force in India, the conditions of the country, climate, and people being so widely different; but the questions of Sunday labor, long hours of work for

children, sanitation, and more regular meal hours, ought to receive the prompt attention of the Home Government, for in these particulars under the present system glaring hardships are inflicted on the hands.

I also cordially agree with the widely-expressed wish of the public in Bombay, that the provisions of the Act should be extended to smaller works, which require more inspection than the larger factories. The law at present only touches mills where 100 hands are employed for more than four months in the year, and only those within the limits of the Bombay Presidency. On my first visit to some of the mills up-country, gearing wheels of mule carriages boxed up and iron bars fixed between carding engines were pointed out, showing the useless expense the masters had been put to, and the inconvenience caused to the hands by instructions given by former inexperienced Inspectors. The millowners of the Bombay Presidency, although so lightly dealt with in the way of factory legislation, complain bitterly that their competitors in other parts of India are not hampered with any Act, but I think the English millowner may with greater reason find fault with the more stringent restrictions placed upon him, in comparison with his Indian fellow-manufacturer.

The working hours in the Indian mills are from daybreak to sunset (a period of nearly 14 hours in the summer months), with 20 minutes to half an hour for meals at breakfast and dinner time; no half holiday being given on the Saturday.

Sundays are working days, although some firms, especially European, stop alternate Sundays, and in some cases one Sunday a month.

On these stopping days, however, the hands are required to come to clean their frames, being allowed to leave the mill at different times varying from 10 A.M. to 1 P.M.

Native holidays vary greatly in different districts, and also owing to the castes of the preponderating workpeople. The average native holidays given are 15 in the year; but on only five of these are the hands allowed to remain away the whole day, on the remainder they are kept the usual time to do the necessary cleaning.

The question of factory legislation has been shelved, and some time must elapse before another effort will be made, unless pressure be brought to bear from the Home Government. The moving spirit in promoting improved Indian factory legislation is a Mr. Sorabjee S. Bengallee, a Parsee merchant, who is always to the front in every good work, but I am sorry to say he has not a great following in this particular movement.

You are aware, from the few clauses contained in the Act I had to carry out, my time was in a great measure taken up in recommending sanitary and economical alterations in the working of the mills, which I had no power to enforce, but which, I may state, were eagerly welcomed and carried out by both managers and proprietors. Since I resigned the inspection of the mills, the work has been handed over to the Collectors of the various districts; but this arrangement can only be of a temporary nature, as these gentlemen have other far more important duties to attend to, and cannot be expected to devote the requisite time to this work, nor have they the technical knowledge necessary to direct what parts of the mill-gearing and machinery should or should, not, be protected.

Very few of the mills employ half-timers (if they can be so called, seeing that children 7 to 12 years of age are allowed to work nine hours a day), and as the fencing of machinery is now generally in a satisfactory state, so that my duties were comparatively light.

The modern mills are of the most approved designs, being provided with rope-drawing engines by the best makers, shafting and gearing and machinery which could vie with any mill in England. Ring throstles are very popular, and several large concerns have filled their spinning rooms with these frames.

None of the mills are lighted with gas. Two or three some years ago were worked by electric light, but during my stay I never saw it used.

There is, as is to be expected, a wide difference in the management of the various mills. Some are superintended exclusively by native managers, engineers, and spinning and carding masters.

Parsees are, as a rule, employed in the better paid situations. A few factories, especially in the city of Bombay, are conducted with great ability; but in others, where the proprietor has little or no knowledge of the business, he often on the score of economy discharges his European overlookers, putting in their place incompetent natives, who soon bring about a lamentable result in the way of inferior and lessened production and a rapid depreciation of the machinery. I have known in one mill four changes of managers in six months, each more incapable than the preceding, and having only the most superficial knowledge of his duties. I remember going my rounds through the many rooms of the mill with one of these managers, and at the close of my inspection I entered various recommendations relating to fencing mule quadrants, driving wheels, and upright shafts in a book kept in the office for that purpose. He read my remarks and begged me to return with him into the mill and explain what I wanted guarding, as he did not know the names of any of the machines, excusing his want of knowledge on the ground of having only just been made manager, being promoted to this responsible position from a seat in a lawyer's office.

A common and curious trait in the character of the native mill proprietor is his seeming indifference to the first cost of the plant and his intense dislike to spend a single rupee afterwards for necessary repairs. Owing to this (fortunately for the English machinist), the life of machinery in an Indian mill is not so long as it would be in an English mill.

Many native speculators, with no conception of spinning, but with wild ideas of the fortunes to be made by starting a mill under any circumstances, will buy worn-out frames by all manner of makers, filling their rooms with machines which will hardly turn, and soon come to grief. Many of these have come to me with open mouth, expressing the greatest astonishment at the result, and praying me to explain the reason of their failure.

Regarding the profits made by these cotton-spinning and manufacturing concerns, it will doubtless make the English masters envious when I say I know of more than one concern in the Presidency which has paid back all the subscribed capital in four years to the delighted and fortunate shareholders.

Generally speaking, with fair management a good profit can be made every year, unless there has been a deficient cotton crop throughout the country. The greatest curse to the trade is the abominable system so generally followed by the native mill agents of deducting a percentage for management on the *output*, whether the goods have been made to a profit or loss. Added to this injustice he frequently charges a commission on all coal and mill stores which are supplied to the factory, leaving the poor shareholder nothing except the knowledge that the agent is waxing rich whilst he is growing poor. In the face of these results, it seems beyond comprehension that very little inducement seems requisite to persuade the native capitalist to take shares in ventures conducted on this basis.

Until this iniquitous system is abolished, the cotton trade in India must always be subject to over-production, and no united action can be taken to check a supply beyond a legitimate demand so long as these men hold the power they possess; their sole thought being to fill their own pockets at the expense of the shareholders, none being given to the condition and future prospects of the trade. The largest millowner is a Parsee millionaire, Sir Dinshaw Maneckjee Petit; he runs seven mills, all well-managed, many of them superintended without the aid of any European foreman. The factories owned by Mussulmen are seldom, if ever, insured, and one which has been built 20 years has never had a coat of paint applied to any of the woodwork. There is great speculation continually going on in mill shares, and, with the exception of a few native concerns, those under European management and direction find the most favor.

Many of the mills up-country use wood for fuel, but several masters recently have laid down coal-burning boilers as the country round is becoming denuded of timber. All the coal consumed is imported from England.

The position of the Indian cotton-spinners and manufacturers is undoubtedly a strong one, owing to the many advantages which their situation affords.

In a few words I may mention some—cheap and abundant labor, the raw material close at hand, many of the factories being in the heart of the cotton-growing districts, a ready market being found in the neighbourhood for all cloth without the intervention of middlemen, few strikes, and those of an unimportant nature, and trifling factory legislation not curtailing the working hours and employment of juvenile labour.

The disadvantage may be summed up in the increased cost of engines, gearing, machinery, and coals owing to freight and carriage, more hands being required per spindle, although the ratio is ever on the decrease, restricted choice of competent overlookers, and occasional stoppage of the whole mill owing to a few of a certain caste taking their religious holiday. Twenty years ago 14 winders and pressers were employed on a pair of mules where seven or eight are now considered sufficient. The dry, electric state of the atmosphere during the hot season in parts of the Mofussil renders damp cloths thrown over the laps at the back of carding engines and running water in troughs in every room necessary to carry the cotton through the preparations.

A curious feature in the management of a native mill is the large number of watchmen employed, often poor relations belonging to proprietors or managers, 14 to 16 being no uncommon complement for a single mill.

Added to these there is the same trouble in getting hands together after a holiday as exists in England, and immense damage caused by damp to machinery which is obliged to stand during the monsoon. Unless the premises be properly fitted with heating apparatus, a single night's rain will cause every atom of steel and polished iron to be coated with rust.

I should recommend inventors and makers of coal-saving appliances to pay special attention to Indian mills as a profitable field for the extension of their business, as the price of fuel is a great item in expenses, and any reduction in the consumption is hailed with delight by the large consumer.

There is an immense difference in the yarn and cloth manufactured in the Presidency; some being equal to the turn-out of our best English concerns, and others so outrageously bad and defective that how any firm can be induced to purchase it, at any price, exceeds my comprehension.

With regard to the mill hands, there is no doubt in my mind that their hours of work are too protracted, their meal hours too short, and their holidays too few, but their lot compared with the average outdoor laborer is to be envied. They earn much better wages and are protected from the great heat of the sun and the heavy rains of the monsoon during the hours of work.

Owing to the higher scale of income, they are naturally better fed and clothed than the general run of natives. The great cause for apprehension is, that by allowing children to commence work at such a tender age, and for such long hours, the factory operative race may, in course of time, sadly deteriorate in physique.

In 1884 there were 44 cotton mills in Bombay city, containing 1,217,730 spindles, 12,135 looms employing 40,879 hands; and in the Mofussil, 17 mills containing 274,404 spindles, 2,252 looms employing 9,049 hands.

Since that time, about 10 mills have been opened in Bombay and four in the Mofussil, making a total of 75 for the whole Presidency. The factories up-country are situated as follows:—Ahmedabad nine, Surat four, Broach three, Nadiad one, Jalgaon one, Sholapur one, Hubli one, and Veramgaum one. The tendency now is to erect mills near the sea-coast, as the dry air up-country renders spinning and weaving a difficult operation at certain seasons of the year.

All the factories in the Presidency are built within easy distance of a line of railway; but the ground to be covered by an Inspector is very great, as one may judge, when I mention that it takes 32 hours by rail to reach the mill at Hubli from Bombay.

Labor is abundant, and I see no difficulties ahead in the way of getting any number of workpeople, for the average native will work any number of hours for a trifling increase in his pay, and the conditions under which he is employed do not

seem to be the matter of consideration to him even though they may materially affect his health. Women work usually shorter hours than men, beginning about 7 A.M. and leaving off at 5-30 P.M. Wages vary in different districts (Bombay paying more than inland stations). The average wages of a man in a cotton mill is from 10 to 20 rupees per month, and woman's from 7 to 9.

Women are principally employed in reeling, winding, and cotton-picking, and it is the exception to find them either in the card room or weaving shed. The native operative seems, whether from overwork or from natural aptitude, to be able to fall asleep at a moment's notice. I have seen hands fast asleep on the mill floor directly they have thrown the strap off their machines and before some of their fellow-hands have been able to get out of the mill doors.

The meal question is a difficult one to legislate on owing to caste prejudice. Some are obliged by their religious tenets to eat at stated times, and if that opportunity is denied, they are obliged to fast for a long period.

Different castes will not eat together. I have always been obliged to be exceedingly careful whilst walking between frames during meal hours to avoid touching the person who might be taking his meals in the room, for if by accident I came in contact with them, they would not hesitate to throw their untasted food away.

The general run of hands will not work with lower castes, and the latter have to be kept in certain parts of the room to themselves, and in some cases in a separate building.

Many of the hands employed in Guzerat are so exceedingly dirty in their habits that I have been obliged to ask the proprietors to order them out of the mill in batches, not allowing them to return until they were more decent and presentable. Washing seems actually to be a once-a-year business, and their hair is so matted that combing is out of the question. Their clothes, if they can be so called, are simply filthy rags. These people belong to a gipsy tribe called Wagris, and are largely employed in reeling in the towns of Ahmedabad, Broach, Surat, and Neriad. Skin diseases and ophthalmia are very prevalent amongst this class, I have seen as many as 30 sufferers at work in one room. Scores of cotton ginning and pressing factories are scattered over the cotton-growing districts, but do not come under inspection, as 100 hands are not employed for more than three months in the year, the extremely busy season only lasting about seven weeks. Many of these places are a scandal as regards want of ventilation, awful dust, unprotected prime movers, and the protracted hours of work.

I will here give a few particulars of the evidence given before the Factory Commission by Rustomjee Framjee Wadia, manager of the Pachora Press and Ginning Factory at Khándish:—

"I know of one ginning factory of 40 gins where there are only four doors and no windows. The length of this factory (the walls of which are chunam) is 120 feet, and the doors 7 feet by 4.

"The management of the engines is generally not in competent hands. They are chiefly worked by those who only know how to produce steam, and who know absolutely nothing about proper level, soundness, the proper fitting of the several parts, steadiness, cleaning of the boiler, &c.

"I myself know several factories where the person in charge is quite unfit for his duties.

"The engines also are often worked when out of order, and, being under 10-h.p., they are never examined by the boiler inspector. The boilers often are not fit for use. In many cases, boilers rejected by the larger factories are bought and used by the smaller factories. I deal in machinery, and have got a large establishment in Bombay. I have disposed of some of these rejected boilers which were quite unfit for use, but I got my money. The ——— Mill has just rejected a boiler which has been bought by my firm. Both I and the consulting engineer in my office examined this boiler, and we found a plate absolutely curved in the dome where the water stands. It was most fortunate we made this examination. I have rejected this boiler as being unfit

to work at 40 lb. pressure. I tested it with both water and steam. I have not sold this boiler, but it is now on sale.

"It is my opinion that five-sevenths of these small ginning factories are in a dangerous condition.

"In ordinary seasons, that is when work is not very pressing, the engine starts between 4 and 5 A.M. and 7, 8, or 9 P.M. without any stoppage during the day. The hands work continuously all these hours, and are relieved by one another for meals. In busy seasons, that is in March and April, the gins and presses sometimes work day and night, and the same set of hands work both night and day, with half an hour's rest in the evening. The same set continue working day and night for about eight days. When the hands have been working day and night for about eight days, and it is impossible to go on longer, another set of hands are procured from Bombay, if they can be found. In this case the work is distributed between the old and new sets of workers, half working all night and half working all day.

"More women are employed in gins than in presses. Both the men and the women come to the factory at 3 A.M. as they have no idea of the time, and they wish to make sure that they are at the factory door by the time it opens at 4 A.M. I have 40 gins in one of my factories at Pachora, and I have only 40 women attending to these 40 gins. I have only eight spare women, I never allow these women off the gins. I am not alone in this respect, it is the general system. There is no change of hands except at meal hours. The women, who work from 4 A.M. to 10 P.M., are paid 3 to 4 annas per day. (There are 16 annas in a rupee, which is equivalent to 2*s*.) All the factories pay at this rate; sometimes we pay our hands 6 pies as a bonus (12 pies to one anna). There is no work in the district at which these poor women can get employment.

"We work these long hours from the 15th of November till the 31st of May, but only about 10 days in each month. Sometimes we work day and night for two months, but in this case we employ two sets of laborers. We employ no children. When the wages are so low for the adults, there is no advantage in employing children. I certainly would recommend that legislation should be extended to these factories. I am personally largely interested in this matter, being a proprietor, secretary, and treasurer. I should like to see these ginning factories worked only 12 hours a day, as we could then charge double rates for ginning the cotton, and, of course, we could pay our laborers better wages; but if the Government forced us to pay our laborers more wages, without restricting our hours, we should be obliged to charge the merchants higher rates. The hands who work these long hours frequently die."

The above evidence speaks for itself, and needs no words of mine to convince the public that legislation is needed for this class of factories.

Mills are increasing at a great pace. During my stay in Bombay—a period of four years—about 18 new ones were started, and a great number of concerns enlarged those already erected, or built sheds for reeling or warehouses, to enable them to turn out these departments in order to make room for more spinning and carding.

Other industries are springing up in all directions. Flour mills have been started so rapidly that the supply has greatly exceeded the present demand, and shares in these concerns have become a drug on the market.

Seed crushing, oil mills, foundries, and dye works are increasing in the Presidency; but no machinists have any footing, and all the cotton machinery has to be imported. Very little use has, up to the present time, been made of the enormous water power which is available in many parts, although the Government, alive to these advantages, have offered great inducements to promoters of new works, but they are slow to seize the opportunity.

I foresee in the future huge fortunes to be made by adventurous and plucky manufacturers, who will turn these great natural means of motive power to a practical use. My remarks do not, of course, apply to those wide, tearing torrents which for three months only during the year would be available, but to those rivers which are always flowing, and never fail in the driest season.

The position of many of the English managers in India is an enviable one, and would surprise men in like situations at home. Some receive 1,000*l*. a year with free

bungalow, gas, water, coal, and medical attendance, and many from 400*l*. to 750*l*. with like perquisites. I should, however, wish the English manager, who has any idea of trying his luck in India, to understand that it is not all gold that glitters.

Many have to return with broken health, not being able to stand the climate; others have to pay away half and sometimes all their savings in sending for and sending back their families, for it is the exception when wives and children can remain for any considerable time without returning to England to recruit. We will not allude to those who are carried off, with a rapidity which would startle the good folks at home, by cholera, heat apoplexy, and other sudden and fatal diseases. There are expenses which must be incurred, such as a carriage and horse, frequent journeys to the hill stations to avoid the heat of the plains, and lastly, the reduced value of the rupee, which, from a buying value of 2*s*. in India, is worth only 1*s*. 4$\frac{3}{4}$*d*. when it reaches England. All managers, engineers, carding and spinning masters, who think of engaging for India, should be careful to have their agreements properly drawn up, and not forget that the items of passage to and from India, medical attendance, free bungalow, part of wages to be sent home at full rates of exchange, should be included or left out according to the terms agreed upon.

Some of the men who have engaged have been driven away from their situations owing to the native masters requiring them to make so much overtime, besides insisting on their devoting their holidays to overlooking repairs being made in the mill.

I give these hints hoping that they may have the effect in the future of leading to proper understandings between employer and employed.

I cannot refrain from here acknowledging the kind reception I met with at the hands of masters and managers; no obstacles were ever thrown in my way, and every facility afforded me in the prosecution of my duties. I seldom, if ever, made any recommendation which I thought would tend to the better conduct of the mill or amelioration of the condition of the workpeople which did not at once receive the sanction and adoption of the master.

Difficulties would arise in the way of prosecution; I give one instance. On my way to inspect a mill in Guzerat, I noticed a group of small children squatting on the roadside. As I approached them, the leader of the band presented me with a written petition asking me to inquire into their grievances.

The paper stated that these lads, whose ages varied from eight to twelve, had been for months employed over hours, and had not been allowed the legal time for meals. It went on to say that the master, a well-known rich miser, had deducted half the amount due to them in wages on various pretexts, and that he was then owing them the remainder. I took the children to the Government bungalow, where the children separately made their statements to the Assistant Collector, he taking down the particulars. A prosecution followed in due course, and when in court I called these children as my witnesses to prove the case, they one and all swore that their former declarations were entirely false, and that their master was a kind and good man who always treated them with the greatest consideration. There was no doubt in the minds of the magistrate, my own, and the police that these children had all been frightened into making this denial of their first statements; but as their master was the only large employer of labor in the district, a quarrel with him meant semi-starvation.

Fortunately, I was able to prove one case of overtime, and got a substantial fine; but no conviction in the 14 others was possible under the circumstances.

Jute manufacturing is carried on almost exclusively in Calcutta; the only jute mill in Bombay being converted during my stay into a cotton-godown and the machinery shipped to Calcutta. Many of the hands are provident and put together sufficient to buy a small piece of land in their native country, leaving it to be cultivated by some members of their family; whilst others, having put by their savings for long weary months, go to their birth-place, feed a lot of lazy Brahmins for the edification of their souls, returning (having spent their all on these drones) to their work again without a rupee. The great proportion of the mill hands of Bombay are drawn from the Southern Marathi country, and are a quiet, harmless, hard-working

lot, falling an easy prey to the grasping native money-lender or marwaris, who lies in waiting for them at the mill door, making tempting offers, and who, once on the track, does not leave his victim until he has dispoiled him of his all. They charge as interest from one to three annas per rupee per month, there being 16 annas to a rupee.

Three-quarters of the yarn spun in India is sent to China in the bundle, the remainder being manufactured into cloth and disposed of in various parts of the country. In case of a war with China, the cotton industry in India would for the time utterly collapse, as there are so few markets open to their goods. The Chamber of Commerce in Bombay is now directing its efforts to remedy this position of affairs. The temperature in some of the mills, especially just before the burst of the monsoon, is very oppressive. I have seen 117° registered in a spinning room in Broach.

In Bombay city, besides the cotton mills and foundries, there are two immense dyeing establishments and one silk mill, making goods for the Rangoon market. Several of the mills manufacture towels, sheets, hosiery, &c.

Another hint to managers intending to take up a situation in India.

I should not advise any man to think of emigrating who has not a perfect control over himself in the way of drink. Living in such a furnace, the enforced solitary life as regards meeting with his fellow-countrymen, frequent periods of depression owing to being separated from his family, and the effects of the trying climate, all conduce to habits of intemperance, and the many loafers whom one meets with and is pestered by prove how many have succumbed who have started with fair and even bright prospects.

I do not think that more serious accidents are reported than at home from a work of the same size, but the slight accidents are of more frequent occurrence. It is often found impossible, owing to the superstition of the relatives, to keep an injured person in the hospital, and several have been removed who were rapidly recovering from their injuries by a mob who have hurried the patient to the magic man. He, having waved a few peacock feathers over him and plastered the wound with dung, saying at the time a few prayers, often leaves him to die.

Exd. A. Raitt.

Govt. of {1888} Madras.

JUDICIAL.

Order thereon No. 2405-16 dt. 13th August 88

Recorded

S/J.D.D.

Issued

Recd. *Encl.*

G.O., 10th July 1888, No. 1477.

No. 245-16 dt. 13th August 1888

JULY.

Indian Factories Act.

Communicating to officers concerned, for report, Government of India endorsement forwarding copy of Secretary of State's despatch calling for a report on the working of the — in certain provinces.

Subg: Engrs I, II, III, IV & V Circles for information

GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

READ—the following paper :—

Despatch from the Right Honorable Lord CROSS, Her Majesty's Secretary of State for India, to His Excellency the Right Honorable the Governor-General of India in Council, dated India Office, London, 3rd May 1888, No. 30 (Statistics and Commerce).

I forward, for your information, 12 copies of the report of the Chief Inspector of Factories for the year 1886-87. At pages 112-123 of that report is a memorandum concerning the Indian Factory Act and Bombay Factories by Mr. Jones, who was for some time Inspector of Factories under the Government of Bombay. I learnt from the despatch of the Government of Bombay, No. 14 (General), of 16th October 1887, that it was not intended at present to appoint any successor to Mr. Jones, and that the work of inspecting factories would be performed by the Assistant Collector in Bombay and by District Magistrates in the interior of the country.

2. You will observe that Mr. Jones remarks upon—

(1) the long hours of work and few holidays in Bombay factories ;
(2) the occasional withholding of wages from hands ;
(3) the incompetency of mill managers, the dangerous character of many mills, and the inadequate fencing of machinery ;
(4) the ill-ventilated and filthy state of many work-rooms.

At the same time, he states in the same memorandum—

(*a*) that the long hours of work are often for only a part of the month or for one season of the year, and that the holidays and their sequelæ are a cause of loss to millowners ;
(*b*) that mill hands are better off, better fed, better clothed, and better protected than ordinary Native laborers ;
(*c*) that half the Bombay factories compare favorably in respect of machinery, management, and construction with similar establishments in England, and that serious accidents are not more numerous than in corresponding works at home ;
(*d*) that suggestions for the amelioration of mill hands are nearly always acted upon by mill managers.

3. I desire to receive a report at an early date upon the working of the Indian Factory Act in Bombay, Bengal, Burma, and in any other province where many factories exist. I should be glad to learn how the plan of placing the duty of inspecting factories in the hands of Magistrates or of Government Engineers has answered ; and whether it is proposed to modify the Factory Act of 1881 in the direction of additional stringency. A statement should be given as far as may be practicable of accidents, fatal or otherwise, that have been reported to, or investigated by, inspectors ; and reference should be made to the four shortcomings summarised in the second paragraph of this despatch on which Mr. Jones dwells.