

Dhananjayaro Gadgil Library

॥ ॐ नमो भगवते वासुदेवाय ॥

GIPE-PUNE-112737

REPORT

OF THE

BOMBAY MILLOWNERS' ASSOCIATION

FOR THE YEAR 1914.

(Established 1st February 1875.)

PRESENTED TO THE ANNUAL GENERAL MEETING
HELD ON 23RD APRIL 1915.

Bombay :

PRINTED AT THE TIMES PRESS.

1915.

CHAIRMEN AND SECRETARIES OF THE BOMBAY MILLOWNERS' ASSOCIATION.

Chairmen.

H. Maxwell, 1875, 1876-77, 1877-78.

J. A. Forbes, 1878-79.

Sir Dinshaw Maneckji Petit, 1879-80, 1880-81, 1881-82, 1882-83, 1883-84, 1884-85,
1886, 1887, 1888-89, 1889-90, 1891, 1892.

Sir George Cotton, 1893, 1894, 1895, 1896, 1897, 1898, 1899*, 1900*.

John R. Greaves, 1899*, 1900*, 1901, 1902.

Bomanji Dinshaw Petit, 1903.

Sir Sassoon J. David, 1904, 1905.

Sir Vithaldas Damodher Thackersey, 1906, 1907.

Fazulbhoy Currimbhoy Ebrahim, 1908.

Manmohandas Ramjee, 1909.

Herbert R. Greaves, 1910.

N. N. Wadia, 1911.

Sir Dinshaw M. Petit, 1912.

J. F. Bradbury, 1913.

Narottam M. Goudas, 1914.

Jehangir B. Petit, 1915.

Secretaries.

John Gordon, 1875-1884.

David Watson (Acting), 1881-82.

John Marshall, 1884-1898.

Frederick Noël-Paton, 1898-1905.

J. B. Leslie-Rogers, 1905-1911.

R. E. Gregor-Pearse, appointed 1912.

CONTENTS.

	PAGE
Accounts of the Association	46
Annual General Meeting	i
Banking Legislation	41, 167
Boiler Inspection Act—Amendment of Rules	23, 60
Boiler Inspection Fees	23, 123
Bombay—Development of	38, 162
Chairman, Deputy Chairman and Committee for 1915	15
Chinese Import Tariff	44
Chinese Ports open to Foreign Trade	44, 208
Cloth Production	4
Congress of Commerce	43, 207
Cotton Crop	3, 15
Cotton Cultivation—Improvement of	34, 161
Cotton Duties Act—Tariff Values	25, 130
Cotton Exports	6
Cotton Fires	35
Cotton Prices	11
Cotton Stocks	45
Cotton Storage	36
Donations	45
Duty on Imported Leather Laces	27, 139
Duty on Imported Tallow	28, 140
Exchange Rate	12
Factories Act—Administration of	17, 49
Factories Act—Assessors' fees	19, 52
Factories Act—Certificates to Children	20, 54
Factories Act—Cleaning of Roofs and Ceilings of Seasonal Factories	22
Factories Act—Hours of Employment of Children	21, 57
Factories Act—Magistrates as Additional Inspectors of Factories	22
Factories Act—Working Hours of Mills	22, 59
Fire Insurance—Sprinkler Discount	29, 153
Fire Pumps—Electrically-driven	30, 154
Hardinge, Lady—Death of	42
Hardinge, the Hon'ble E. C.—Death of	42
Holidays—Mill, 1915	43
Income Tax—Board to assist Collector	42, 206
Leather Laces—Import Duty on	27, 139
Legislative Council—Representative of Indian Commercial Community	16, 47
Members	i, 16
Mill Industry—Progress of	5
Piece-Goods Contracts	30
Piece-Goods, Country-made—Shipments	7, 155
Piece-Goods List	27, 139
Public Services Commission	31

	PAGE
Quality Numbers on Cloth—Registration of	11, 165
Rules 5 and 6—Amendment of	16
Rules and Regulations of the Association	i
Silver Prices	12
Smoke Nuisances Act—Extension to Kurla	24, 129
Smoke Nuisances Commission—Association's Representative	24
Smoke Nuisances Commission—Examination of Stokers	24, 124
Statistics	210
Tallow—Import Duty	28, 140
Wholesale Cash Market Value	28, 142
Yarn—Exports	8
Yarn—Production	4

Bombay Millowners' Association.

ANNUAL GENERAL MEETING.

The Annual General Meeting of the Members of the Bombay Millowners' Association was held in the rooms of the Association, Graham's Buildings, on Friday, the 23rd April 1915, at 4-30 p.m. (Standard Time), to transact the following business:—

- (1) To receive the Report of the Committee for the year 1914.
- (2) To amend Rules 5, 25, 26 of the Rules and Regulations of the Association and Rule 4 of the rules for the election of the Association's Representative on the Bombay Legislative Council, the Bombay Improvement Trust and the Bombay Port Trust.
- (3) To consider notice of motion lodged by Mr. C. N. Wadia on behalf of the Century Spinning and Manufacturing Company, Limited, to the effect that he will propose and Mr. H. Powell of the Textile Manufacturing Company, Limited, will second that the present Rules 45 and 48 of the Rules and Regulations of the Association be amended by the Solicitors of the Association so as to establish the voting for the Chairman, Deputy Chairman and Committee on the same basis as prescribed in Rule 5.
- (4) To elect an Auditor of the Association's Accounts for the year 1915.

And to transact any other business that may be brought forward.

Mr. Narottum Morarji Goolaldas, Chairman of the Association, presided. Among those present were:—Mr. J. B. Petit (Deputy Chairman) (The Manookji Petit Mfg. Co., Ltd., The Framji Petit Spg. & Mfg. Co., Ltd., The Godavery Valley Ginning and Pressing Co., Ltd., The Parbhani Ginning and Pressing Co., Ltd., the Emperor Edward Spg. & Mfg. Co., Ltd.), Mr. N. B. Saklatwalla (The Central India Spg., Wvg., & Mfg. Co., Ltd., and The Swadeshi Mills Co., Ltd.), Sir Sassoon David Bart. (The David Mills Co., Ltd., The Dawn Mills Co., Ltd., and The Standard Mills Co., Ltd.), Mr. D. E. Wacha and Mr. Ruttonsey D. Morarji (The Morarji Goolaldas Spg. & Wvg. Co., Ltd., and The Sholapore Spg. and Wvg. Co., Ltd.), Mr. C. N. Wadia (The Century Spg. and Mfg. Co., Ltd.), Mr. Meyer Nissim (The Sassoon Spg. & Wvg. Co., Ltd., and The Union Mills, Ltd.) and Mr. C. V. Mehta (The Mofussil Cotton Mfg. Co., Ltd.), Mr. N. G. Hunt (The Apollo Mills, The Connaught Mills Co., Ltd., The Empress Spg., Wvg., Co., Ltd., The Howard and Bullough Mills Co., Ltd., The Imperial Cotton Mills Co., Ltd., The James Greaves Mills Co., Ltd., and the New Empress Spg. and Wvg., Co., Ltd.), Mr. J. F. Bradbury (The Colaba Land and Mill Co., Ltd., The Bradbury Mills Co., Ltd., The New Great Eastern Spg. and Wvg. Co., Ltd., and The New City of Bombay Mfg. Co., Ltd.), Mr. J. H. Latimer (The Phoenix Mills Co., Ltd.), Mr. D. M. Wadia (The Simplex Mills Co., Ltd., and The Akola and Mid India Spg., Wvg. and Mfg. Co., Ltd.), Mr. H. V. Powell and Mr. A. Gaddis (The Bombay Dyeing and Mfg. Co., Ltd., and The Textile Mfg. Co., Ltd.), Mr. B. Brown (The Finlay Mills Ltd., and The Swan Mills Ltd.), Mr. J. K. Parulker (The Khandeish Spg. & Wvg. Mills Co., Ltd.), Mr. Haji Yusuf Haji Esmail Subani (The Elphinstone Mill) and Mr. Noël-Wilkinson, Acting Secretary of the Association.

THE CHAIRMAN'S REVIEW.

EFFECTS OF THE WAR.

The notice convening the Meeting having been read, the Chairman **Mr. Narottum M. Goolaldas**, in moving the adoption of the report, said:—

I would at the outset observe that the introductory part of the report very tersely deals

with the salient features of our work during the past year. If I briefly allude to them in this place it would be only for the purpose of a little sidelight on the more important topics. So much has been and is being said on this war, which is destined to be memorable in the world's history, that I am not going to tire your patience with its economic effects on the commerce, the industries and the manufactures of the world. The laws of war and of international trade seem to be in conflict. At present the great question of questions which has been recently the subject of exchange of views between such a great neutral and powerful country as the United States and another equally powerful country like the United Kingdom of Great Britain and Ireland is the legality or illegality of merchant vessels carrying neutral flags, but conveying contraband goods for belligerent States and also whether food and other supplies could be made available to the same States under pretext of supporting a famishing civil population. There are half a dozen other minor aspects of international politics which the war has for the first time brought to the surface. All these grave issues will have to be closely discussed and adjudged upon by eminent statesmen and international jurists after the war is over.

THE ECONOMIC RESULTS.

So far then, as to the political consequences which the war has so glaringly brought into prominence. Coming now to the purely economic effects wrought by the present unfortunate condition of hostilities, it may be observed that they are of a variety of character; and their manifestly adverse influence on the trade and industries of the world are serious, but not so serious as might have been otherwise the case. If the world's trades and industries are being carried on with fair regularity and the least hardships and inconveniences, it is entirely owing to the effective blockade of the enemy's ports by the powerful British Navy, which is still the Mistress of the Sea and is gallantly maintaining its high reputation for efficiency and scientific precision. Standing bravely for the last eight months at the gates of the North Sea, it has absolutely arrested any action on the part of the enemy's fleet with this most satisfactory result—that trade is as safe on the high seas as if no war had been waged. True it is that the enemy has striven his best to injure that trade by submarine attacks on merchant vessels, but the published statistics show how the commerce of the world, however contracted, goes on without the least inconvenience and hardship. The peaceful nations of the world are already alive to the invaluable service which the British Fleet and those of her Allies have rendered. That service will form for ever one of the brightest pages of history—a page which will be at once ennobling, inspiring and encouraging to all those who love the pacific evolution of the progress of humanity.

No doubt India has partially suffered from the economic effect of the war, but she is thankful that nothing very material has happened. Sacrifices, all have to undergo, and none can gainsay the fact that she is nobly giving her share of the sacrifice, a sacrifice in which the prince and the peasant alike have a share. An embargo has been placed on some of our materials of manufacture, but that was inevitable. We have legitimate grounds for our grievances, but the present is not the time to present them to the governing authorities, whose attention has been so exclusively devoted to support England and the allies in their titanic efforts against their enemies. It is our patriotic duty for the time to hold our grievances in abeyance. The time must certainly come when we shall have to point out how far Indian trades and Indian industries have been artificially hampered and handicapped and how imperative it is for their onward progress to emancipate them from their fetters. The future prosperity of India financially and economically, I venture to say, greatly depends on her being independent to evolve her own commercial and economic destiny. The only remedy for it is fiscal autonomy. It will be an act of the greatest political wisdom and statesmanship when that independence is gained. It will be a red letter day in the country's annals.

· PRAISE FOR THE GOVERNMENT.

Having said so much, we cannot refrain from eulogising the economic and financial statesmanship of the Government of India in having at the psychological hour published its well considered resolution to make available six crores of public balances to the Presidency Bank for purposes of general trade without favouring any specific or class interests. Confidence and credit, which were losing ground since September last, were at once restored and that with the happiest results. With a sagacity which cannot but be admired the interests of all commercial and industrial classes were well considered and weighed, of which the resolution just referred to was the welcome outcome. The strength or weakness of a Government is tried and tested only during a time of the greatest strain and stress. And I am sure you will readily admit that almost all the actions which our Imperial Government have taken since the war began irresistibly inform us of its great strength. More, the unostentatious but exceedingly well conceived Budget of the current official year, presented by the Finance Minister, simply demonstrates the fact of that strength, and proves to the world outside India how capable she is to hold her own. Confidence begets confidence. Thus it has come to pass that with the confidence displayed by the people in the ability and capacity of our Government, that authority itself has been able to repose more and more of its confidence in the people themselves. It is to be earnestly hoped that such mutual confidence and trust will grow more and more for the greater good of the rulers and the ruled when the clang of arms has wholly ceased and the sword has been turned into the ploughshare.

This restoration of confidence dispelled in our own industry that apprehension which a branch of it had displayed in the early part of September. The principal dealers in the raw material were, it must be confessed, a little too previous in appealing to the Imperial Hercules. Government had shown that our Association was right and that none of the crutches offered by the alarmists to prop up the trade in the raw material were at all essential. The economic laws, though momentarily arrested, had adjusted themselves and everything has moved satisfactorily since.

INDUSTRIAL DEPRESSION.

As to our own position as manufacturers, it must be ruefully observed that even now there are no material signs, save some spasmodic movements, of a steady improvement in our products. The depression which had commenced some months before the war, was, of course exceedingly aggravated. But we of the industry have borne our conditions of adversity with patience and in the hope that sooner or later the days of prosperity will return. It has been said by the great political philosopher of Elizabeth's time that the good things are to be desired but the days of adversity are to be admired. If, however, we are passing through unprecedented adversity we are also learning new lessons. The war, an evil as it is, has taught us some useful lessons. It is an eyeopener.

Another matter in relation to cotton may be touched here. The report of the committee on the large unparalleled fires of last year has been before the public for some months. On the main point the committee were unanimous that the fires were of an incendiary character and not owing to any natural causes. That fact is of great value. The other broad fact to be noticed is the series of suggestions made for the stacking of cotton bales on the green in future and the steps which should be taken for watching and protecting them. It is a matter of regret that no area can yet be made available at Tank Bunder, but it is to be hoped the Port Trustees may see their way, in view of the large interests at stake, that a part of the reclaimed ground may be made available during the next busy season.

DOMESTIC PROBLEMS.

In domestic matters your committee are greatly dissatisfied with the silence of the Fire Insurance Association to reduce the rate on risks generally protected by sprinklers. Though

more than one reminder has been sent, they have paid no attention. It is a matter to be regretted that an important association which greatly depends for its prosperity on factories should be so negligent of the interest of its customers. And it is now the intention of the Committee to take such other active steps whereby mills may be benefited in their insurances.

This review would be incomplete were no reference made to the most all absorbing question which is exercising the mind of all millowners who turn out coloured yarn and cloth. As you know, our mills are now producing of the latter double the quantity which they used to turn out five years ago. The embargo laid on the export of aniline dyes has been of a character which might be legitimately called a grievance. Why should these dyes be denied to a dependency like India and why they should be retained for the sole and exclusive use of Lancashire manufacturers, millowners are at a loss to understand. If the free trade policy is to stand good and if its principles are sound, then the almost total prohibition of the dyes to this country is inexplicable. It practically means protection to Lancashire at the expense of India. I trust that this aspect of the matter will seriously engage the attention of the Committee and a suitable representation be made to the Imperial Government on the subject. Some months ago a circular had gone the round of the mills inquiring what quantities and descriptions of dyes each factory would require. The information asked for was loyally furnished. But strange to say nothing more has been heard of from the Government since the issue of the circular. Are millowners to understand that India in matters of industry, when Lancashire is in competition, should always be subordinate to Lancashire interests? That is the question which needs a satisfactory reply from the Imperial Government.

The labour problem is always with us. It is sometimes aggravated and sometimes slumbering. All the same it is to be earnestly hoped that concerted action will be taken for the conservation of employers' interests without in any way prejudicing those of the employees. Dilatoriness and want of unity have been the chief features of this problem, so far as employers are concerned, but it is time this reproach was removed. The present is the most opportune time for action. Let us fully appreciate the value of the world old adage that "a stitch in time saves nine."

The Boiler Inspection Act is again on the legislative anvil and will no doubt soon form the subject of careful investigation by the in-coming Committee. So far as experts on the retiring Committee are concerned, it is thought that it is a most revolutionary piece of legislation in which one man is left to centralise everything which necessarily signifies untold inconveniences, hardships and even harassments to boiler users. No legislation in recent times in reference to our industry has been so one-sided and drastic, and otherwise every way mischievous than the one now drafted, and the Association will do well to make a strong representation to Government for the purpose of recasting the entire bill by omitting therefrom all the most objectionable and mischievous clauses.

TRADE WITH CHINA.

Turning to foreign trade, it is a matter of regret to notice how year after year the exports of Indian yarn to China are diminishing. The tocsin of alarm has been rung by more than one member at our annual meetings but it seems to go unheeded. Japan, which was a negligible rival some ten years ago, has been steadily driving out the Indian yarn from the markets of China, while the increased spirit of industrial activity which is characterising the Chinese has also been instrumental towards the same purpose. There are now more than 30 mills in China, and it may be taken for granted that that number will, in a few short years, be doubled. To a very large extent it is the fault of the Indian mills that they are allowing Japanese yarn to steal a march over their own. As Consul Mr. Hosie had recently reported to the Government at home, Indian yarn is very defective, compared to Japanese yarn in the quality of reeling strength, orderly bundling, packing and so on. On the other hand, the Japanese are putting forth every effort to diminish their cost of production so as to undersell Indian yarn, and at the same time to consult the taste and the sentiments of their

numerous customers. If Indian millowners continue the *laissez faire* policy of the last few years, it is to be feared that a large portion of the Indian export trade will be entirely gone. It is to be hoped strenuous efforts will be made to regain the losing position. Nay, that a new and most profitable market will be nursed at Basra which is now happily British. With law and order fairly established at that great and ancient entrepot of Eastern and Western commerce, there would be an extensive field for the off take of Indian cotton manufactures.

THE HOUSING PROBLEM.

The housing problem still seems to hang fire, and so far as is not known only two mill companies have availed themselves of the statutory provisions specially enacted in the amended Bombay Improvement Trust Act. The problem in abstract has been thrashed out times out of number, but no tangible practical beginning seems to be visible at present or even in the near future. The advantages of housing the operatives in sanitary rooms, with sanitary surroundings, are so obvious that it would be wasting time to expatiate on them at this hour. All that I can say is that on the moral and social well-being of the operative will greatly depend the future prosperity of our industry. The economic question is always there, but no effort of an organised and well conceived character has yet been made to ameliorate it. The average operative is an indebted personage. He has not learnt thrift while he is more or less addicted to the habit of drink which, thanks to the prosperous Excise Department of the Government of Bombay, has brought liquorshops near his home. In matters of elementary education, too, the operative is still far behind. Recently efforts have been made by the Government in this direction. An appeal was made by the Government to the millowners but difficulties of imparting elementary instruction to the young are many. These, however, may be overcome by sympathetic treatment and moral suasion. Here it is that the self-interest and innate conservative instincts of the operative's parent are the greatest stumbling blocks. It is time, however, that progressive Bombay should take a well-considered leap forward in the matter of the amelioration of the social and economic condition of the operative. Words are not enough. There has been in the past any amount of bethumping of words. It was time in our own enlightened interest we took ourselves to action of a healthy and salutary character. We are all sinners, but let us put our shoulders together to remove the reproach to which we have been and are exposed for so many years.

ADMIXTURE OF COTTON SEEDS.

A word may lastly be said in reference to the louder complaint of the growing practice of admixture of cotton seeds. Though the subject has of and on being referred to our association's and committee meetings, and though the Government of Bombay has been uniformly careful in preventing such admixture by instructions to the different Collectors, there seems to be no material abatement of the admixture. Millowners find how the better varieties of cotton are deteriorating in their respective grade. It would be well were the in-coming Committee once more to address itself to this question with a view to making a suitable representation to the Government in its Agricultural Department.

In conclusion, we all trust and hope that with a happy and speedy close of the war and the return of normal times we may be able to witness a new era in India of industrial organisation and enterprise. We wish for more prosperous years in all her staple industries including our own, and the rise and growth of new young industries which under the fostering care and moral support of the Imperial Government may take a firm footing in India, thus advancing a further stage in her great industrial progress and prosperity.

With these observations I beg to move the adoption of this report, thanking at the same time the retiring Committee of the Association for their kind co-operation and assistance in discharging my duties as the Chairman, and to the Secretary and the staff for their kind help.

MR. J. B. PETIT.

In seconding the adoption of the report, Mr. J. B. Petit, Deputy Chairman, said :—

The severe depression through which the spinning and weaving industry was passing when we last met, had hardly abated, when the declaration of the great European war—the greatest yet recorded in the history of mankind—suddenly produced a feeling of deep gloom and distrust, unprecedented in the annals of our industry in common with all the branches of trade and manufactures throughout the civilized world.

One of the many abnormal conditions very seriously affecting our industry, that immediately followed the declaration of the war, was the total loss of credit, which in its train, generated a feeling of acute stringency, extreme uneasiness and a lamentable lack of confidence. The situation produced by this feeling, at one time threatened to develop into a panic and to bring about a financial crisis which roused the apprehensions even of old and experienced men who had successfully weathered the storms of the share-mania of 1866, and the bank failures of 1913. Thanks, however, to the genius of the Imperial and Indian Governments and the statesmanlike measures adopted by them, the situation was soon brought under control, credit was restored and business assumed an almost normal aspect. The financial assistance in particular, given by the Government of India to the Presidency banks for facilitating the financing of trade, materially helped to relieve the stringency and to revive confidence.

Cotton received the next rude shock and in spite of the many artificial methods adopted by Liverpool and New York including the "Buy-a-bale-of-Cotton" scheme to prop up and support a falling market, the prices came down in the course only of a few months from 6'66 to 4'64d. per lb. Though abnormal, the fall was no means unexpected and was only in keeping with the heavy drop that all the other markets simultaneously experienced. In this country, however, whilst all the other branches of the trade kept their heads cool, a panic ensued among the cotton merchants and a false alarm was raised by those engaged in the trade, who ultimately approached Government for intervention and financial assistance, with the ostensible object of preventing disaster to the producers of cotton and the great structure of industrial and commercial prosperity which depends so largely upon cotton as a foundation.

The Government of India, however, deserve to be warmly congratulated upon having wisely declined to yield to the clamour of a single interest to the exclusion of others that were equally hard hit.

PROPOSED REDUCTION OF ACREAGE.

Then followed another move on the part of those engaged in the cotton trade to induce the Government of India to take steps for the purpose of curtailing the cultivation of cotton during the next season. This Association was among the many public bodies consulted by the Government on this important matter and I am glad to say that the Association emphatically declared itself against the proposal.

So far as India is concerned it is perhaps possible, but in the case of America, I am almost certain, that the acreage usually given over to cotton will be considerably reduced this year. I do not however attach much importance to the reports we have received indicating wholesale reductions. Every planter in all cotton-growing districts, both in this country and in America, is governed, more or less by his own personal interests, and no amount of external influence or even state pressure will induce him to bind himself to any definite plan of campaign.

Personally, I consider it a dangerous policy for the Government to seek to impose restrictions of this character upon the cultivator, who so fully understands his own advantage and the needs of the situation that he is sure to know what is good and what is bad in his own interests. Nor is it possible to justify such interference as was proposed, in the light of sub-

sequent events and the improved prospects of the cotton situation in the face of a larger demand for the commodity in the event of the war coming to a close at an early date.

HEAVY STOCKS.

During the past year, values were low both in cloth and yarn, and although things have brightened slightly of late, even to-day there seems to be hardly any prospect of any very material change in the condition of the industry. Until very recently, stocks were still accumulating without any visible chance of an early off-take; and, the rise in cotton at one time threatened to add considerably to the difficulty and finally to eliminate even the small margin of profit that the earlier period of the war showed.

Unfortunately for our industry, no concerted action was taken either to reduce the production or to induce a quicker off-take with the result that, with cotton again in the vicinity of 6d. per lb., a bad and somewhat irresponsible market, and a huge stock of manufactured goods on hand, even the current year does not give more hopes of prosperity than did the year under review.

The closing of most of the important Continental markets which were the principal consumers of our waste, have helped to increase our unsold and undelivered stocks and consequently to reduce our already slender margins, thereby effectively demonstrating once more the wisdom of paying more attention to the production of coarser material from wastes.

TRADE OF THE ENEMY.

The difficulties resulting from the abnormal conditions brought about by the war, some of which have been enumerated above have, however, not been without their beneficent effects. They have served to open our eyes in more respects than one, have forced us to go outside the old beaten track in many directions, and have produced a mental condition which will enable us to make a genuine effort to meet new requirements and otherwise to cope with the situation now created. This will have a far-reaching effect in another way also, as in the future, when we come to more normal times again and when a more settled state of trade prevails, the mental effect should be very marked, and should result in a greater power of adapting ourselves to circumstances, such as capturing new markets in addition to making ourselves impregnable in those we already hold, becoming more self-contained and self-supporting than before and producing or manufacturing all the essentials of the industry for which we are now dependent on foreign countries.

So far as our dependence on Germany as regards dyes and dye-stuffs is concerned, we are all aware of the state dye-works that have been started in England with a huge capital, supported by a loan advanced by the Government on very favourable terms. Whether all these facilities will help to make the British Empire independent of the German stuff which has reached its present state of perfection, after years of patient and elaborate scientific enquiry and millions upon millions of pounds spent for experimental purposes, is a problem which the future alone will solve.

But before being too sanguine, it would be well to realise fully the difficulties of the situation. We must remember clearly that in Germany it is an industry that has been built up more in the laboratories by competent chemists and scientific men of a very high order, than by a combination of great financiers or business men, or even by State help: that in this respect at any rate Germany has in the past held an immense predominance over England, and last though not least, that this industry is peculiarly suited to the genius of the German people. We must admit that the Germans, by means of specially equipped chemical laboratories and at an enormous expenditure spread over a quarter of a century, have been able to manufacture these dyes from the waste products of coal in such profusion as to enable them to supply with ease more than 90 per cent. of the world's requirements at a cost of production and inferentially, a selling price, which in normal times, is bound to be at least a hundred per cent.

below the cost of any material which an English factory is likely to produce. To my mind at least for some years to come, to expect those engaged in the Textile industry to confine themselves to the indigenous stuff, is, to say the least, to expect the impossible.

So far, however, as this country is concerned, under present conditions it may perhaps be possible by careful handling, to revive the old indigenous industry of manufacturing natural dyes from various dyeing materials which are plentiful in this country, such as vegetable drugs, indigo and so forth. I believe, natural indigo in itself is capable of a vast store of colouring varieties and shades. It is a well-known fact that at one time, the Indian dyeing industry became famous throughout the world for the bright and attractive colours in which most of our textile productions were dyed by the crude processes of the olden days.

India possesses a vast store of natural dye-stuffs that can be profitably investigated and turned to good account at such institutions as the great Research Institute founded at Mysore at such a heavy cost by one of our most eminent and distinguished citizens and captains of industry, the late Mr. Tata, and which can thereby help this country in developing in the light of modern chemistry, a great and important industry, with tremendous possibilities.

In the same way, there are innumerable, and in some cases insurmountable difficulties, in the way of the other trades which are at present the monopoly of the German and against which a war was now being waged.

Prohibitions and restrictions in trade on a somewhat liberal scale, owing to the special conditions created by the war, have not only become advisable, but in some cases even obligatory, both in the interests of this country and the Empire in general, to say nothing of the technical necessities directly arising out of the war. The drastic and courageous measures, restricting in particular the exports of wool and wheat, although wise and justified under the exceptional and extraordinary circumstances of the case, would in normal times have created serious differences of opinion and raised far-reaching problems of a very complicated and important nature, involving the reconsideration and perhaps final revision even of well-established principles of trade which have made the prosperity of the British Isles in the past.

That this country itself has derived considerable benefit from these extraordinary measures is quite apparent. By the prohibition of all private exports, prices have already been very materially lowered, speculation has been nipped in the bud and the possibility of an impending economic disaster has been successfully averted. The Government by taking this wise and statesmanlike step has at one and the same time protected the consumer in this country from being sacrificed to the interests of the exporter, and rendered a service to the United Kingdom. It is not often that in its economic measures the Government in this country has served the interests of India as well as of the United Kingdom, more often those interests have clashed and India has been sacrificed. Everything considered, no one will seriously dispute the right of the Government to take this momentous step out of Imperial considerations, at any rate at an extraordinary juncture like the present.

The usual labour problem continues, and the difficulties experienced in past years are at present more or less in the same shape and form. But the question, though acute in itself pales into insignificance before the many wider and broader issues brought forth by the war this year.

I shall therefore content myself for the present by alluding only to one aspect of it that has not hitherto been dealt with and that is in regard to the education of the higher or superior staff.

While attempts are being continuously made to introduce primary education among the boys engaged in the mills, it is not a little surprising to realise that we have done next to nothing to promote education among the members of the superior staff of our mill, most of

whom can already read and write both English and the Vernaculars ; and to encourage them particularly in furthering their knowledge both in the theoretical and practical part of their work. A millowners' reading-room located in a central position, with branches situated, to begin with, say in three of our largest mill districts, viz., east and west Parel, Fors Road, and Jacob Circle, as far as Tardeo, supplied with magazines and journals on textile, engineering and electrical subjects, and up-to-date books of small or moderate values, can well be maintained for the benefit of a large number of the heads of the different important departments of our mills. The expenditure incurred on such libraries and reading rooms, worked under proper regulations, where admittance should be given either free or on payment of a nominal fee according to the earnings of each member, would be more than well spent, and would be productive of considerable good to the industry. At present, the various heads of departments, and the foremen working under them who are entrusted with the management of costly stock and machinery, and are practically in sole charge of them, have absolutely no means of keeping in touch with all the up-to-date methods of working and modern improvements in machinery and other appliances, and thereby improving their knowledge in the working of the various branches with which they happen to be connected. The suggestion I have ventured to make, will, I am inclined to think, supply a want which will not only be to their benefit, but will also have the effect of indirectly furthering the interests of the industry itself. In the alternative, I think, a small annual grant, say of Rs. 500 to the Bombay Textile and Engineering Association which has similar objects in view will enable us to make a beginning in this direction without the risk of any very heavy outlay. The Association is presided over by Mr. T. S. Dawson, the Principal of the Victoria Jubilee Technical Institute, and its management is in good hands, and I strongly recommend that a small grant of Rs. 500 be given to this Association for the purposes I have referred to.

The abnormal economic conditions generated by the war have naturally impressed all trading countries with the importance of stimulating their own respective industries and manufactures with all the natural resources at their disposal. This country in its turn, although fully alive to the possibilities of making itself independent of foreign supplies and although proud of its immense wealth of raw materials, is only too painfully conscious of its limitations. I frankly confess that I am not one of those that believe that the mere declaration by a stroke of the pen of a high protective tariff will, as if by magic, stop foreign imports and give an impetus to indigenous industries. There are many practical conditions of commerce and manufactures, which must be very carefully considered before a demand for protection is made. It is possible that by protection a few small industries which are yet in their infancy, might be assisted to an extent that would lead to their permanent establishment, but to say that by the introduction of protection foreign imports will disappear from India, is to pronounce an opinion which would not bear the test either of reason or facts. If England, in spite of her free-trade principles and with her markets open to the unrestricted imports of foreign goods, has succeeded in establishing and maintaining in the world of commerce even in these days of severe competition a supreme position in some of the most necessary requirements of life, I would hesitate before committing myself to a different policy for this country.

But for all that, we have to ask whether here in India, the Government is doing everything it might do to enable the country to profit by the extraordinary conditions produced by the war to develop the industrial position in order to enable India to become self-contained as far as possible in the fullness of time.

I at once admit that we have our failings, that capital is shy, that enterprise is wanting, or anything else you like, but I am sure no one will seriously dispute the proposition that without State assistance, no appreciable progress can be made in the directions I have ventured to indicate. India has undoubted possibilities of self-containment which can be easily attained by the people with that measure of Government support and assistance which the country ought to get if it were possible for the Government to be guided solely by the interests of India without being affected by more potential and powerful contradictory influences.

The imposition of the Excise Duty at the behests of Lancashire is an instance in view, and whatever the differences of opinion in this country may be as to its ultimate effect on the industry, there is undoubted unanimity as to the desirability and absolute necessity of its abolition at the earliest opportunity.

FISCAL AUTONOMY.

The only solution in my opinion of these and similar abuses, is the attainment by India of complete fiscal autonomy. It is by such autonomy that staple Indian industries, of which cotton is not the least, can have free and full play. It is an imperative need of the country. By "fiscal autonomy" I mean absolute freedom of action in all fiscal matters, even in relation to England. Fiscal policy in this country has unfortunately been too often shaped to suit the interests of the manufacturers of the United Kingdom, when their interests have clashed with those of India; and the time has now come when India should be enabled to work out her own salvation in the manner she thinks most advantageous for her future progress and development, irrespective of non-Indian interests. It must be remembered that unless India is given fiscal freedom and allowed free scope in the adjustment of her tariffs, it is impossible for her industries to make any progress.

When the war is over and when this country formulates and submits to the King-Emperor and the great English Democracy, its petition of rights and its list of grievances, long unredressed, to be favourably considered not as the reward of services rendered (because they were offered and accepted spontaneously) but because of the new angle of vision that has now been created as the result of this happy co-operation between the two countries, the mercantile community of the country should among other prayers, include to request for absolute fiscal autonomy and for the repeal of the Excise Duty to which I have already referred. This Association in particular should apply for direct and regular representation not only on the Port Trust and the Local Corporation, but also on the Legislative Councils, both Provincial and Imperial. When the psychological moment presents itself, I trust this Association will know how to act in matters of this importance and urgency.

The report was adopted.

Mr. N. B. Saktiwalla proposed, Mr. D. E. Wacha seconded and it was agreed:—

That the Association's Rules and Regulations be amended as under:—

- (a) At the beginning of the Rule 5 to insert the following words "Save as is hereinafter otherwise provided."
- (b) In the second and third lines of Rule 25 to delete the words "one of such voting papers" and after the word "Association" in the last line to add the words "one voting paper in respect of every vote to which he is entitled under Rule 5 hereof."
- (c) In Rule 26, second line, after the words "fill up" for the word "a" to substitute the word "each."
- (d) In Rule 4 of the rules for the election of the Association's representative on the Bombay Legislative Council to delete the last word "only" and substitute the words "for every complete sum of Rupees fifty paid by him as annual subscription to the Association."
- (e) In Rule 4 of the rules for the election of the Association's representative on the Bombay Improvement Trust Board to delete the last word "only" and substitute the words "for every complete sum of Rupees fifty paid by him as annual subscription to the Association."

- (7) In Rule 4 of the rules for the election of the Association's representative on the Port Trust Board to delete the last word "only" and substitute the words "for every complete sum of Rupees fifty paid by him as annual subscription to the Association."

Mr. C. N. Wadia proposed and **Mr. H. Powell** seconded that the present Rules 45 and 48 of the Rules and Regulations of the Association be amended by the Solicitors of the Association so as to establish the voting for the Chairman, Deputy Chairman and Committee on the same basis as prescribed in Rule 5.

Sir Sassoon David opposed the proposal on the ground that the matter had been discussed in Committee and rejected by a majority. He further did not see the necessity for the suggested amendment of the rules as the old rules had worked without a hitch for several years.

On being put to the vote however the proposition was carried.

It was proposed by **Sir Sassoon David, Bart.**, seconded by **Mr. Meyer Nissim** and agreed :—

That the following contributions be made out of the funds of the Association :—

Rs. 2,000 to the Funds of the Victoria Jubilee Technical Institute ;

Rs. 1,000 to the Government College of Commerce ;

Rs. 500 to the Sir Jamsetji Jeejeebhoy Hospital Nursing Fund ;

Rs. 250 to the Goculdas Tejpal Hospital Nursing Fund ;

Rs. 250 to the Funds of the Society for the Promotion of Education among the Masses.

Rs. 250 to the Funds of the Adams-Wylie Memorial Hospital.

It was proposed by **Mr. L. McIlwrick**, seconded by **Mr. Geddis** and resolved :—

That **Mr. Nesserwanjee Sorabjee Jamsetjee, F.C.B.A.** be re-elected Auditor of the Association's accounts for the year 1915 on the remuneration hitherto paid to him.

A vote of thanks to the Chairman terminated the proceedings.

REPORT
OF THE COMMITTEE OF THE
BOMBAY MILLOWNERS' ASSOCIATION.

For the period 1st January to 31st December 1914.

INTRODUCTION.

Though the depression which had begun to be felt before the close of 1913 was expected to give way to a fair prospect for both spinning and weaving with the busy season of 1914, the hope became fainter as the year advanced, so much so that by the end of June the full effects of the prolonged depression were to be discerned. Even then it was thought that a good monsoon would gradually induce a better market for the products of the mills, despite the fact that there was no little uneasiness caused by the larger accumulation of stocks. But unfortunately, in face of the assured harvest crops owing to an abundant rainfall, the outbreak of the war which is now recognised as the most unprecedented in the history of the world, swept away the feeling of optimism which was just beginning to grow. Stocks began to swell with absolutely no off-take, while the introduction of moratorium in the United Kingdom and elsewhere led to a cession almost of credit, with effect that by September, there was a prevailing want of confidence, if not distrust, among all branches of commerce and manufactures. An alarm subsequently was raised as to the effect on the local cotton market of a vast quantity of unsold cotton which may adversely affect the fortunes of the new crop and lead to a possible crisis in that trade. Happily the apprehension was proved by subsequent facts to be illfounded or based on an imperfect appreciation of the conditions then prevailing in the Cotton Districts. The Government meanwhile were appealed to and the Association was asked its opinion on the matter. The Committee responded to this invitation of the Government of India and observed that it would be inexpedient to protect a single trade interest, as all interests were equally hard hit, but the Committee had no objection to any measure which the Government might be pleased to take towards the protection and conservation of the interests of the cultivators. But soon after events showed that the interests of cotton traders were in no way prejudiced, while the course of the new cotton crop at the end of the year happily dispelled all previous fears, and premature foreboding. Meanwhile a dozen mills resolved to stop working for some time. But the majority of factories continued to work more or less having regard to the considerably cheaper cotton with which they were able to work. It is a source of gratification that all through the crisis the cotton industry was carried on with a calmness, courage and a spirit of hopefulness which have demonstrated its inherent soundness in spite of the unprecedented

depression and the many economic difficulties caused by the war in all parts of the world. The problem of the supply of chemicals and dyes which had been regularly imported from Germany, presented the greatest difficulty. But what prudence and business foresight could suggest was done, though it is a matter of regret that the many limitations and restrictions which the Home Government have by proclamation placed on the raw materials for use by cotton manufacturers in India have greatly hampered, and are still hampering, the industry. But at this juncture it was not the desire of the Committee to move in the matter, though when peace conditions happily prevail, and the sooner the better, it would be time to make a respectful representation to Government on the prejudicial effects of the embargo which though disguised is in reality a protective measure for the benefit of the cotton manufacturers of the United Kingdom. Fiscal autonomy for India has become inevitable. For it is only by such autonomy that staple Indian industries, of which cotton is not the least, can have free and full play. The Committee, however, cannot refrain from expressing its unqualified satisfaction at the statesmanlike manner in which the Imperial Government have endeavoured to help all trade interests in this country and the steps it took in January of the current year to restore credit by making available considerably larger cash balances than were ordinarily made available for purposes of commerce and manufactures.

Cotton prices at the beginning of the year stood at 7.5 which remained steady till April, when they rose higher. By July, however, with the first reports of a crop of 16 millions, they fell to 6.66. The outbreak of the war, however, altered matters, while the many artificial measures taken by Liverpool to prop up prices signally failed. Nevertheless by November prices fell to their natural level of 4.64. With returning confidence and a more accurate appreciation of the future of the industry prices rose a little in the middle of December. In Lancashire at the close of the year spindles were doing better than the looms. It is superfluous to state that cotton prices here generally ruled in sympathy with those which prevailed from time to time in New York. The general trend of prices of all descriptions was high at the commencement of the year, say Rs. 250 per candy, and continued to be so more or less with some fluctuations. At the end of July the average price was in the neighbourhood of Rs. 200. It dropped down soon after the outbreak of the war to Rs. 120, and remained so till the close of the year. At the beginning of the new year it rose to Rs. 150 which may be deemed to be the natural price.

Both spinning and weaving have suffered badly throughout the year and at the close there seemed to be no hopeful prospect of a large off-take of the accumulated stocks. And it was not expected that there would be any considerable diminution till the results of the coming monsoon are finally ascertained.

The production of yarn for the calendar year was 657,737,280 lbs. as against 680,221,711 lbs. in 1913. The exports of yarn to China have greatly diminished and it is to be feared that with the increased output of indigenous yarn in China, and the larger imports of Japanese, the diminution in Indian exports must be fully expected.

The production of cloth was 269,230,285 lbs. against 269,497,514 lbs. in 1913.

The problem of the scarcity of labour continues with the varying economic conditions of the general labourer.

The Government are keen on elementary education for the children of the mill operatives, but it is a subject full of complications and the Committee have recently pointed out what could be done short of compulsion. The only remedy is to adopt measures on the lines of least resistance.

It is satisfactory to state that in view of the prolonged depression of the cloth market the tariff values of cloth for purposes of excise have been brought as far as possible in close harmony with the average prices of various descriptions of cloth.

YARN EXPORTS.

Exports of Indian Yarn from India to Foreign Countries during the official year 1913-14 amounted to 197,978,265 lbs. as against 203,961,357 lbs. in 1912-13, showing a decrease of 5,983,092 lbs. or 2.93 per cent. The quantity exported during 10 months of official year 1914-15 amounted to 110,490,439 lbs. compared with 160,838,846 lbs. in 1913-14, showing a decrease of 50,348,407 lbs. or 31.30 per cent.

COTTON CROP, 1914-15.

The total area in all territories reported on is now computed at 24,632,000 acres, which marks a net decrease of 388,000 acres, or 1.55 per cent. on 25,020,000 acres (revised figures) at this time last year.

The total estimated outturn is 5,232,000 bales of 400 lbs. each as against 5,065,000 bales (revised figures) for last year, representing an increase of 167,000 bales or 3.29 per cent. To this figure might be added some 1,000 bales estimated as the production in Native States in Bihar and Orissa which make no returns.

The following statement (taken from the Indian Trade Journal) compares the figures for the last three years (the figures are in thousands):—

	YEAR ENDING 30TH SEPTEMBER.		
	1914.	1913.	1912.
	Bales.	Bales.	Bales.
Net Exports	8,647	2,228	1,761
Mill Consumption	1,816	1,805	1,774
Consumption outside Mills (conjectural) ...	450	450	450
Total	5,913	4,483	3,985
<i>Deduct—</i> Estimated yield ...	5,065	4,610	3,288
Excess (+) or Deficit (—) ...	—848	+ 127	—697

* Substituted (after further consultation with the Bombay Cotton Trade Association, Ltd.) for the figure of 740,000 formerly estimated.

YARN.

The quantity of yarn produced in India during the official year 1913-14, amounted to **682,703,031 lbs.** as against **688,472,902 lbs.** during the previous 12 months or a decrease of **5,769,871 lbs.** or **0·83 per cent.** Of this amount **244,989,776 lbs.** were consumed in the production of **274,388,550 lbs.** cloth and **197,978,265 lbs.** exported to Foreign Countries during the official year 1913-14, leaving a balance of **239,734,990 lbs.**

The total shipments of yarn from Bombay to China during the Calendar years 1913 and 1914 amounted to **405,359 bales** (of **400 lbs.** each) and **324,586 bales** (of **400 lbs.** each), respectively showing a decrease of **80,773 bales** or **19·92 per cent.**

The shipments from Bombay to United Kingdom and Continent during the Calendar year 1914, amounted to **2,036 bales** as against **583 bales** in 1913 and **2,508 bales** in 1912. The maximum quantity exported to the United Kingdom and Continent during the years 1907 and 1908 was **56,335** and **17,255 bales.**

CLOTH.

The production of cloth in India during the official years 1913-14 amounted to **1,164,291,588 yards,** as against **1,220,442,545 yards** showing a decrease of **56,150,957 yards,** or **4·6 per cent.** The Exports to Foreign Countries during the official year 1913-14, compared with 1912-13, show an increase of about **2½ million yards :—**

1908-09	...	...	...	...	77,988,964	yards.
1909-10	...	...	...	...	94,137,558	"
1910-11	...	...	...	...	99,788,815	"
1911-12	...	...	...	...	81,429,410	"
1912-13	...	...	...	...	86,512,812	"
1913-14	...	...	...	...	89,233,716	"

As regards Export to China from Bombay, it may be mentioned that there was during the Calendar year 1914 a decrease of **622,160 yards** or **81·60 per cent :—**

1913	...	...	...	762,280	yards.
1914	...	...	...	140,120	"

Production of Yarn and Cloth in India from 1st January to 31st December :—

Yarn.				Lbs.
1914	...	...	...	657,737,280
1913 (revised)	...	...	...	680,221,711
			Decrease	22,484,431 or 3·30%
Cloth.			Yards.	Lbs.
1914...	...	...	1,115,845,897	269,230,285
1913 (revised)	...	...	1,148,171,992	269,497,514
Decrease	...	...	32,326,095	267,229
			or 2·81%	or 0·09%

PROGRESS OF THE MILL INDUSTRY.

The following statement shows the progress of the Mill Industry in the Island of Bombay, as also in the whole of India :—

BOMBAY ISLAND.

Year ending 30th June.	Number of Mills.	Number of Spindles.	Number of Looms.	Average No. of Hands Employed Daily.	Approximate Quantity of Cotton Consumed.	
					Cwts.	Bales of 392 lbs.
1897	75	2,187,425	21,287	69,530	2,459,646	702,756
1898	82	2,226,982	21,379	70,728	2,860,648	817,328
1899	82	2,410,861	22,209	77,169	3,327,800	950,800
1900	82	2,536,891	22,215	72,914	2,600,900	744,800
1901	81	2,371,092	22,414	82,162	2,435,153	695,758
1902	80	2,523,769	22,845	86,122	3,455,823	987,378
1903	80	2,533,382	23,125	86,913	3,451,798	986,229
1904	79	2,534,230	24,136	89,915	3,404,569	972,734
1905	81	2,560,916	29,073	92,924	3,753,582	1,072,452
1906	84	2,614,323	28,778	100,798	3,994,424	1,141,264
1907	85	2,613,483	31,982	98,101	3,905,125	1,115,750
1908	86	2,734,683	35,967	101,536	3,777,179	1,079,194
1909	89	2,800,345	39,264	105,751	3,845,464	1,098,704
1910	89	2,824,046	41,491	104,550	3,444,203	984,058
1911	87	2,890,580	42,467	104,500	3,337,075	953,450
1912	86	2,865,452	43,388	109,091	3,771,656	1,077,616
1913	90	2,925,966	45,250	110,033	3,752,735	1,072,210
1914 (Year ending 31st August).	85	3,009,172	49,845	109,860	3,773,133	1,078,038

ALL-INDIA.

Year ending 30th June.	Number of Mills.	Number of Spindles.	Number of Looms.	Average No. of Hands employed daily.	Approximate Quantity of Cotton consumed.	
					Cwts.	Bales of 392 lbs.
1897	173	40,65,618	37,584	1,44,335	45,53,276	13,00,936
1898	185	42,59,720	38,013	1,48,964	51,84,648	14,81,328
1899	188	47,28,333	39,069	1,62,108	58,63,165	16,75,190
1900	153	49,45,783	40,124	1,61,189	50,86,732	14,53,352
1901	193	50,06,936	41,180	1,72,883	47,31,090	13,51,740
1902	192	50,06,965	42,584	1,81,031	61,77,633	17,65,038
1903	192	50,43,297	44,092	1,81,399	60,87,690	17,39,340
1904	191	51,18,121	45,337	1,84,779	61,06,681	17,44,766
1905	197	51,63,486	50,139	1,95,277	65,77,554	18,79,244
1906	217	52,79,595	52,668	2,08,616	70,82,306	20,23,516
1907	224	53,39,275	58,436	2,05,696	69,30,595	19,80,170
1908	241	57,56,020	67,920	2,21,195	69,70,250	19,91,500
1909	259	60,53,231	76,898	2,36,924	73,81,500	21,09,000
1910	283	61,95,671	82,725	2,33,624	67,72,535	19,35,010
1911	263	63,57,460	85,352	2,30,649	66,70,531	19,05,866
1912	268	64,63,929	88,951	2,43,637	71,75,357	20,50,102
1913	272	65,96,862	94,136	2,53,786	73,36,056	20,96,016
1914 (year ending 31st August).	271	67,78,895	1,04,179	2,60,276	75,00,961	21,43,126

The undernoted figures show an increase in the **Exports of Cotton from Bombay** in the year 1914 and a decrease in the quantity of yarn produced during the same period. The number of operatives actually at work shows a decrease of 173 :—

Year ending 30th June.	Hands Employed.	* Yarn Produced.	Cotton.		
			Mill Consumption.	Exports.	Arrivals.
			† Bales.	§ Bales.	§ Bales.
1905	92,924	8,33,858	10,72,452	10,47,721	26,03,012
1906	1,00,798	9,73,449	11,41,264	14,93,872	26,63,208
1907	98,101	9,26,649	11,15,750	19,15,702	29,48,993
1908	1,01,536	8,82,879	10,79,194	11,85,177	21,22,754
1909	1,05,751	8,94,115	10,98,704	18,66,570	21,66,281
1910	1,04,550	8,25,197	9,84,058	20,25,165	31,51,905
1911	1,04,500	8,01,068	9,53,450	16,82,430	24,67,176
1912	1,09,631	8,19,102	10,77,616	13,06,153	25,39,826
1913	1,10,033	9,09,202	10,72,210	14,73,876	27,74,311
1914 (year ending 31st August)	1,09,860	8,87,561	10,78,038	25,70,615	37,39,409

* Year ending 31st March.

† Bales of 400 lbs.

§ Bales of 84 cwts.

Below is a comparative Statement of **Cotton Consumption, Yarn and Cloth Production in India** for a series of years :—

12 months ending 31st March.	Cotton.		Yarn.		Cloth.	
	† Mill Consumption.	F.-P. Bales of 3½ cwts. each.	Production.	Bales of 400 lbs. each.	Production.	
	Cwts.	Cwts.	Cwts.	Yards.	Lbs.	
1899	58,83,165	16,75,190	45,74,867	12,80,962	35,57,09,050	10,16,89,943
1900	50,86,732	14,53,352	45,87,708	12,83,558	32,94,23,397	9,80,64,807
1901	47,31,090	13,51,740	31,51,563	8,82,437	24,11,76,942	9,87,47,566
1902	61,77,633	17,55,038	51,15,519	14,32,345	40,97,44,993	11,96,50,686
1903	60,87,690	17,39,340	51,44,951	14,40,586	40,63,16,717	12,27,74,014
1904	61,06,631	17,44,766	51,57,338	14,44,054	46,05,54,273	13,80,44,172
1905	65,77,354	18,79,244	51,64,118	14,45,953	54,95,29,065	15,87,46,555
1906	70,82,306	20,23,516	60,79,630	17,02,296	56,49,90,190	16,38,80,194
1907	69,30,595	19,80,170	58,36,611	16,34,251	70,81,39,874	16,57,67,858
1908	69,70,250	19,91,500	56,99,063	15,95,738	80,84,26,561	18,90,51,679
1909	73,81,500	21,09,000	58,64,556	16,42,075	82,44,89,164	19,23,64,697
1910	67,72,535	19,35,010	56,01,484	15,68,410	96,38,69,482	22,88,24,078
1911	66,70,531	19,05,866	54,45,778	15,24,318	1,04,27,41,653	24,58,14,873
1912	71,75,357	20,50,102	55,80,626	15,62,575	1,13,61,51,390	26,66,44,181
1913	73,36,056	20,96,016	61,47,079	17,21,182	1,22,04,42,545	28,54,71,002
1914	75,00,961	21,43,126	60,95,562	17,06,757	1,16,42,91,588	27,43,88,550

* Year ending 31st August.

† Year ending 30th June.

The Shipments of Country-made Piece-Goods from Bombay to China show a decrease on the previous twelve months of 1913, of 6,22,160 yards, or 81.61 per cent., as will be perceived from the following figures :—

Period.	CHINA.		JAPAN.		TOTAL.	
	Packages.	Yards.	Packages.	Yards.	Packages.	Yards.
From 1st Jan. to 31st Dec. 1877...	10	14,400	...	.....	10	14,400
Do. do. 1878...	1,206	14,99,334	58	1,13,528	1,264	16,12,862
Do. do. 1879...	296	8,65,640	5	8,400	301	8,74,040
Do. do. 1880...	1,553	18,90,685	110	1,32,000	1,663	20,22,685
Do. do. 1881...	144	1,68,139	2	5,250	146	1,73,389
Do. do. 1882...	573	7,13,237	20	36,714	593	7,49,951
Do. do. 1883...	1,375	21,88,770	462	5,65,953	2,237	27,54,723
Do. do. 1884...	1,395	17,70,662	16	25,187	1,611	17,95,849
Do. do. 1885...	2,308	37,12,373	6	5,376	2,309	37,17,649
Do. do. 1886...	2,303	29,88,890	...	.....	2,302	29,88,890
Do. do. 1887...	1,963	25,84,680	3	4,560	1,966	25,89,240
Do. do. 1888...	11,320	1,57,51,688	96	1,40,321	11,416	1,58,92,009
Do. do. 1889...	1,302	19,65,997	26	81,360	1,328	20,17,197
Do. do. 1890...	3,148	36,60,574	21	23,800	3,169	36,84,374
Do. do. 1891...	4,364	61,02,350	...	.....	4,364	61,02,350
Do. do. 1892...	7,416	99,84,385	...	.....	7,416	99,84,385
Do. do. 1893...	3,593	45,17,445	38	57,312	3,631	45,74,757
Do. do. 1894...	4,949	60,68,702	...	.....	4,949	60,68,702
Do. do. 1895...	7,744	1,00,64,441	7	7,200	7,751	1,00,71,641
Do. do. 1896...	7,024	86,38,535	26	30,430	7,050	86,68,965
Do. do. 1897...	2,368	50,36,875	15	21,988	2,383	50,58,863
Do. do. 1898...	947	13,13,473	...	.....	947	13,13,473
Do. do. 1899...	3,034	39,93,348	1	1,680	3,035	39,95,028
Do. do. 1900...	1,080	13,72,980	...	.....	1,080	13,72,980
Do. do. 1901...	418	5,59,100	...	.....	418	5,59,100
Do. do. 1902...	500	5,69,768	...	.....	500	5,69,768
Do. do. 1903...	138	1,68,081	...	.....	138	1,68,081
Do. do. 1904...	2,410	27,98,035	...	.....	2,410	27,98,035
Do. do. 1905...	10,085	1,16,72,521	...	.....	10,085	1,16,72,521
Do. do. 1906...	557	7,04,090	...	.....	557	7,04,090
Do. do. 1907...	262	3,53,032	...	.....	262	3,53,032
Do. do. 1908...	2,803	33,45,175	...	.....	2,803	33,45,175
Do. do. 1909...	2,484	31,37,627	...	.....	2,484	31,37,627
Do. do. 1910...	1,804	23,56,642	...	.....	1,804	23,56,642
Do. do. 1911...	279	3,05,684	...	.....	279	3,05,684
Do. do. 1912...	823	10,39,900	...	.....	823	10,39,900
Do. do. 1913...	638	7,62,230	...	.....	638	7,62,230
Do. do. 1914...	98	1,40,120	...	.....	98	1,40,120

In Country-made Yarn a decrease of **19.92 per cent.** occurs in Shipments to China during 1914. Japan, it will be noticed, has taken nothing during the same period from Bombay. The following statement shows in detail the **Shipments of Country-made Yarn from Bombay to China and Japan** for a series of years :—

Period.	To China (Bales, 400 lbs. each)	To Japan (Bales, 400 lbs. each).	Total Bales
From 1st January to 31st December 1877	28,516	142	28,658
Do. do. 1878	45,933	1,745	47,678
Do. do. 1879	45,530	4,842	50,372
Do. do. 1880	63,194	4,527	67,721
Do. do. 1881	61,783	7,378	69,161
Do. do. 1882	81,434	9,854	91,288
Do. do. 1883	94,982	17,421	1,12,403
Do. do. 1884	1,27,318	13,846	1,41,164
Do. do. 1885	1,54,517	19,020	1,73,537
Do. do. 1886	1,99,407	29,543	2,19,950
Do. do. 1887	2,05,158	39,730	2,44,888
Do. do. 1888	2,34,071	52,697	2,86,768
Do. do. 1889	2,54,697	62,220	3,16,917
Do. do. 1890	3,25,060	37,722	3,62,782
Do. do. 1891	3,65,038	10,939	3,75,977
Do. do. 1892	3,85,771	21,445	4,07,216
Do. do. 1893	2,97,572	14,198	3,11,770
Do. do. 1894	3,38,703	10,743	3,49,446
Do. do. 1895	3,74,119	2,515	3,76,634
Do. do. 1896	4,71,023	2,467	4,73,490
Do. do. 1897	3,61,221	645	3,61,866
Do. do. 1898	4,37,645	475	4,38,120
Do. do. 1899	5,79,619	250	5,79,869
Do. do. 1900	2,53,331	100	2,53,431
Do. do. 1901	5,36,195	.....	5,36,195
Do. do. 1902	5,55,487	.....	5,55,487
Do. do. 1903	6,04,044	.....	6,04,044
Do. do. 1904	4,60,316	3	4,60,319
Do. do. 1905	6,51,870	.....	6,51,870
Do. do. 1906	5,96,926	500	5,97,426
Do. do. 1907	4,12,127	200	4,12,327
Do. do. 1908	4,41,899	.....	4,41,899
Do. do. 1909	5,10,746	.....	5,10,746
Do. do. 1910	4,24,893	.....	4,24,893
Do. do. 1911	2,75,087	.....	2,75,087
Do. do. 1912	4,33,989	.....	4,33,989
Do. do. 1913	4,05,359	.....	4,05,359
Do. do. 1914	3,24,586	..	3,24,586

The following Statement shows the Shipment of Cotton Piece-goods and Yarns from the United Kingdom to British India, China and Japan in the years 1877 to 1914 :—

Years. (1st Jan. to 31st Dec.)	PIECE-GOODS OF ALL KINDS.			YARNS.		
	British India.	To China (including Hongkong).	To Japan.	British India.	To China (including Hongkong).	To Japan.
1877	Yards. *1,30,48,35,496	Yards. 36,73,29,900	Yards. 2,71,50,300	Lbs. *8,50,30,025	Lbs. 1,79,62,200	Lbs. 1,51,05,700
1878	*1,18,90,59,900	34,00,97,800	4,22,32,400	*8,53,92,000	1,10,56,200	2,54,09,600
1879	*1,20,57,46,400	46,28,08,800	6,16,17,500	*9,95,96,900	1,48,48,400	2,46,07,700
1880	*1,67,08,10,900	44,72,71,900	6,14,64,500	*4,40,97,750	1,95,14,200	2,69,11,600
1881	*1,68,97,48,500	52,38,52,300	6,88,25,100	*4,06,93,300	1,91,49,400	2,88,23,600
1882	*1,52,31,56,000	40,19,58,300	5,29,90,500	*4,22,08,800	1,52,26,700	1,91,44,200
1883	*1,65,30,73,000	37,06,59,800	4,50,06,000	*4,21,72,400	1,35,70,700	2,01,48,500
1884	*1,64,27,31,800	39,45,88,300	4,53,54,200	*4,55,85,100	1,57,24,800	2,31,34,800
1885	*1,66,46,81,000	52,39,27,000	4,54,12,400	*4,18,20,800	2,05,78,900	1,26,87,200
1886	2,11,88,88,400	45,58,28,000	8,46,38,500	4,66,05,800	1,05,98,200	1,63,82,200
1887	1,81,19,64,500	55,27,42,700	6,54,08,800	4,88,52,400	1,18,82,200	2,84,72,500
1888	2,05,52,40,300	57,45,47,500	7,78,56,400	5,40,62,000	1,74,74,000	2,71,68,600
1889	2,00,11,58,400	47,44,26,100	8,25,78,000	4,53,54,800	88,28,900	2,68,32,600
1890	2,02,10,13,500	57,03,97,800	6,88,09,400	4,97,34,000	1,49,56,900	2,81,00,500
1891	1,68,64,90,500	53,41,29,400	6,11,20,100	5,00,08,600	1,31,44,800	1,48,26,500
1892	1,86,08,72,200	49,74,85,200	7,51,80,500	3,95,05,200	85,01,300	2,38,84,900
1893	1,88,82,91,200	36,54,25,500	6,83,97,800	3,85,38,400	87,78,500	1,83,63,000
1894	2,27,68,45,800	42,53,40,200	7,16,03,900	4,00,36,000	97,69,500	1,46,38,800
1895	1,71,82,24,000	52,81,87,800	9,90,35,600	4,10,70,600	1,12,26,100	2,12,66,000
1896	2,05,80,24,500	54,29,98,400	10,55,07,100	4,91,68,800	90,76,400	2,27,87,400
1897	1,75,88,87,600	44,51,82,100	9,40,56,700	4,76,98,100	1,12,46,000	2,31,42,600
1898	2,08,38,69,400	48,64,96,200	10,49,66,000	4,26,82,900	1,31,09,700	1,71,91,600
1899	2,18,08,85,400	55,40,80,000	9,38,50,600	8,90,14,900	1,15,44,700	1,25,26,500
1900	1,87,78,08,200	45,61,95,300	11,94,70,200	3,21,54,600	22,69,700	1,12,78,800
1901	2,32,86,82,400	49,10,72,700	6,83,21,400	5,58,10,100	69,38,300	74,85,900
1902	1,99,62,07,800	57,47,75,000	10,91,16,400	5,02,08,100	68,97,800	28,56,900
1903	1,99,81,67,200	47,70,91,500	6,78,24,800	2,53,58,000	46,60,900	14,06,100
1904	2,25,59,15,900	54,90,78,900	4,23,74,000	2,64,18,000	24,57,200	6,80,700
1905	2,39,19,89,000	79,97,82,300	12,67,24,800	3,38,21,300	84,40,900	40,70,700
1906	2,35,16,94,500	64,74,25,400	11,03,86,400	2,77,52,400	55,50,600	68,15,900
1907	2,45,42,38,900	55,33,75,000	12,12,40,300	3,10,11,700	42,98,600	21,12,500
1908	2,15,09,30,800	49,82,92,600	11,88,94,300	2,84,24,400	55,38,300	16,37,300
1909	2,04,87,99,100	57,34,82,600	11,39,07,500	3,60,23,300	44,77,400	9,94,500
1910	2,21,58,31,700	47,13,62,200	10,05,88,200	2,64,82,300	7,52,200	8,40,800
1911	2,42,16,61,300	64,75,08,100	9,22,08,300	3,54,08,000	90,90,000	.....
1912	3,79,53,54,700	62,70,36,800	7,47,66,300	4,21,93,700	26,40,100	.....
1913	3,02,78,92,000	71,65,71,400	6,01,99,900	3,74,31,400	21,46,400	.....
1914	2,60,83,89,900	57,79,41,700	2,60,28,600	3,74,49,000	18,76,400	.....
Average for 10 years (1905 to 1914)	2,44,78,56,510	60,13,82,050	9,31,71,520	3,62,48,940	38,51,090	15,51,950

Increase or decrease on { figures for 1913 and 1914. } — 14·68% — 19·31% — 48·01% + ·07% — 26·53%

* Excluding Burma.

The Imports of Yarn and Cloth into China are summarised in the following statement:—

From	Yarn.		Cloth.	
	Average of 10 years (1905 to 1914).	1914.	Average of 10 years (1905 to 1914).	1914.
			Yards.	Yards.
Bombay, bales of 400 lbs. ...	4,47,748	3,24,586	.....	.....
" lbs. ...	17,90,99,200	12,98,94,400	23,71,713	1,40,120
United Kingdom, lbs. ...	88,51,090	15,76,400	60,12,82,060	57,79,41,700
Total lbs. ...	18,29,50,290	18,14,10,800	.....	.....
Total yards ...	.....	.....	60,36,03,768	57,80,81,820

Imports of Piece-Goods (Grey, White and Coloured) and Yarn into British India from Japan; Excise Duty realized from Goods woven in the Cotton Mills in India, and gross amount of Customs Duty collected on Piece-Goods (Grey, White and Coloured) imported from the United Kingdom into British India:—

YEARS.	Imports of Piece-Goods and Yarn from Japan.		Excise Duty realized from Goods woven in Cotton Mills in India.		Gross amount of Customs Duty collected on Piece-Goods imported from United Kingdom.
	Piece-Goods.	Yarn.	Gross.	Net.	
	Yards.	lbs.	Rs.	Rs.	Rs.
1896-1897 ...	26,888	10	11,45,200	11,13,454	88,72,221
1897-1898 ...	10,413	10	12,14,108	11,86,848	76,10,777
1898-1899 ...	9,394	150	14,27,246	14,05,216	81,75,168
1899-1900 ...	24,768	140	13,80,526	13,50,306	88,62,453
1900-1901 ...	22,076	128,140	12,64,787	12,11,431	89,05,782
1901-1902 ...	34,827	.....	18,31,079	17,77,965	99,00,280
1902-1903 ...	24,934	.....	19,31,754	18,91,010	92,11,090
1903-1904 ...	508,988	2,080	21,36,510	20,95,151	92,73,539
1904-1905 ...	344,897	.....	24,49,145	24,00,976	1,13,99,465
1905-1906 ...	260,097	33	27,90,239	27,54,516	1,24,47,029
1906-1907 ...	178,180	57	29,82,671	29,46,515	1,20,41,047
1907-1908 ...	99,806	110	34,97,216	34,53,443	1,42,09,100
1908-1909 ...	111,739	120	36,58,276	36,12,977	1,67,06,892
1909-1910 ...	76,808	40	41,43,892	40,98,719	1,12,97,951
1910-1911 ...	156,205	316,117	44,56,129	44,01,707	1,29,62,724
1911-1912 ...	622,861	586,677	50,61,974	49,86,971	1,42,85,489
1912-1913 ...	5,880,723	384,429	58,39,147	57,97,745	1,77,00,532
1913-1914 ...	8,900,578	1,000,260	*56,77,669	*56,33,585	1,91,85,776

* Provisional.

The following table shows for each of the last nineteen years the **number of pounds of yarn produced in India per spindle in position**, which is a fairly good index of the steadiness with which the spindles have been worked, and the prosperity or depression of the industry :—

Years.				Spindles in position.	Yarn produced.	Cwt. per spindle.
					Cwts.	
1896	...	..	...	39,32,946	36,60,287	0·981
1897	...	...	...	40,65,618	37,78,436	0·929
1898	...	...	...	42,59,720	41,30,320	0·969
1899	...	...	...	47,28,333	35,74,867	0·967
1900	...	...	...	49,45,783	45,87,708	0·928
1901	...	...	...	50,06,986	31,51,563	0·627
1902	...	...	...	50,06,965	51,15,519	1·021
1903	...	...	...	50,43,297	51,44,951	1·020
1904	...	...	...	51,18,121	51,57,333	1·008
1905	...	...	...	51,63,486	51,64,118	1·000
1906	...	...	...	52,79,595	60,79,630	1·151
1907	...	...	...	53,33,275	58,86,611	1·094
1908	...	...	...	57,56,020	56,99,063	0·990
1909	...	...	...	60,53,231	58,64,556	0·963
1910	...	...	...	61,95,671	56,01,484	0·901
1911	...	...	...	63,57,460	54,31,306	0·854
1912	...	...	...	64,63,929	55,80,626	0·863
1913	...	...	...	65,96,862	61,46,623	0·931
1914	...	...	...	67,78,295	60,95,563	0·899

The fluctuations in the **Spot Prices of Middling Upland Cotton in Liverpool** are shown below, as also the **Average Prices of Ginned Oomrawati and Ginned Bengal Cotton in Bombay** :—

	Average Price per lb. in Liverpool for Middling Upland.	Average Price per Candy of 754 lbs. in Bombay.			
		Oomrawati (Khamgaun Akola) Ginned "Fine."	Delivery.	Bengal Ginned "Fine."	Delivery.
1914.	₹.	Rs.		Rs.	
March	7·5	218	Ready	193½	Ready.
April	7·32	215½	Do.	199	Do.
May	7·46	213	Do.	199	Do.
June	7·7	237	Do.	215	Do.
July	7·33	224	Do.	204	Do.
August	6·33	188	January	167½	January.
September	6·05	173½	Do.	151	Do.
October	.....	164½	Do.	131	Do.
November	4·54	151	Do.	136½	Do.
December	4·40	148	Do.	124	Do.
1915.					
January	4·91	157	Ready	136	Ready.
February	5·01	161	Do.	145	Do.

As regards the **Prices of Silver in Bombay and the Rates of Exchange on Hongkong and Shanghai**, the following were the quotations on the last Mail day of each month :—

	Price of Bar Silver in Bombay. (Ex. Duty.)	China Exchange.	
		Hongkong per 100 Dollars.	Shanghai per 100 Taels.
1914.	Ra. s. p.	Ra. s. p.	Ra. s. p.
27th February	69 0 0	140 12 0	189 4 0
27th March	68 2 0	142 12 0	191 4 0
24th April	68 12 0	143 8 0	193 4 0
29th May	67 0 0	141 12 0	190 4 0
26th June	65 15 0	139 12 0	187 0 0
31st July	62 8 0	128 4 0	170 8 0
28th August	67 8 0	131 0 0	172 8 0
25th September	65 13 0	134 12 0	173 0 0
29th October	61 10 0	127 0 0	163 0 0
27th November	61 6 0	129 8 0	165 0 0
30th December	59 10 0	131 4 0	167 0 0
1915.			
28th January	58 14 0	131 12 0	167 8 0

For purposes of comparison, the following figures are appended showing the **Rates of Exchange on Hongkong and the Prices of Silver ruling at the end of March** in each of the following years :—

	Price of Silver, Per 100 Tolas.		Exchange on Hongkong.
	Ra.	s.	Rs.
1894	84	11 $\frac{1}{2}$	175 $\frac{1}{2}$
1895	91	12	188 $\frac{1}{2}$
1896	92	9 $\frac{1}{2}$	186 $\frac{1}{2}$
1897	88	9 $\frac{1}{2}$	169 $\frac{1}{2}$
1898	71	3	141 $\frac{1}{2}$
1899	73	15 $\frac{1}{2}$	149 $\frac{1}{2}$
1900	73	3 $\frac{1}{2}$	147
1901	75	4 $\frac{3}{4}$	151 $\frac{1}{2}$
1902	67	1 $\frac{1}{2}$	138 $\frac{1}{2}$
1903	60	4 $\frac{1}{2}$	119 $\frac{1}{2}$
1904	70	10 $\frac{1}{2}$	137 $\frac{1}{2}$
1905	72	1	139 $\frac{1}{2}$
1906	79	10 $\frac{1}{2}$	155 $\frac{1}{2}$
1907	83	14 $\frac{1}{2}$	162 $\frac{1}{2}$
1908	70	1 $\frac{1}{2}$	142 $\frac{1}{2}$
1909	62	8 $\frac{1}{2}$	131 $\frac{1}{2}$
1910	68	10 $\frac{1}{2}$	130 $\frac{1}{2}$
1911	70	13 $\frac{1}{2}$	134 $\frac{1}{2}$
1912	78	9 $\frac{1}{2}$	143 $\frac{1}{2}$
1913	† 77	1 $\frac{1}{2}$	† 142 $\frac{1}{2}$
1914	† 70	1 $\frac{1}{2}$	† 134

† Approximate.

SPINDLES AND LOOMS AT WORK IN INDIA, THE UNITED
STATES OF AMERICA, GREAT BRITAIN, GERMANY,
CHINA AND JAPAN.

The following figures have been obtained from various sources and may be taken as being approximately correct. In order, however, to make the record as complete as possible, the Committee will be obliged, if members and others who have any additional particulars available will kindly forward them to the Secretary for inclusion in any future statements that may be published :—

SPINDLES.

Year.	India.	United States of America.	Great Britain.	Germany.	Japan.	China.
1870	.....	7,182,415	33,995,000	.....	.....	.....
1871	.....	.....	.....	.....	.....	.....
1872	.....	.....	.....	.....	.....	.....
1873	.....	.....	.....	.....	.....	.....
1874	.....	.....	.....	.....	.....	.....
1875	.....	.....	.....	4,200,000	.....	.....
1876	1,100,112	.....	.....	.....	.....	.....
1877	1,244,206	.....	.....	.....	.....	.....
1878	1,289,706	.....	.....	.....	.....	.....
1879	1,452,794	.....	.....	.....	.....	.....
1880	1,461,690	10,653,435	.....	.....	.....	.....
1881	1,513,096	.....	.....	.....	.....	.....
1882	1,620,814	.....	.....	.....	30,000	.....
1883	1,790,388	.....	.....	.....	.....	.....
1884	2,001,667	.....	43,000,000	.....	.....	.....
1885	2,145,646	.....	43,000,000	.....	.....	.....
1886	2,261,561	.....	42,700,000	.....	.....	.....
1887	2,421,200	.....	42,740,000	.....	.....	.....
1888	2,488,851	.....	43,000,000	.....	.....	.....
1889	2,762,518	.....	43,600,000	.....	.....	.....
1890	3,274,196	14,384,190	43,750,000	.....	.....	.....
1891	3,351,694	14,640,000	44,750,000	.....	.....	.....
1892	3,402,232	15,200,000	45,270,000	.....	385,314	.....
1893	3,575,917	15,700,000	45,270,000	.....	381,781	.....
1894	3,649,736	16,100,000	45,190,000	.....	530,074	.....
1895	3,809,929	16,650,000	45,400,000	6,571,332	580,945	.....
1896	3,932,946	17,333,396	44,900,000	.....	692,394	.....
1897	4,065,618	18,228,991	44,500,000	.....	768,328	.....
1898	4,259,720	18,434,244	44,900,000	7,155,500	1,027,817	.....
1899	4,728,833	19,329,092	45,000,000	.....	1,170,337	.....
1900	4,945,783	19,472,232	45,600,000	8,031,400	1,274,000	560,000
1901	5,006,936	20,195,835	46,100,000	8,434,601	1,234,976	.....
1902	5,006,965	20,907,212	49,727,107	.....	1,230,697	.....
1903	5,043,997	21,212,827	49,700,000	.....	1,381,306	.....
1904	5,118,121	22,197,522	49,600,000	.....	1,345,585	.....
1905	5,163,486	22,861,049	50,964,874	8,832,016	1,226,594	.....
1906	5,279,595	24,628,379	52,796,930	9,121,259	1,472,253	.....
1907	5,333,275	25,681,509	52,585,362	9,730,209	1,540,452	750,000
1908	5,756,020	26,133,442	55,213,024	9,850,209	1,695,879	.....
1909	6,053,231	27,914,084	57,026,422	10,162,872	1,954,893	.....
1910	6,195,671	28,299,482	57,731,849	10,200,000	2,099,764	.....
1911	6,357,460	29,064,492	58,002,435	10,480,090	2,170,796	831,000
1912	6,463,922	29,962,713	58,140,220	10,725,732	2,158,629	833,112
1913	6,594,862	30,579,000	58,980,000	10,920,426	2,176,960	947,406
1914	6,778,895	32,227,840	59,317,197	.....	2,203,978	1,000,000

LOOMS.

Year.	India.	United States of America.	Great Britain.	Germany.	Japan.	China.
1870			441,000			
1871						
1872						
1873						
1874						
1875						
1876	9,139					
1877	10,385					
1878	10,533					
1879	13,018					
1880	13,502					
1881	13,707					
1882	14,172					
1883	15,373					
1884	16,262					
1885	16,537		561,000			
1886	17,455					
1887	18,536					
1888	19,496					
1889	21,561					
1890	23,412					
1891	24,531					
1892	25,444		660,000			
1893	28,164					
1894	31,154					
1895	35,338			245,000		
1896	37,270	354,358				
1897	37,584	379,341			2,852	
1898	38,013	384,745		240,000	2,798	
1899	39,069	392,690			2,757	
1900	40,124				5,045	
1901	41,180	411,106		211,818		
1902	42,584	477,072				
1903	44,092	488,760	684,000		5,043	
1904	45,337	503,027			5,085	
1905	50,139	515,006	704,357		8,140	
1906	52,668	525,630	704,357	230,200	9,601	
1907	58,436	536,815	725,221		9,462	
1908	67,920	546,160	736,325		11,146	
1909	76,898	555,398	739,382		13,813	
1910	82,725	625,719	741,197		17,702	
1911	85,352	633,909	741,260		20,431	
1912	88,951	671,873	758,712		20,902	3,738
1913	94,136	696,387	805,452	230,200	20,634	4,755
1914	104,170				24,233	

ESTIMATE OF COTTON CROP.

Season.	United States of America.	India.	Season.	United States of America.	India.
	Bales of 500 lbs. net.	Bales of 400 lbs. net.		Bales of 500 lbs. net.	Bales of 400 lbs. net.
1874-75	3,393,000	.....	1894-95	9,480,000	2,223,029
1875-76	4,122,000	.....	1895-96	6,798,000	2,670,388
1876-77	3,971,006	.....	1896-97	8,281,000	2,264,890
1877-78	4,282,000	.....	1897-98	10,775,000	2,473,033
1878-79	4,556,000	.....	1898-99	10,940,000	3,015,269
1879-80	5,251,000	.....	1899-00	8,997,000	1,090,168
1880-81	6,062,000	.....	1900-01	9,991,000	2,953,381
1881-82	4,904,000	.....	1901-02	10,344,000	2,744,591
1882-83	6,452,000	.....	1902-03	10,274,000	3,367,030
1883-84	5,225,000	.....	1903-04	9,682,000	3,160,565
1884-85	5,198,000	.....	1904-05	13,436,000	3,791,000
1885-86	6,030,000	.....	1905-06	10,919,000	3,416,000
1886-87	5,977,000	.....	1906-07	13,267,000	4,934,000
1887-88	6,516,000	.....	1907-08	11,089,000	3,122,000
1888-89	6,736,000	.....	1908-09	13,458,000	3,692,000
1889-90	6,898,000	.....	1909-10	10,155,000	4,718,000
1890-91	8,242,000	.....	1910-11	11,834,000	3,853,000
1891-92	8,526,000	1,697,615	1911-12	15,876,000	3,288,000
1892-93	6,318,000	2,272,716	1912-13	13,820,000	4,610,000
1893-94	7,115,000	2,529,325	1913-14 ... ..	.....	5,201,000

ELECTION OF CHAIRMAN OF THE ASSOCIATION FOR 1915.

The annual ballot for the office of Chairman of the Association took place on 11th January 1915, and resulted in the election of **Mr. Jehangir B. Petit.**

DEPUTY CHAIRMAN OF THE ASSOCIATION.

The annual ballot for the above office took place on 18th January 1915, and resulted in the election of **Mr. N. B. Saklatwalla.**

ELECTION OF COMMITTEE FOR 1915.

The ballot for the remaining 18 members of the Committee of the Association for the year 1915 was held on the 25th January 1915, and resulted in the election of—

The Hon'ble Sir Sassoon David, Bart., Sir Dinshaw M. Petit, Bart., Sir Vithaldas D. Thackersey, Kt., The Hon'ble Mr. T. W. Birkett, The Hon'ble Mr. Manmohandas Ramji, and Messrs. J. F. Bradbury, B. Brown, Rahimtoola Currimbhoy Ebrahim, Narottam Morarji Goculdas, N. G. Hunt, Cowasji Jehangir, (Jun.), L. McIlwrick, C. V. Mehta, S. A. Nathan, Meyer Nissim, D. E. Wacha, C. N. Wadia and N. N. Wadia.

Mr. Nathan, however, resigned his seat and a fresh ballot was held on the 15th February 1915, when Mr. J. H. Latimer was elected to fill the vacancy.

MEMBERSHIP.

The total membership of the Association on the 31st December 1914 was 79 compared with 78 at the end of 1913.

The following mills were elected during the year under report :—

The Pearl Mills Limited,

Proposed by the David Mills Co., Ltd.

Seconded by the Textile Manufacturing Co., Ltd.

The Kastoorchand Mills Co., Ltd.

Proposed by the Madhowji Dharamsi Manufacturing Co., Ltd.

Seconded by the Sholapoor Spinning and Weaving Co., Ltd.

The following member resigned :—

The Amritsar Cotton Mills Co., Ltd.

 AMENDMENT OF RULES 5 AND 6.

At the Annual General Meeting of the members of the Association held on the 14th April 1914, it was resolved that Rules 5 and 6 of the Rules and Regulations of the Association be rescinded and that the following be substituted therefor, the numbers of the succeeding rules to be altered accordingly:—

“5. Every member shall be entitled to one vote for every complete sum of Rs. 50 paid by him as annual subscription under Rule 35 (a) and (b) of the Rules and Regulations of the Association.”

 REPRESENTATION OF INDIAN COMMERCIAL COMMUNITY
 IN BOMBAY LEGISLATIVE COUNCIL.

The Government of Bombay in July 1914 forwarded to the Association, for an expression of opinion, an extract from a letter from the Hon'ble Sir Ibrahim Rahimtoola in which he advocated that the seat in the Bombay Legislative Council, reserved for the Indian Commercial Community and at present occupied by a representative appointed by an electorate consisting of 10 delegates from the Piece-Goods Merchants' Association and 10 from the Indian Merchants' Chamber and Bureau, should be filled by an electorate which should have for its basis the payment of income-tax, or failing that the payment of fees to the Port Trust.

The matter was very carefully considered by the Committee but they could not support the arguments put forward by the Hon'ble Sir Ibrahim Rahimtoola, nor could they admit that one interest monopolised the whole representation.

The submission to the effect that the best electorate would be one which had for its basis the payment of income-tax, did not commend itself to the Committee inasmuch as they had always understood that income-tax returns were confidential as between the State and individuals. The alternative

suggestion that votes should be allotted in accordance with the volume of payment to the Port Trust, was also open to many objections which the Committee felt did not need enumeration.

In replying to Government to the above effect the Committee stated that from information placed at their disposal they understood that the seat on the Local Legislative Council allotted to the Indian Merchants Chamber was not filled by a representative of the Indian Piece-Goods Merchants' Association as such but that Indian trade interests generally were fully protected by the regulations at present in force governing this election. They were therefore not in favour of any alteration of the system now followed with regard to the election of a representative of the Indian Commercial Community to the Bombay Legislative Council. (*Appendix A.*)

ADMINISTRATION IN BOMBAY OF THE INDIAN FACTORIES ACT.

(See Report 1913, pp. 20, 68.)

It will be remembered that a deal of correspondence passed between the Association and the Government of Bombay in 1913 on the question of the administration in Bombay of the Indian Factories Act, and more especially in connection with the appointment of the Chief Inspector of Factories, which the Committee considered should be filled by a technical expert possessing a working knowledge of mill machinery from practical experience.

The Committee also drew the attention of Government to the interpretation and use made by the Inspectors of section 18 (2) of the Factories Act in passing a number of general orders in regard to the fencing of machinery. The Committee contended this was not in accordance with the intention of the Act, and was in fact a violation of section 18 (1) (c); and they requested that Government would see their way to pass the necessary orders for restricting the actions of the Inspectors.

The Committee further addressed Government in regard to Rule 20 for fencing of Ring and Throstle frames and pointed out that the new rule required the guards to be made of flat iron bars, instead of the existing round iron guards, which entailed on the industry great expense and no compensating benefit.

A reply was received from the Bombay Government in June 1914, in which it was intimated that with reference to the request that the Association might be given an assurance that in future the appointment of Chief Inspector of factories would never be filled except by a technical expert possessing a practical working knowledge and experience of mill machinery, there were comparatively few factory inspectors either in India or in England who possessed this qualification, and that its possession was far from connoting or being necessarily concomitant with, the presence of the particular kind of capacity, experience and knowledge which was essential for efficient factory inspection. To make appointment to the Chief Inspectorship strictly conditional on the possession of a practical working experience of mill machinery would involve

Government contended, the passing over of a number of the most efficient inspectors on the staff of the department, and might necessitate the selection of a man who, though possessing the particular kind of experience referred to, was from the point of view of inspection and the control of inspecting staff, appreciably less efficient. In the circumstances Government were unable to give the assurance desired, but reserved to themselves complete and unfettered discretion in the choice of the incumbent of the Chief Inspectorship.

In regard to the next point raised by the Association, while Government concurred in the interpretation of section 18 (1) (c) and (2) of the Act as restricting to a particular part of the machinery of a particular mill the power of an inspector to pass an order for fencing not required by any substantive provision of the Act or by any rule passed under section 1S (1) (c) thereof, they were unable to admit the accuracy of the statement that the inspectors frequently passed orders in contravention of this interpretation. Enquiries showed, they stated, that there had, as a matter of fact, been only two instances which could in any way be regarded as being of the nature referred to. In the first instance the Chief Inspector issued a circular to Millowners drawing attention to the necessity of fitting the dust-chamber doors of scutchers with automatic locking apparatus, and, in accordance with this circular, passed specific orders under section 18 (2) in the inspection books of a number of mills. In the other case the Chief Inspector directed the issue of individual orders under section 18 (2) to all mills in which nip-guards had not been provided for calendering machines. If, as appeared to have been the case, it was the intention in both these instances that a certain part of the machinery should, in every mill in which such part exists, be fenced in one and the same way, irrespective of the individual circumstances of each case, then Government were of opinion that the proper way of giving effect to that intention was to pass a general rule under section 18 (1) (c) and not to proceed by a series of individual orders under Section 18 (2) all directed to the same object and having the same effect. Government promised to make further enquiries into these two cases and to take such action in regard to them as might appear desirable.

In connection with the Association's representation regarding the provision of flat iron bars for the guarding of ring and throstle frames, Government stated that although no legal ground existed for such a concession, the rule had in actual practice been enforced only in respect of ring frames erected or re-erected after the rules under the present Act came into force. In the circumstances the Governor in Council was not prepared to re-open the question of the propriety of this rule, the objection to which, as represented by the Association, had already been fully considered, nor could he give any undertaking that, in every case of the existence of a strong difference of opinion between the Department and the Association, independent expert opinion should necessarily be consulted. But at the same time Government assured the Association that no new rule affecting the interests of Millowners would be passed without that body being afforded every reasonable opportunity of submitting their representations to Government and without such representations receiving the most careful consideration at the hands of the latter.

In conveying to Government their thanks for the assurance given in the final paragraph of their letter, the Committee referred them to paragraph III of the Report of the Indian Factory Labour Commission, 1908, Volume I. Therein the Commission recommended that full-time inspectors should have Indian experience of the main industry of the Province and be allowed to pass 3 months with a Factory Inspector in England as soon after their appointment as possible. The Committee ventured to submit that if these recommendations were given effect to, a class of inspector would be created from which it would be possible to select when occasion arose a Chief Inspector possessing the expert technical knowledge which the Committee considered absolutely necessary to secure efficient Factory inspection.

The Committee also stated that they viewed with alarm the principle which appeared to govern the selection of Inspectors for the post of Chief Inspector. Mere seniority as an Inspector should not, the Committee submitted, be the sole qualification for such an important post as Chief Inspector, and a hope was expressed that Government would again consider the advisability of demanding from Inspectors a thorough practical knowledge of, and working experience in, mill machinery before confirming these officials in the senior post.

In reply to the above Government stated that if, as was understood to be the case, the assurance which the Association desired to receive from Government was to the effect that no Inspector would be appointed to the post of Chief Inspector who had not, before being appointed as Inspector, acquired a technical knowledge of mill machinery by actual employment in a mill, then Government were not prepared, for the reason stated in their previous letter, to bind themselves to any such undertaking. They believed that the degree of knowledge of mill machinery and of the actual conditions of work in a mill requisite to enable a Chief Inspector to form correct conclusions as to what was dangerous and what was not dangerous and as to what could reasonably be demanded in the way of precautions against danger could, given the necessary qualifications in other respects, be acquired by experience as an Inspector, and that the particular form of training desired by the Association was not an essential.

Government further stated that there was no foundation for the assumption that mere seniority as Inspector would be the sole determining, or even a preponderant, consideration with Government in their selection of an incumbent of the post of Chief Inspector when such selection was made from the ranks of the Inspectors. (*Appendix B.*)

RULES UNDER THE FACTORIES ACT.

ASSESSORS' FEES.

The Government of Bombay forwarded to the Association, for information and for any remarks the Committee might wish to offer, a copy of a Government notification containing a draft amended sub-rule (3) of Rule 30 of the Rules published by Government under the Indian Factories Act. The draft rule read as follows :—

“ An assessor appointed in accordance with the provisions of clause (2) shall receive a fee of Rs. 25 for each day or each part of a day during which the

appeal may be heard. He shall also receive a reasonable sum to cover the cost of attending at any place with the appellate authority in connection with the appeal. The fee and the allowance shall be paid by Government. The appellate authority shall decide what is a reasonable sum for the purpose of allowance. But, where assessors have been appointed at the request of the appellant and the appeal has been decided wholly or partly against him, the appellate authority may direct that the fee and the allowance of the assessors shall be paid in whole or in part by the appellant."

The Committee approved the proposed alteration but in informing Government to this effect they suggested that Government might consider the desirability of relieving an appellant who won his case outright of all responsibility of costs in the appeal. (*Appendix C.*)

CERTIFICATION OF CHILDREN UNDER THE INDIAN FACTORIES ACT.

It was brought to the notice of the Committee that the Mills in Bombay were experiencing a deal of trouble in having children certified for employment as half and full-timers. A Conference was consequently arranged between a Sub-Committee of the Association and the Collector of Bombay when the whole matter was thoroughly discussed, and as a result, the following instructions regarding the certification of children were approved and issued to all Textile Factories in Bombay.

Children sent to the Certifying Surgeon for certification of age and physical fitness should be accompanied by a Clerk or Time-keeper from the Mill, who must produce the Children's Register prescribed by Section 35 (Rule 26) and enter the names and other particulars pertaining to the children who have been granted certificates, and obtain the signature of the Certifying Surgeon against the names so entered.

The certificates granted shall be taken by the Clerk or Time-keeper and handed over to the Manager of the Mill, who will, on demand by any Inspector of Factories, be responsible for the production of a certificate for each child employed in the Mill.

Certificates corresponding to the names in the Register and relating to children who have severed their connection with the Mill, or who have been absent from work without leave for an uninterrupted period of three months, or who are known to be employed in some other Mill, shall also be produced on demand, and shall forthwith be taken charge of by the Inspector and returned to the Certifying Surgeon through the Inspector appointed under Government Resolution No. 7296-A, dated the 30th October 1912. as the Inspector to whom all notices must be sent.

A column should be provided in the Register for the entry of the approximate age of the child as stated in the certificate.

Certificates will be granted to children (if qualified), whether they have been previously certified or not ; and the name of the Mill presenting the children for examination shall be endorsed on the certificate, without which no certificate will be accepted.

Certificates will only be of value to the Mill in whose favour they are granted (they should therefore not be transferred from one Mill to another).

Any child who desires to leave the Mill in which he is employed may, in the presence of the Inspector of Factories, obtain his certificate from the Manager. The Inspector shall endorse the certificate in favour of the other Mill, and send it to the Manager of the Mill. He shall also make an endorsement to that effect against the name of the child in the Register.

Any certificates, for purposes of the Indian Factories Act, shall on demand be handed over to an Inspector of Factories, who shall grant a receipt for them, and return them to the Manager, when done with, at the earliest possible date. (*Appendix D*.)

HOURS OF EMPLOYMENT OF CHILDREN.

In June 1914 the following draft notification was issued by the Government of Bombay :—

No. 4591.—The following draft of a notification which it is proposed to issue in exercise of the powers conferred by section 37 of the Indian Factories Act, 1911 (XII of 1911), is published as required by section 39, sub-section (1) of the said Act for the information of all persons likely to be affected thereby ; and notice is hereby given that the draft will be taken into consideration by the Governor in Council on or after the 15th day of September 1914.

2. Any objections or suggestions which may be sent to the Secretary to Government in the General Department before the date aforesaid will be considered by the Governor in Council.

DRAFT NOTIFICATION.

In exercise of the powers conferred by section 37 of the Indian Factories Act, 1911 (XII of 1911), the Governor in Council is pleased to amend the Bombay Factory Rules, 1912, published in Government Notification No. 3099A, dated 15th May 1912, as follows, namely :—

Below Rule 28 of the said rules the following rule shall be added, namely :—

- “ 28A. (1) No child shall be employed in a textile factory except on a system of shifts to be approved by the Inspector.
- (2) No child shall be employed in a textile factory continuously for any period exceeding three hours.

- (3) Every child employed in a textile factory shall be relieved of all work for a period of not less than three hours after each period of employment."

A copy of the above draft notification was forwarded to the Association by the Bombay Government for an expression of opinion.

The Committee were not in favour of the suggested Rule 28A, and in informing Government to this effect, they submitted that a system of three-hour shifts, if rendered compulsory, would result in considerable inconvenience to Millowners. The Committee further pointed out that, after consultation with the Association's Solicitors, they were of opinion that the proposed amendment of the Bombay Factory Rules, 1912, by a notification of the nature of the draft submitted would be *ultra vires* of the Governor in Council, as it appeared to the Committee that section (1) of the proposed Rule 28A overrid the provisions of section 26 of the Act, while sections (2) and (3) of the proposed Rule 28A overrid those of section 21 (1) of the Act. The Committee were consequently of opinion that the proposed amendments could only be made by amending the Act. (*Appendix E.*)

WORKING HOURS OF MILLS.

(See Report 1912, pp. 27, 50.)

The Collector of Bombay enquired whether the Committee wished to suggest any change in the sets of morning and evening hours observed in Mills in the Presidency proper, in accordance with Government Resolution No. 8706 of the 17th December 1912.

The Committee replied that they had no suggestions to put forward in this connection. (*Appendix F.*)

SUB-DIVISIONAL MAGISTRATES AS EX-OFFICIO ADDITIONAL INSPECTORS OF FACTORIES.

The Government of Bombay in August 1914 issued a notification to the effect that in exercise of the powers conferred by sub-sections (4) and (5) of section 4 of the Indian Factories Act, 1911 (XII of 1911), the Governor in Council was pleased to appoint every Sub-Divisional Magistrate in the Presidency including the Province of Sind to be an ex-officio additional Inspector of Factories within the local limits of his jurisdiction and to declare that the powers of such additional inspectors should be limited to the authority to enter any factory within the limits aforesaid and to make such examinations of the premises and registers as might be necessary to enable him to satisfy himself that the requirements of sections 21, 22, 23 and 24 of the said Act were being properly observed.

CLEANING OF ROOFS AND CEILINGS OF SEASONAL FACTORIES.

The Government of Bombay forwarded to the Association for any remarks the Committee might wish to offer a copy of the following draft notification :—

"In exercise of the powers conferred by clause (e) of sub-section (2) of section 37 of the Indian Factories Act, 1911 (XII of 1911), the Governor in

Council is pleased to amend the Bombay Factory Rules, 1912, published in Government Notification in the General Department, No. 3099A, dated the 15th May 1912, as follows, namely :—

To Rule 14 (1) of the said Rules the following proviso shall be added, namely :—

Provided that in the case of a seasonal factory which has the ceiling or roof constructed of corrugated or plain iron sheets the occupier shall be exempt from the necessity of lime-washing such ceiling or roof, but he shall have the interior of such ceiling or roof kept clean and thoroughly swept down at least once in every working season, and, if the Inspector so directs, more often than once in such season."

The Committee had no remarks to offer in connection with the above.

RULES UNDER THE BOMBAY BOILER INSPECTION ACT.

(See Reports 1911, pp. 14, 44 ; 1912, pp. 30, 117.)

It will be remembered that when in 1912 the Government of Bombay submitted to the Association for an expression of opinion thereon a draft Bombay Boiler Inspection Act and Part II of the Rules thereunder entitled "The Bombay Engineers Examination Rules," the Committee requested that Parts I and III of the Rules respectively entitled "The Bombay Boiler Act Administration Rules" and "The Bombay Boiler Inspection Rules," should also be submitted to the Association for opinion. This was done by Government in January 1914. The full text of the Committee's letter conveying their views on the draft Rules will be found in *Appendix G*.

BOILER INSPECTION FEES.

In the year 1901 in consequence of the large surplus balance which had accumulated to the credit of the Bombay Boiler Inspection Fund, the scale of Boiler Inspection fees was reduced as shown below :—

Class of Boiler.	Fees reduced.	
	From	To
	Rs.	Rs.
I. Up to 10 Horse-Power...	15	10
II. 11 to 20 ,, ...	20	15
III. 21 to 30 ,, ...	30	20
IV. 31 to 50 ,, ...	40	35
V. Over 50 ,, ...	50	40

The Government of Bombay in July 1914 informed the Association that a large portion of the surplus had, since 1901, been absorbed in meeting the annual excess expenditure over receipts. As the balance available was not

sufficient to meet future demands it was proposed, pending the amendment of the Act, that the fees for the inspection of Boilers of 1 to 30 horse power should be raised as shown below :—

Horse-power.	Fees to be increased.	
	From	To
	Rs.	Rs.
1 to 10 Horse-Power	10	15
11 to 20 " 	15	20
21 to 30 " 	20	25

In support of the proposal it was contended that the inspection of smaller boilers involved as much travelling and almost as much of the Inspector's time as the inspection of the larger ones.

The views of the Association on the proposal were desired by Government.

The Committee had no objection to the fees being raised for the inspection of small boilers, because they quite agreed that the services rendered in these cases involved as much travelling and took almost as much of the Inspector's time as was the case when large boilers were inspected.

In replying to the Bombay Government in the above terms the Committee however stated that they trusted inspection fees for large boilers would not be raised merely because of an increase in the establishment of the Boiler Inspection Department. (*Appendix H.*)

BOMBAY SMOKE NUISANCES COMMISSION.

EXAMINATION OF STOKERS.

(See Report 1913, pp. 17, 61.)

The Bombay Government forwarded to the Association for information a copy of the regulations, relating to the Examination of Stokers for certificates of competency, framed by the Bombay Nuisances Commission.

For purposes of record the regulations are reprinted in *Appendix I.*

ASSOCIATION'S REPRESENTATIVE.

(See Report 1913, page 17.)

Mr. N. N. Wadia, who was appointed as the Association's representative on the Smoke Nuisances Commission, resigned his seat on proceeding to Europe and Mr. W. A. Sutherland was elected to fill the vacancy.

BOMBAY SMOKE NUISANCES ACT.

EXTENSION TO KURLA.

The Government of Bombay submitted to the Committee for any suggestions they might wish to make a copy of a notification declaring the intentions of Government to extend the Bombay Smoke Nuisances Act to the Municipal area of Kurla in the Thana District.

The Committee stated that they had no suggestions to offer in regard to the proposal. (*Appendix J.*)

TARIFF VALUES UNDER THE COTTON DUTIES ACT.

A Special Sub-Committee of the Association was appointed in the early part of the year under review for the purpose of considering the system which is followed by the Excise Authorities in Bombay and the Director General of Commercial Intelligence in regard to the fixing of Tariff Valuations under the Cotton Duties Act. As a result of the deliberations of this Sub-Committee the Committee of the Association addressed the Government of Bombay in the matter and contended that the existing method of fixing the valuations was open to objection as not being quite fair, and that it was wrong in principle. It would seem that the top prices secured by the few favoured concerns were taken as a standard for the determination of the new tariff, and this, it was submitted, was unreasonable and distinctly unfair to the majority of Millowners who could only realize moderate prices. The only equitable arrangement it appeared to the Committee would be to strike an average of the highest and lowest.

The Committee further submitted that to fix the tariff values for the coming year on the basis of the average prices realized during the preceding year was wrong in principle and prejudicial to the interests of the Mill Industry. A coming year may fairly forecast to be in no way prosperous to the cloth trade by reason of scarcity or famine or other economic or political factors. Under such conditions, to apply the average rate obtained for the previous year, would be wholly indefensible. In the opinion of the Committee the correct procedure would be to take first a fairly reasonable forecast of what the coming year was likely to be and then to determine, in the light of such forecast, what valuations might be recommended as being fair to Government and unoppressive to Millowners. The average price suggested in the previous paragraph, to be taken as a guide only.

The Committee were also of opinion that November was not perhaps the best month in which to fix these rates, and they suggested February as an alternative. During this latter month the Indian market was from all points of view in a better position to test prices, as the value of cloth was governed by the rates ruling for American Cotton, and these were not ascertainable with any accuracy until February, the commencement of the busy season.

It was further added that since the existing tariff was fixed prices had gone down considerably and there was every indication of a further fall. The Committee therefore recommended that when violent fluctuations took place, tariffs should be revised during the year.

In reply to the above, the Government of Bombay stated that the first contention of the Committee was not based on a correct presumption; for, when the revision of the Tariff Schedule was under consideration, the prevailing prices were collected from Mills of all kinds, but the tariff value adopted was usually rather above than below the average prices prevailing in each of these Mills. Many of the smaller Mills, especially up-country Mills, turned out at a lower price small quantities of inferior grades of certain descriptions of cloth which were turned out by some of the better Mills in Bombay in considerable quantities of a better grade at a higher price. In such instances it was obvious that

if the average to be struck for the purposes of tariff valuations was based on the average prices obtained for each item in Mills of all classes, irrespective of the quantities produced in each Mill, the result would not be a correct representation of the average market value. It was further stated that in practice the market value adopted for the Tariff Schedule was usually below the value obtained by the best Mills but above that obtained by the lower grade Mills. Government contended that if the Tariff schedule was lowered to correspond with the prices realized for the lowest grades of each cloth, not only would the revenue suffer largely, but a decided stimulus would be given to the production of inferior kinds of cloth, a result which was not desirable.

As regards the second contention, Government stated that the system followed was to consider the prices realized on the Divali sales, when much forward-selling was done, in conjunction with the prices prevailing in the past year. If any circumstances existed which rendered likely a drop in prices in the next year, due consideration was paid to this fact.

As regards the Association's contention that the tariff might be revised during the year, it was observed that it was always open to the Government of India to revise the Schedule of Tariff duties under the Cotton Duties Act. If the Association could establish to the satisfaction of Government that the market values prevailing for certain items in the schedule were below those fixed in it, it might be possible to effect some alteration in the schedule for the rest of the year; but the Association must also be ready to agree to the enhancement of the tariff value, when it should fall below the average market value in the case of any item. Government further observed that fluctuations of prices did not injure the producer, when the tariff duty was fixed for one year; on the other hand amendment of the schedule to meet fluctuations during the year would, they considered, entail a good deal of extra trouble.

At a later date the Association were addressed by the Collector of Bombay in regard to the Committee's suggestion that the tariff valuations should be fixed in the month of February instead of November. The Collector stated that the existing arrangement was sanctioned at the instance of this Association after consultation with the Chamber of Commerce and the Local Governments concerned. The Government of India observed that under the orders of 1906 the Tariff Valuations of cotton goods could be revised at any period in the event of a material fluctuation occurring in their prices; but there had been no demand on the part of the trade for intermediate revision since the existing arrangement was sanctioned. In these circumstances the Government of India were not inclined to disturb the existing arrangement until it was more clearly shown that the proposed change was desirable in the interest of the trade. The Collector therefore enquired whether this Association had any further reasons to adduce in support of the proposal.

The Committee however replied that they had no further reasons to adduce in support of their proposal than those contained in their letter to the Bombay Government.

The Collector of Bombay met the Committee on the 29th October 1914 and a proposal was considered to the effect that there should be a temporary revision of the valuations for Cotton Piece Goods in the shape of an all-round reduction, with effect from 1st October 1914, of 2 annas on grey goods, and 2½ annas on coloured goods, the question being reviewed again in January 1915. This proposal was later accepted by the Government of India. (*Appendix K.*)

LIST OF COTTON PIECE-GOODS.

(*See Report 1913, p. 47.*)

The Director General of Commercial Intelligence enquired whether the Committee had any suggestions to offer with a view to the revision of the list of cotton piece-goods.

The Committee stated in reply that they had no suggestions to put forward in this connection. (*Appendix L.*)

CUSTOMS DUTY ON IMPORTED LEATHER LACES.

Since the introduction of the Tariff and the Cotton Duties Acts in 1896, leather laces for joining belting and leather strapping were classed under Article 13 of the Tariff Schedule and could therefore be imported free of duty by Weaving Mills on production of a certificate to the effect that the laces were for the sole use of the mill importing them and for the purpose specified. Early in the year under review however the Customs Department under orders from the Government of India assessed these laces to duty under article 45 of the Tariff Schedule IV. The Committee accordingly enquired from the Collector of Customs whether the Government of India Notification on the subject was quite clear, as so far as they were aware no abuses of the concession to the weaving industry had come to light and it was therefore difficult to understand why a system that had been in force for 18 years should be dropped without notice.

In reply the Collector stated that leather laces for sewing leather belting imported by a Cotton Manufacturing Company were by misapprehension passed free of duty at the Bombay Custom House as "laces" mentioned in Customs Circular No. III of 1896, and in Article 13 (IV) of Tariff Schedule IV. In September 1913, the question whether this practice was correct was referred to the Government of India who pointed out that the laces mentioned in item 13 (IV) of Tariff Schedule IV and Customs Circular No. III of 1896, referred only to laces used in the weaving and spinning sections of Cotton Mills. Laces for sewing leather belting imported by Cotton Manufacturing Companies were not exempt under that item, and should be assessed under Article 45 of the Tariff Schedule IV. The Collector further stated that the instructions of the Government of India on the point were explicit. (*Appendix M*)

IMPORT DUTY ON TALLOW.

(See Reports, 1911, pp. 27, 120 ; 1912, pp. 24, 84 ; 1913, pp. 29, 104.)

As a result of the representation made by the Association in 1911, the Government of India tentatively decided to allow a refund of Import duty paid on tallow used by a Mill, provided the application was made within six months after importation. During the year under report the Government of India extended the above period to one year and made the concession a permanent one.

A copy of the revised procedure regarding the grant of refund of Customs duty, and the Customs Standing Orders issued in pursuance thereof will be found in *Appendix N*.

LOCAL WHOLESALE CASH MARKET VALUE.

The Collector of Customs, Bombay, forwarded to the Association extracts from a letter from the Government of India on the subject of the interpretation of the term "Local Wholesale Cash Market Value" for the purpose of assessing import duty, and enquired whether the Committee had any suggestions to offer in the matter. The Collector also forwarded a list of the articles assessed at the Bombay Custom House under clause (a) of Section 30 of the Sea Customs Act and a list of tariff valued articles ; but stated that the present enquiry related more particularly to Cotton Piece-Goods as such goods frequently passed through two or perhaps three hands before they were placed on the market in the lots which for the purpose of assessment under clause (a), Section 30 of the Sea Customs Act, were regarded as wholesale units. The Collector further stated that the wholesale rates at present adopted by the Bombay Custom House were definite quotations and so far as the Customs Department was concerned, formed a satisfactory basis of assessment. The proposals (a) that goods should be assessed on the price at which the importer of a large consignment sold the goods, and (b) that the term "Wholesale" should be interpreted in its broadest sense of quantity, were both, the Collector contended, open to objections. It appeared therefore on the whole, that the most satisfactory course, both for Government and the Public, would be to retain the existing basis of assessment, and, if it was deemed necessary to afford any relief to the importer, to grant it by deducting a small fixed percentage from the real value as at present assessed. The Collector of Customs understood that the average difference between the c. i. f. invoice price per bale or case of Cotton Piece-goods imported in large consignments, and the price per bale or case as sold by bazaar dealers in small lots might be taken to be roughly 5 per cent. Of this the importer's profit would be about 2 per cent. to 3 per cent. and the profit of subsequent dealers about 1 per cent. each. If this was correct, the real value of goods as at present assessed less about 2 per cent. might be fairly taken as representing the importer's selling price under normal conditions when the goods passed through the hands of several dealers.

The Committee were also favoured by the Bombay Chamber of Commerce with a copy of a letter the latter had written to the Collector of Customs in this connection. In this letter the Chamber contended that the real value for Customs duty purposes should be the nett wholesale cash price at the place of import, *i. e.*, duty should not be levied on discounts or interest or landing, removing and warehouse charges.

The Bombay Chamber supported the proposal of the Bengal Chamber of Commerce, contained in the 4th paragraph of their letter to the Government of India, Department of Commerce and Industry, dated 31st December 1910, which reads as follows :—

“The Committee do not desire that any change should be made in the procedure which is followed for the assessment of the ‘wholesale cash price.’ They suggest that the ‘wholesale cash price’ as at present ascertained, should be reduced by 10 per cent. made up as follows :—(1) import duty $3\frac{1}{2}$ per cent.; (2) trade discount $1\frac{1}{2}$ per cent., (3) interest $1\frac{1}{2}$ per cent., (4) landing, removal and warehouse charges $1\frac{1}{2}$ per cent.; (5) dealer’s profit 2 per cent.; this being, in their opinion, the added value of the goods in the bazaar, upon which it is inequitable that importers should have to pay duty. In other words, they suggest that it would be fair to levy duty on nine-tenths of the ‘wholesale cash price’ as at present ascertained.”

The Bombay Chamber further contended that if the market value must be taken for purposes of Import Duty, that market value should be the selling price of the first bazaar seller and not that of a subsequent bazaar seller. They observed, however, that a reduction of 2 per cent. from the value as at present assessed was contemplated, and if this were finally decided upon the Chamber would regard it as a fair compromise. But in approving this concession under the existing practice the Chamber did not consider the present basis either correct or satisfactory, and they confirmed their previous letters on this subject.

In replying to the Collector of Customs, the Committee stated that they supported the contentions put forward by the Bombay Chamber of Commerce in the letter referred to above; and added that they regarded the proposed reduction of 2 per cent. from the value as at present assessed as a fair compromise, but not as a satisfactory settlement of the points at issue. (*Appendix O.*)

FIRE INSURANCE OF MILLS.

SPRINKLER DISCOUNT.

(See Report, 1912, pp. 32, 133.)

The Committee in April 1914 again addressed the Bombay Fire Insurance Association with reference to the question of sprinkler discount for cotton godowns in Mills in Bombay, and submitted that the existing rate of 15 per cent. was much too low. The Committee felt that as the Mills in Calcutta

were receiving 30 per cent. discount for their jute godowns, the members of this Association were well within their rights in again seeking to secure a similar concession for Bombay.

Beyond a formal acknowledgment and a statement to the effect that the matter was receiving the consideration of their Committee, no reply has been received from the Bombay Fire Insurance Association. (*Appendix P.*)

ELECTRICALLY DRIVEN FIRE PUMPS IN MILLS.

The Bombay Fire Insurance Association addressed this Association in connection with the question of the suitability of installing electrically driven fire service pumps in Mills.

The rule adopted by the Fire Offices Committee (Foreign) London, in this connection reads as follows :—

“ An electrically driven pump cannot be accepted unless it has current always available from two distinct and independent plants (so that a breakdown of either from any cause, could not prevent the pumps being worked) the current being conveyed to a point on the premises by separate mains. ”

“ If the generating plants do not constitute separate fire risks, the case must be specially submitted. ”

The Fire Insurance Association understood that the Tata Co. intended cutting off their supply during the night and therefore electrically driven pumps from this source for fire extinguishing purposes would not be permitted.

In the case of any mill authorities contemplating installing electrically driven fire pumps, a complete plan of the proposed arrangements had to be submitted to the Bombay Fire Insurance Association through their Insurance Co. for approval and sanction.

The Committee of the Fire Insurance Association were of opinion that electrically driven fire pumps were not suitable for Bombay at the moment, but they were prepared to consider any scheme which might be submitted for their approval. (*Appendix Q.*)

COUNTRY PIECE-GOODS CONTRACTS.

In September 1913, this Association was approached by the Country Piece-goods Merchants' Association in regard to the form of contract for the purchase and sale of Country Piece-goods. Sub-Committees of the two Associations met and discussed the matter and eventually a form of contract was placed before a Special General Meeting of the Members of this Association on the 31st March 1914 and was, with certain amendments, adopted. The Country Piece-goods Merchants' Association however did not approve of all the clauses of the new form of contract and several conferences again took place between the Sub-Committees of the two Associations. Finally at a Special

General Meeting of the Members of this Association held on 7th August 1914, it was decided after some discussion, to rescind the resolution passed at the Special General Meeting held on 31st March 1914. (*Appendix R.*)

PUBLIC SERVICES COMMISSION.

(See Report 1913, pp. 35, 117.)

It will be remembered that Mr. N. N. Wadia was chosen by the Committee to appear before the Public Services Commission for the purpose of giving evidence on behalf of the Association in support of a representation made by the Committee in regard to the Factory and Steam Boiler Inspection Departments.

Mr. Wadia duly appeared before the Royal Commission and the following is a summary of the evidence given on behalf of the Association :—

MR. N. N. WADIA, called and examined.

(To Chairman): Witness represented the Bombay Millowners' Association, which consisted of the Millowners in Bombay.

It was necessary that Boiler Inspectors should have had experience of land boilers before joining the department, as land boilers differed, especially in length, from marine boilers. Some land boilers were as much as 32 feet long, while marine boilers were seldom longer than 14 or 15 feet. The expansion of plates in long boilers was entirely different from the expansion in short ones. The inspection of the department in the last four or five years had been very satisfactory under the Chief Boiler Inspector, and since the staff had been increased the inspection was certainly better than it was formerly.

He understood that Mr. McIntosh was bringing forward new rules under the Boiler Act before the Bombay Council, and had made certain recommendations, which, while applicable to marine boilers, could not be applied to land boilers.

Appointments in the departments should be open to engineers of the Royal Indian Marine and Mercantile Marine, and to land engineers holding first-class certificates. Some of the engineers of the Royal Indian Marine and Mercantile Marine would have had experience of land boilers as apprentices in England. He would not make it a condition of appointment that officers should have had experience of land boilers, but it was most desirable that they should have.

Boiler Inspectors should be paid the same salaries as engineers employed in local Mills, from Rs. 500 to 700, as good men could not be attracted for less. Also better travelling allowances should be given. If the emoluments of the Inspectors were increased a better class of Inspectors would be obtained ; but he did not wish to criticise the present men in the department.

The post of First Inspector was superfluous. His duties were similar to those of the junior Inspectors. He did not, however, know what office work the First Inspector had to do. The recommendation that the appointment

should be abolished was based on the fact that the expenditure on the Boiler Department had gone up very materially in the last four years. Up to 1909 there were only five Inspectors, and they had now been increased to eight, and the Chief Inspector's salary had been increased up to Rs. 1,500. The Boiler fees up to 1909 showed a surplus of two lakhs, and that was gradually being absorbed at the rate of Rs. 20,000 a year.

The Association would rather see fewer Inspectors of a better class receiving larger salaries than numerous Inspectors of an indifferent class. The number of Inspectors at present was excessive. The staff had increased in the proportion of five to eight during the last four years, but boilers had not increased in anything like the same proportion.

The observations made with regard to Boiler Inspectors applied also to Factory Inspectors.

The Association would like to see the Boiler and Factory Inspection Departments made Imperial and not Provincial, so that a better class of man might be attracted by the chance of rising to senior posts. They also recommended that Boiler and Factory Inspectors should not be under the control of the Collector of Bombay, as it was a technical department and should be controlled by an imperial head.

Junior Inspectors should have a chance of rising to be Chief Inspectors of Boilers. In the new Bill before the Legislative Council it was proposed that a single full-time Examiner should be appointed for granting first-class certificates, but the Association preferred a Board of Examiners. Some years ago a full-time Examiner was appointed and bribery went on, and the Government of Bombay in framing the Act of 1891 were induced by his father, who was then on the Council, to appoint a Board of Examiners, and that Board had acted very well.

In Calcutta the department was under a Commission which practically did the work of the Chief Inspector, and the Association much preferred to have in Bombay a Board of intelligent Engineers rather than a Chief Inspector. If the department was made an Imperial one, every officer would be liable to serve in any part of India.

The Association laid great stress on the point that Factory Inspectors should be men who had a knowledge of mill machinery. There was at present an Inspector who was taken from the Customs and appointed a Factory Inspector, and who had no knowledge of mills.

The Cotton Excise duties should be transferred to the Customs Department. When the Factory Act was brought before the Imperial Council the Association laid great stress on the point that the Chief Inspector and the Factory Inspectors should have nothing to do with the Collector of Bombay, as it was very unwise that the action of an Inspector should be controlled by a man who had no knowledge of mill machinery. The Government issued a special resolution No. 7296A which stated that the District Magistrate,

who was an inspector under sub-section 8 of section 4 of the Act, should pass no original orders under various sections of the Act within the limits of his own district, and it was made clear in that resolution that the Collector of Bombay had no original power. There had been cases reported to the Association in which some original orders had been passed.

(To Sir Theodore Morison): The Association had no objection to the appointment of Indian factory inspectors. A large majority of the engineers in mills were Indians, and also a large majority of the owners. No discussion had taken place in the Association on the subject, but he thought that as long as efficient inspection was secured, it did not matter to the Association whether the inspector was an Indian or a European. He did not think there would be any deterioration of efficiency if Indian inspectors were appointed, as there were many clever Indians in the mills now who were quite capable of doing the work and who had the advantage of knowing the workmen and the language and the local conditions.

(To Mr. Abdur Rahim): He would exclude the Collector altogether from the Boiler Act and have a Commission of Engineers.

Very few Indians received a training in mechanical work in England, probably owing to their want of means. In England there would be great difficulties in obtaining training in mills, especially in Lancashire, and mill practice was a very essential condition. There were men in the local mills in India who would very soon reach the highest rank, as they were being trained under European overseers.

The Collector did not interfere with the details of factory inspection, but the service should be Imperial, and controlled imperially, and should not be under the Collector at all. A factory inspector might pass an order for fencing machinery, and if the millowner appealed, the appeal had to be heard in Bombay by the Collector, with or without assessors, and thus the Collector practically sat in judgment on his subordinates, and might give an opinion quite independent of the assessors.

Under the Boiler Act a Commissioner had to be appointed from time to time to hear appeals.

(To Mr. Sale): The inspection during the last five years had been very well done, but he thought it could be done quite as well with a reduced number of inspectors.

The Commission he proposed would merely act in cases of appeal from an inspector's decision and would have no power to give orders, as, for instance, with regard to the working pressure to be allowed to a boiler. He only asked for some extension of the present system on the lines of Calcutta. A Collector now had no power to alter calculations with regard to boilers, and if anyone was dissatisfied with an inspector's decision, he either went to the Chief Inspector or appealed to the Commission, which consisted of expert engineers.

Only one case of the Collector issuing original orders had happened lately. There had been only one appeal case recently, and that was in connection with his own Mill, and the Collector of Bombay went directly against the two assessors.

(To Mr. Chaubal) : The passes issued by the medical officer to children working in factories was to certify that the child was a half-timer, between the years of nine and fourteen.

(The witness withdrew.)

IMPROVEMENT OF COTTON CULTIVATION.

Mr. Arno S. Pearse, Secretary of the International Federation of Master Cotton Spinners' and Manufacturers' Associations, visited India towards the end of 1913 and made a tour of the Cotton districts. In forwarding to the Government of Bombay a report of this tour the Committee communicated the following resolution which was unanimously passed by them in connection therewith :—

“ While acknowledging the increased activity shown by the Department of Agriculture in the extension and improvement of cotton cultivation in India, this meeting of Bombay Millowners respectfully urges the Government of India to increase the staff of Agricultural Experts ; to devote greater attention to the wider distribution of improved and selected seed and suggests that cotton seed should be supplied by the Directors of Agriculture of each Province to the ryots as far as possible on credit, *i.e.*, the value of the seed to be encashed by the Revenue Department along with the assessment, after the picking of the crop. This meeting again urges Government to make the watering of ginned cotton a penal offence.”

In reply the Bombay Government stated that the suggestions made by the Committee were referred to the Government of India for consideration and the following remarks were communicated for the information of the Committee at the request of the Supreme Government.

As regards the Committee's request for an increase in the staff of agricultural experts, it was intimated that the superior staff of the Bombay Agricultural Department had been recently strengthened by the addition of two new appointments. The Secretary of State sanctioned the employment of a third Deputy Director of Agriculture in the Bombay Presidency in November 1913, and had also approved the proposal made by the Government of Bombay for the creation of an appointment of a second Economic Botanist for this Presidency.

With reference to the Committee's suggestion that Government should devote greater attention to the wider distribution of improved and selected seed, it was observed that the Bombay Agricultural Department had narrowed down the distribution of cotton seed to a few varieties that showed distinct advantages in the Surat District, Khandesh and the Southern Mahratta Country

The advantage at which the Agricultural Department chiefly aimed was quantity rather than quality because it had been found that local markets hardly responded to improved quality. Even in the cases of quantity which with cotton often depended on ginning percentage, it was not always easy to ensure that improvement should be duly recognised in an enhanced price, but progress was being made in this matter.

It was stated that the Committee's proposal for the supply by the Director of Agriculture of the cotton seed on credit to cultivators was impracticable. No stereotyped system of seed farms and seed distribution could be adopted generally, and the arrangements made must be adapted to the nature of the seed and to local conditions. Efforts were being made on these lines to extend the distribution of seed as rapidly as was practicable.

The question of amending the law so as to make the watering of ginned cotton a penal offence was carefully considered by the Government of India in connection with the representations made in 1912 to the Secretary of State by the International Federation of Master Cotton Spinners' and Manufacturers' Associations. The Supreme Government regretted that they were unable to take any action in the direction suggested by the Committee of the Association. (*Appendix S.*)

COTTON FIRES AT COLABA.

In the early part of 1914 several disastrous fires occurred on the Cotton Green at Colaba resulting in the destruction of immense quantities of baled cotton. The Government of Bombay appointed a Committee to enquire into the causes of these outbreaks and to consider and recommend what preventive and protective measures should be adopted to guard against such outbreaks in future. The Association was asked to elect a representative to serve on this Committee and the Chairman, Mr. Narottam M. Goculdas, was nominated to do so.

The above Committee met on several occasions to record evidence and eventually submitted their report to Government. Their suggestions for preventive and precautionary action may be summarised as follows :—

- (i) The removal of the Cotton Green from Colaba to some more spacious, better arranged, better drained and more remote site.
- (ii) The restriction of the height of cotton stacks, with proper alleys, lines or roads between the various stacks and jaithas.
- (iii) The storage of cotton in godowns which are properly built.
- (iv) The organization and maintenance by the Cotton Merchants and Insurance Companies jointly of a better staff for guarding the Green.
- (v) The provision of an adequate number of hydrants and full pressure of water throughout the 24 hours.

- (v) Efforts by Insurance Companies to safeguard as closely as possible their own interests after fire has occurred.
- (vi) The institution of a Tribunal or Court of Enquiry of the nature referred to in the preceding paragraph.

STORAGE OF COTTON AT MAZAGON.

About the same time that the Cotton Fires Committee was appointed a Special Committee consisting of representatives of this Association, the Bombay Chamber of Commerce, the Bombay Cotton Trade Association, Ltd., the Bombay Cotton Exchange Co., Ltd., the Bombay Muccadams' Association, the Bombay Fire Insurance Association, and the Bombay Salvage Corps Association, was at the instance of the Bombay Chamber of Commerce appointed to consider the question of providing additional storage ground for cotton, in view of the great congestion at Colaba, and the increased Insurance charges which it was recognised that the trade would have to bear.

The Port Trustees informed the Chamber of Commerce that they were prepared, if applications for storage areas for 4 lakhs of bales (calculated on a maximum storage height of 14 bales) were reserved, to undertake the preparation of a temporary storage area at Mazagon-Sewri Reclamation, to be occupied until the permanent Depôt was ready.

The Special Committee inspected the land above referred to and at a subsequent meeting a suggestion was put forward to transfer the greater part of the trade to Tank Bunder with a view to concentrating the whole trade in that locality eventually.

The interests represented at that meeting seemed to favour some such move, and when the different Associations interested were invited to give effect to their opinions by making provisional applications for plots at Tank Bunder, it was found that storage room for over 9 lakhs of bales was asked for, but these applications were mostly subject to the reservation that the headquarters of the trade should be transferred from Colaba to Tank Bunder.

After several meetings the Special Committee finally issued the following report :—

Report of the Special Committee appointed to consider the question of additional storage for the coming season :—

This Committee which consisted of representatives of the Bombay Chamber of Commerce, the Bombay Cotton Trade Association, Ltd., the Bombay Millowners' Association, the Bombay Cotton Exchange Co., Ltd., the Bombay Cotton Muccadams' Association, the Bombay Fire Insurance Association, and the Bombay Salvage Corps Association first met on the 16th April 1914. The Chairman of the Bombay Port Trust was also invited to be present.

A plan of the new site at Tank Bunder was laid on the table and the Chairman of the Port Trust explained at some length the possibilities of the new ground as a temporary storage area for cotton. A general discussion

then took place and eventually it was agreed that the Port Trust should quote rates for the plots and generally the terms under which they would be prepared to take the work in hand. The Fire Insurance Association representatives also agreed to quote rates of insurance for cotton stored on this new ground.

Before the meeting terminated a Sub-Committee was appointed to consider details of this scheme. This Sub-Committee met on the 2nd June 1914 and the Chairman of the Port Trust again attended. The Trustees' proposals were as follows :—

To lay out a storage ground at Tank Bunder which will be ready to accommodate $3\frac{1}{2}$ to 4 lakhs of bales by 15th November and 6 lakhs of bales by 31st December this year. Further accommodation to the extent of 2 lakhs of bales will be provided thereafter if required. This depôt will be connected by rail both with up-country and with the docks and the general lay out of the ground will permit of favourable rates of insurance being obtained. The area to be laid out in lines of blocks of 3 Jaithas, of these two jaithas will be 75×30 feet, each of which is calculated, with bales piled 14 high, to hold 3,000 bales ; the 3rd jaitha in each block to be 75×40 feet which will allow of the construction of a shed to hold 5,000 bales ; these blocks to be separated by open spaces 30 feet broad and each jaitha in the block to be separated from the next by a space of 10 feet.

The rent to be charged for the land will be Rs. 2 per square yard per annum of the jaitha area occupied ; open spaces required for the Bombay Fire Insurance Association rules will not be charged for. The plot will be leased for 4 years in the first instance. This period may be extended if the permanent depôt be not ready under 4 years.

The rates of insurance quoted by the Fire Insurance Association for cotton stored at Tank Bunder, were as follows :—

If bales are stacked not more than 5 high	—	10 annas.
" " " " " " " 8 "	—	16 "
" " " " " " " 14 "	—	24 "

The above information was passed on to the various Associations who were represented on this Special Committee and a final meeting on the full Committee was held in the rooms of the Chamber of Commerce on Thursday, the 25th June 1914. After fully discussing the whole scheme the following resolutions were unanimously passed :—

- (1) That in the opinion of this Committee the Cotton Depôt at Colaba cannot any longer be regarded as adequate for the requirements of the trade, because of the restricted area and high insurance charges.
- (2) That every advantage should be taken of the offer of the Port Trustees to lay out a Depôt at Tank Bunder which will accommodate 6 lakhs and in case of need probably 8 lakhs of bales during the next season.

- (3) That the Bombay Cotton Trade Association, Ltd., be requested to alter or modify their rules to afford equal facilities for transactions in cotton, whether such cotton be stored at Tank Bunder Depôt or the Colaba Depôt.
- (4) That the above resolutions be sent to the Chairmen of the various Associations concerned with a request that they will communicate same to their members and invite them to send in as early as possible to the Port Trustees applications for such plots as may be required.
- (5) That copies of these resolutions be sent to the Press for general information.

DEVELOPMENT OF BOMBAY.

(See Reports 1908, pp. 28, 88 ; 1913, pp. 38, 119.)

The Bombay Development Committee referred to in the Associations' Report for 1913, submitted their report to Government in May 1914.

In forwarding for the information of the Committee, a copy of the above report, the Government of Bombay submitted a summary of the recommendations made by the Development Committee and requested that Government might be informed what action the Association proposed to take in order to give effect to those recommendations.

The following is a copy of the summary referred to above :—

Chapter IV, paragraph 10.—(i) All offensive trades, and all factories and large industries employing more than a certain number of employès, should be restricted to the north-eastern corner of the Island, the maximum number of employès for this purpose to be determined after special enquiry. Salsette should provide for future expansion.

Chapter IV, paragraph 13.—(ii) An Improvement Scheme for Fort North, including a communication from east to west, is desirable and important.

Chapter V, paragraph 16.—(iii) The improvements at Love Grove now in process of construction should be pushed on as rapidly as possible to completion. The result should be watched for a period covering one monsoon and if the nuisance is not mitigated sufficiently to make the foreshore attractive for residences, the matter should be forthwith referred to an expert Committee for consideration as to the measures then to be taken.

Chapter VI, paragraphs 22, 24.—(iv) As regards the problem of the slums of Bombay, migration should be encouraged by developing open land for residential purposes. In particular, Mahim

could be usefully developed by a process of Town-planning. Railway Companies should be required to house their work-people outside Bombay and other large employers of labour should be required by legislation to provide housing accommodation for their employes.

Chapter VI, paragraph 25.—(v) The Improvement Trust should continue to devote special attention to the provision of sanitary chawl accommodation for the poor evicted from tenements demolished in process of Improvement Schemes.

Chapter VI, paragraphs 22, 25.—(vi) The Municipality should treat as a matter of the greatest urgency the work of revising the Building By-laws, in such a way as to strengthen them as much as possible. Power should be given to the Municipality to require that there should be no alteration or additions to buildings which would not have been allowed if the whole building had been reconstructed afresh, and the 63 $\frac{3}{4}$ ° rule should be applied in the case of all future additions to or alterations of buildings. Power should also be given to prohibit such subsequent partitioning of rooms as would not be allowed in the first instance when building plans were approved. Building By-laws more stringent than at present should be framed for the outlying portions of the City, and Mr. Orr's proposal to lay down a 63 $\frac{3}{4}$ ° rule is approved.

Chapter VI, paragraph 22.—(vii) The Municipality should be authorized to declare single rooms unfit for human habitation.

Chapter VI, paragraph 21.—(viii) Care should be taken that the application of these measures does not fall too oppressively on owners who depend for their livelihood upon the rent from a single house.

Chapter VI, paragraph 23.—(ix) It should be considered whether, side by side with the gradual completion of the extension schemes at present in hand, the Improvement Trust should not also devote itself to undertaking small Improvement Schemes within the City. In addition to the alteration of the By-laws with a view to emphasize the individual responsibility of house-owners for the habitable condition of their dwellings, there should proceed general schemes for the betterment of congested areas through the agency of the Improvement Trust.

Chapter VI, paragraph 22.—(x) Every scheme of development should make provision for the reservation of land to remain permanently open for recreative purposes.

- Chapter VII, paragraphs 31, 33, and Chapter IX, paragraph 50.—(vi) Government should effect a reclamation of about 100 acres, the bulk of which should face the Oval, in order to provide sites for Government buildings and public institutions, with primary regard to the needs of education. The whole space available to the west of the Secretariat should be then planned out in a comprehensive scheme. A marine drive at least 80 feet wide should be constructed along the sea face.
- Chapter VIII, paragraph 37.—(vii) The G. I. P. and B. B. & C. I. Railways should be required to arrange for additional communication between each other in Bombay.
- Chapter VIII, paragraph 38.—(viii) The B. B. & C. I. Railway should be required to sink its line below the surface from the south of Grant Road to Wodehouse Bridge and to cover it in.
- Chapter VIII, paragraph 42.—(xiv) The attention of the Municipality should be directed to Mahim as an area which it is important to develop early and on sound lines with the help of a Town Planning Act.
- Chapter VIII, paragraph 43.—(xv) There should be a loop railway line from Mahim Station through Mahim Woods to Grant Road Station.
- Chapter VIII, paragraph 44.—(xvi) Certain extensions of the tramway system are desirable.
- Chapter IX, paragraph 47.—(xvii) The attention of Government is drawn to the question whether the future area of Dock extension should not form the subject of special investigation.
- Chapter IX, paragraph 48.—(xviii) A strong and representative Committee should go into the question of providing a new site for the European General Hospital.
- Chapter IX, paragraph 49.—(xix) It would be well if the area occupied by the Military Hospital and barracks near Marine Lines Station, or at least the western half of that area, were surrendered to the Civil authority.
- Chapter IX, paragraph 50.—(xx) A 40-foot road should be constructed immediately along Kennedy Sea Face.
- Chapter IX, paragraph 51.—(xxi) The Saluting Battery site should be improved and planted out as a garden.
- Chapter X, paragraph 59.—(xxii) The consideration of the removal of the Slaughter House from Bandra to the west of the Island should be taken up afresh.

Chapter XI, paragraph 62.—(xxiii) For securing co-ordination among the various works undertaken in the course of development, Government, the Corporation, the two Railways, the Improvement Trust and the Port Trust should each depute an Executive Officer to a periodical conference, of which the Special Officer, Salsette Building Sites, should be a member.

The Committee in replying to Government put forward the following remarks with regard to those passages of the Report which had particular reference to the Mill Industry:—

Chapter 4, paragraph 10.—The Committee had no objection to the North East Corner of the Island being set apart for the Textile Industry. They were of opinion that from 40 to 50 thousand square yards should be allowed for a Mill and that the price of the ground should not exceed Rs. 2-8-0 per square yard. They suggested that the plot be arranged so that Railway Sidings could be provided if required, and that proper facilities for the transport of work people to and from this area should be provided.

Chapter 6, paragraphs 22 and 24.—The Committee were of opinion that it was desirable that Millowners should house their work people, but they were not in favour of legislation making it compulsory to do so.

Chapter 6, paragraph 25.—The Committee supported the recommendation that the Improvement Trust should continue to devote special attention to the provision of Sanitary Chawl accommodation for the poor who were evicted from tenements demolished in the process of Improvement Schemes. (*Appendix T.*)

REGISTRATION OF QUALITY NUMBERS ON CLOTH.

The Committee had under consideration the question of the desirability or feasibility of registering the quality Numbers used on Cloth. After consultation with the Association's Solicitors a set of draft rules were drawn up and submitted to a Special General Meeting of the members of the Association on the 2nd March 1914, but it was decided to allow the matter to remain in abeyance pending the result of a test case that was before the High Court. (*Appendix U.*)

BANKING LEGISLATION.

(See Report 1913, pp. 32, 114.)

In connection with the correspondence that passed between the Government of Bombay and this Association in 1913, (see Report for that year) in regard to the use of the term "Bank" in this country, the Government in September 1914 forwarded to the Association copies of the opinions expressed by the officers and Associations consulted in the matter, and invited this Association to nominate a representative to attend a Conference consisting of

the Honourable the Advocate-General, the Registrar of Companies and representatives of local Chambers of Commerce and Associations and Firms for the purpose of discussing the subject with the Hon'ble Sir Richard Lamb.

The Committee duly nominated the Chairman, Mr. Narottam M. Goculdas, to represent the Association at the above Conference, which was held on the 30th November 1914. (*Appendix V.*)

ADVISORY BOARD TO THE COLLECTOR OF INCOME-TAX.

A Resolution was moved in the Imperial Legislative Council on January 14th, 1914, by the Hon'ble Mr. Rama Raganingar recommending that advisory boards composed of non-official gentlemen nominated by the Revenue Heads of the Districts should be formed to assist officials in the work of assessment under the Income Tax Act.

In forwarding a copy of the above resolution the Commissioner of Income Tax, Bombay, requested to be favoured with the opinion of the Association as to whether it was desirable that any advisory board of the nature indicated should be formed to assist the Collector of Income Tax, Bombay, in the work of assessment.

In reply the Committee stated that they supported the views put forward by the Bombay Chamber of Commerce in this connection. It was felt that the right of enquiring into the financial standing of an individual, for the purpose of arriving at a correct assessment, should be vested in an official rather than an advisory board of non-officials and the Committee were therefore opposed to the recommendation above referred to. (*Appendix W.*)

DEATH OF LADY HARDINGE AND THE HON'BLE E. C. HARDINGE, D.S.O.

On receipt of news of the death of Lady Hardinge the Chairman on behalf of the Members sent the following telegram to the Private Secretary to His Excellency the Viceroy :—

“The Members of the Bombay Millowners' Association respectfully tender an expression of their sincere sympathy to His Excellency the Viceroy in his sad bereavement.”

The following reply was received :—

“Viceroy greatly appreciates your kind message and sends grateful thanks.”

On hearing of the death of the Viceroy's eldest son the Hon'ble E. C. Hardinge, D.S.O., the following telegram was sent to the Private Secretary to His Excellency the Viceroy :—

“Members Bombay Millowners' Association desire to convey to His Excellency the Viceroy an expression of their very sincere sympathies in his sad bereavement.”

The following reply was received :—

“ His Excellency is grateful to you and the members of Bombay Millowners' Association for your kind sympathy with him in his sorrow.”

CONGRESS OF COMMERCE.

(See Report 1913, pp. 47, 149.)

The Indian Merchants' Chamber and Bureau informed the Association that it had been resolved to hold the first session of the Indian Commercial Congress in Bombay in the second week of November 1914, and invited the Association to nominate a representative to serve as a member of the Reception Committee.

The Committee accordingly nominated Mr. Narottam M. Goculdas as the Association's representative.

Later, however, the Indian Merchants' Chamber and Bureau informed the Association that owing to the war the holding of the Congress had been postponed *sine die*. (Appendix X.)

MILL HOLIDAYS, 1915.

The following Holidays were recommended by the Committee for general adoption under the provisions of the Indian Factories Act :—

MONTH AND DATE.	DAY OF THE WEEK.	FESTIVAL.
JANUARY 1st	Friday	<i>New Year Day.</i>
10th	SUNDAY.	
14th	Thursday	<i>Makar Sankranti,</i>
24th	SUNDAY.	
31st	Do.	
FEBRUARY 7th	SUNDAY.	
12th	Friday	<i>Maha Shivaratri.</i>
21st	SUNDAY.	
MARCH 2nd	Tuesday	} <i>Holi.</i>
3rd	Wednesday	
4th	Thursday	
16th	Tuesday	<i>Gudi Padwa.</i>
21st	SUNDAY.	
25th	Thursday	<i>Ram Navmi.</i>
APRIL 4th	SUNDAY.	
11th	Do.	
18th	Do.	
25th	Do.	
MAY 2nd	SUNDAY.	
9th	Do.	
18th	Tuesday	<i>Adurgan Jassan.</i>
23rd	SUNDAY.	
30th	Do.	
JUNE 6th	SUNDAY.	
13th	Do.	
20th	Do.	
27th	Do.	
JULY 4th	SUNDAY.	
11th	Do.	
18th	Do.	
23rd	Friday	<i>Ashadi Ekadashi.</i>

MONTH AND DATE,		DAY OF THE WEEK.	FESTIVAL.
AUGUST	1st	SUNDAY	
	8th	Do.	
	15th	Do.	<i>Nag Panchami.</i>
	24th	Tuesday	<i>Narli Purnima.</i>
	29th	SUNDAY.	
SEPTEMBER	2nd	Thursday	<i>Gokul Asthami.</i>
	12th	SUNDAY.	<i>Ganesh Chaturthi.</i>
	17th	Friday	<i>Gowri Visarjan.</i>
	26th	SUNDAY.	
OCTOBER	3rd	SUNDAY.	
	8th	Friday	<i>Sarva Pitra Amvasa.</i>
	17th	SUNDAY	<i>Dasara.</i>
	24th	Do.	
	31st	Do.	
NOVEMBER	7th	SUNDAY	} <i>Diwali.</i>
	8th	Monday	
	9th	Tuesday	
	14th	SUNDAY.	
	18th	Thursday	<i>Tabot.</i>
DECEMBER	28th	SUNDAY.	
	5th	SUNDAY.	
	12th	Do.	
	19th	Do.	
	26th	Do.	

OPENING OF SEVEN CHINESE PORTS TO FOREIGN TRADE.

Intimation was received in July 1910 from the Collector of Customs, Bombay, to the effect that the Chinese Government had opened to Foreign Trade the following ports in North China :—Kueihuaq'eng, Kalgan, Dolonor, Chihfeng, Taonanfu, Hulatao, and Lungkow, with the object of developing international trade and interests in Inner Mongolia. (*Appendix Y.*)

CHINESE IMPORT TARIFF.

The Government of India in March 1914 informed the Association that in accordance with Article XV of the Shanghai Treaty of Commerce, 1902, between Great Britain and China, which provided for a decennial revision of the Chinese Import Tariff of 1902, the Chinese Government had notified to the Powers their desire to revise the tariff, so as to bring it up to an effective 5% *ad valorem* and His Majesty's Government had formally assented to the revision. The principles and details of the revision were not then known, but the Government of India enquired whether the Association wished to make any representations or to offer any observations at that stage.

Article XV above referred to reads as follows :—

“ It is agreed that either of the High Contracting Parties to this Treaty may demand a revision of the Tariff at the end of ten years ; but if no demand be made within six months after the first ten years, then the tariff shall remain in force for ten years more, reckoned from the end of the preceding ten years, and so it shall be at the end of each successive ten years.

“ Any Tariff concession which China may hereafter accord to articles of the produce or manufacture of any other State shall immediately be extended to

similar articles of the produce or manufacture of His Britannic Majesty's Dominions, by whomsoever imported.

"Treaties already existing between the United Kingdom and China shall continue in force in so far as they are not atrogated or modified by stipulations of the present Treaty."

In reply the Committee stated that at that stage, they merely wished to point out that any revision, resulting in an increase of duties, would be detrimental to the interests of the members of this Association. If however it be the intention to make the tariff effective only, the Committee would offer no serious objections but they submitted the Likin taxes might be abolished.

It was admitted that these taxes formed one of the permanent sources of income to the Provincial Governments of China, but they were in form as objectionable as taxes could be and, it was understood, as obnoxious to the native as to the foreign merchant. The Committee felt therefore that an effort might be made to secure the repeal of these taxes and they commended the matter to the careful consideration of the Government of India.

DONATIONS.

In accordance with the Resolution passed at the Annual General Meeting of the Association held on 14th April 1914, the following donations were paid out of the funds of the Association :—

	Rs.
Victoria Jubilee Technical Institute	2,000
Government College of Commerce	1,000
Sir Jamsetjee Jeejeebhoy Hospital Nursing Fund ...	500
Goculdas Tejpal Hospital Nursing Fund	250
Society for the promotion of education among the Masses	250

STOCKS OF COTTON IN BOMBAY.

In accordance with the practice in previous years the Committee obtained returns from Cotton Spinning and Weaving Mills in Bombay, showing the quantity of raw cotton held in stock on 31st August 1914. The following summarised statement was subsequently circulated to all Mills in Bombay :—

Quantity of raw cotton in stock on 31st August 1914.

Cotton actually on hand in Godowns.		Ready cotton bought but not taken delivery of.		Total.	
Actual number of bales.	Actual weight of bales. (in candies.)	Actual number of bales.	Actual weight of bales. (in candies.)	Actual number of bales.	Actual weight of bales. (in candies.)
2,18,875	1,12,046	14,600	7,932	2,33,275	1,19,978

Appendix A.

Representation of Indian Commercial Community in Bombay Legislative Council.

No. 834.

LEGAL DEPARTMENT,
BOMBAY CASTLE, 11th July 1914.

THE PRESIDENT,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I am directed to forward herewith, for your information, an extract from a letter from the Honourable Sir Ibrahim Rahimtoola, C.I.E., on the subject of the election of the representative of the Indian Commercial Community in the Legislative Council of the Governor of Bombay, and to request that you will be so good as to favour Government with the opinion of the Association on the subject.—I have, etc.,

P. E. PERCIVAL,
Secretary to Government.

Accompaniment to Government letter No. 834, dated the 11th July 1914.

(Extract from a letter of the Honourable Sir Ibrahim Rahimtoola, Kt., C.I.E.)

In Regulation 2 of Government Notification in the Legal Department issued on the 16th October 1912, it is laid down that one Member shall be elected by "the Indian Commercial Community." My submission is that in actual practice this seat should be given to the whole of the Indian Commercial Community and not to any particular trade or interest. If reference is made to the replies which were received by Government in connection with the Reform Scheme, it will be observed that I was amongst the first who claimed that the right of the Indian Commercial Community to elect representatives to the Legislative Councils should be recognized, and I think I am entitled to ask that the right conceded to the representation of this interest should in practice be given to the Members of the Indian Mercantile Community.

While the regulations provide that one seat on the Bombay Legislative Council shall be occupied by a representative elected by the Indian Commercial Community, in actual practice this seat is filled by a representative of the Indian Piece-goods Merchants. The electorate for securing to the "Indian Commercial Community" a representative by election consists under the orders of Government of 20 delegates, 10 appointed by the Piece-goods Merchants' Association and the other 10 by the Indian Mercantile Chamber.

It would be interesting to note what the constitution of the Indian Mercantile Chamber is, with reference to its connection with the Piece-goods Merchants' Association. This Chamber was brought into existence under the auspices of the latter body. The Piece-goods Merchants' Association appoints 100 men from amongst themselves to become Members of the Indian Merchants' Chamber and pays the bulk of their subscriptions. If my information is correct, each Member of the Chamber appointed by the Piece-goods Merchants' Association pays Rs. 5 per annum as his part of the subscription of Rs. 30, while the Piece-goods Merchants' Association pays the balance of Rs. 25 per Member. The total number of Members of the Indian Chamber is now about 200, half of whom are delegates of the Piece-goods Merchants' Association. Amongst the remaining 100 Members there is a substantial portion belonging to the piece-goods trade and the mill-owning interest. It will be observed, therefore, that besides appointing 10 delegates of the 20 in whom the right to elect a Member of the Legislative Council has been vested, they exercise through their 100 delegates and other

members a preponderating influence in the choice of the other 10 delegates. As a matter of fact, this seat is held securely under present conditions by the piece-goods trade to the practical exclusion of all other trades and commercial interests.

There is one aspect of the question to which I should like to invite your particular attention. Under clause 12 of Regulation 2 mentioned above, one elective seat is allowed to the Millowners' Association. Subject to the views I hold as regards election by Associations, I readily recognise the right of elective representation for the important textile industry of this Province. Government have, in consideration of the importance of industry, trade and commerce, provided two distinct elective seats for their respective representation. I venture to submit that, in formulating the electorates, care must be taken to see that one interest does not monopolise the whole representation. I think it cannot for a moment be disputed that the yarn and piece-goods trades are branches of the textile industry, and it is obviously unfair to frame an electorate under which the second seat specially provided for the representation of the Indian Commercial Community should in practice go exclusively to the piece-goods trade to the obvious prejudice of all other commercial interests in the Presidency. It will naturally be asked whether any better arrangement can be made to secure to the Indian Commercial Community the right to elect a representative. I venture to submit that there are several alternatives which can well be adopted. The best electorate would be one which has for its basis the payment of income-tax. In assessing people for the payment of this tax the officer in charge notes the amount of income derived from different sources. It will, therefore, be easy to prepare a list of those who are engaged in trade and commerce and by fixing the amount of income-tax at a given figure to qualify for a vote, an electorate can be formed of such dimensions as may be considered workable. The advantage of this procedure is that everyone who pays the amount of tax fixed by Government and is engaged in trade and commerce will secure the right of voting at the election of a representative on the ground of having a stake in Indian trade and commerce and not merely because he belongs to a recognised Association.

If, for Departmental reasons, it is found either difficult or impracticable to give effect to this suggestion, I would venture to submit, for the consideration of Government, the desirability of availing themselves of the records of the Bombay Port Trust for the formation of this electorate. Every particle of the sea-borne trade of Bombay passes through the hands of the Port Trust. Fees are levied by that body on all imports and exports. If a list of Indian merchants who pay a certain amount of fees per annum to the Port Trust is prepared, it will form a suitable electorate for the representation of the Indian Commercial Community. If it is considered desirable, the names of Indian merchants who import and export merchandise on a substantial scale through the two Railway Companies in Bombay may be embodied in the list of voters.

It will thus be observed that, if Government so desire, they have the means of securing in reality to the Indian Commercial Community the right of direct representation which is deliberately conceded to them under the regulations framed to give effect to the Reform Scheme. I earnestly trust that this point will receive your careful consideration and that the right of representation to the Indian Commercial Community will be secured to them by such alteration in the electorate as may be considered suitable.

No. 328 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 14th September 1914.

THE SECRETARY TO GOVERNMENT,
LEGAL DEPARTMENT,
Bombay.

SIR,

I am directed to acknowledge receipt of your letter No. 834, dated 11th July 1914, forwarding an extract from a letter from the Hon'ble Sir Ibrahim Rahimtoola, C.I.E., on the

subject of the election of the representative of the Indian Commercial Community in the Legislative Council of the Governor of Bombay and requesting the opinion of this Association thereon.

2. In reply I am to state that my Committee have carefully considered the extract above referred to, but they cannot support the arguments therein put forward; neither can they admit that one interest monopolises the whole representation.

3. The submission contained in the 4th paragraph of the said extract, to the effect that the best electorate would be one which has for its basis the payment of income-tax, does not commend itself to my Committee, inasmuch as they have always understood income-tax returns to be confidential as between the State and individuals. The alternative suggestion that votes should be allotted in accordance with the volume of payment to the Port Trust, is also open to many objections, which my Committee feel they need not enumerate.

4. From information placed at their disposal my Committee understand that the seat on the local Legislative Council allotted to the Indian Merchants Chamber, is not filled by a representative of the Indian Piece-goods Merchants as such but that Indian trade interests generally are fully protected by the regulations at present in force governing this election. They are therefore not in favour of any alteration of the system now followed with regard to the election of a representative of the Indian Commercial Community to the Bombay Legislative Council.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

Appendix B.

Administration in Bombay of the Indian Factories Act.

No. 4613.

GENERAL DEPARTMENT,
BOMBAY CASTLE, 10th June 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I am directed to refer to your letters, dated respectively the 7th January and 6th February 1914, in which you raise certain points in connexion with the administration in Bombay of the Indian Factories Act in regard to which your Association considers that it has ground for complaint. The representations contained in those letters have received the careful consideration of Government, and I am now to communicate to you the following observations in regard to the several points raised.

2. With reference to the request that the Association may be given an assurance that in future the appointment of Chief Inspector of Factories will never be filled except by a technical expert possessing a practical working knowledge and experience of mill machinery, I am to observe that there are comparatively few factory inspectors either in India or in England who possess this qualification, and that its possession is far from connoting, or being necessarily concomitant with, the presence of the particular kind of capacity, experience and knowledge which is essential for efficient factory inspection. To make appointment to the Chief Inspectorship strictly conditional on the possession of a practical working experience of mill machinery would involve the passing over of a number of the most efficient inspectors on the staff of the department, and might necessitate the selection of a man who, though possessing the particular kind of experience referred to, was from the point of view of inspection and

of the control of inspecting staff, appreciably less efficient. In the circumstances I am to say that Government are unable to give the assurance desired, but must reserve to themselves complete and unfettered discretion in the choice of the incumbent of the Chief Inspectorship.

3. In regard to the next point raised by your Association I am to say that while Government concur in that body's interpretation of Section 18 (1) (c) and (2) of the Act as restricting to a particular part of the machinery of a particular mill the power of an inspector to pass an order for fencing not required by any substantive provision of the Act or by any rule passed under Section 18 (1) (c) thereof, they are unable to admit the accuracy of the statement that the inspectors frequently pass orders in contravention of this interpretation. Enquiry shows that there have, as a matter of fact, been only two instances which could in any way be regarded as being of the nature referred to. In the first instance the Chief Inspector issued a circular to millowners drawing attention to the necessity of fitting the dust-chamber doors of scutchers with automatic locking apparatus, and, in accordance with this circular, passed specific orders under Section 18 (2) in the inspection books of a number of mills. In the other case the Chief Inspector directed the issue of individual orders under Section 18 (2) to all mills in which nip-guards had not been provided for calendering machines. If, as appears to have been the case, it was the intention in both these instances that a certain part of the machinery should, in every mill in which such part exists, be fenced in one and the same way, irrespective of the individual circumstances of each case, then Government are of opinion that the proper way of giving effect to that intention was to pass a general rule under Section 18 (1) (c), and not to proceed by a series of individual orders under Section 18 (2) all directed to the same object and having the same effect. Further enquiry will be made into these two cases, and Government will in due course take such action in regard to them as may appear desirable.

4. With regard to the reference in your letters to the case in which proceedings were instituted against the Textile Manufacturing Company, Limited, for having omitted to guard the dust-chamber doors of scutchers while the machine was working, it is understood that the principal contention of the Association is to the effect that the order requiring that the above precaution should be taken was in fact passed by the Collector himself, and that therefore he was acting *ultra vires* both in passing such an order and in subsequently deciding in appeal as to its validity and propriety. The facts of the case, however, are that the Chief Inspector noted in the inspection book of the mill in question an order to the effect that the dust-chamber doors of the scutchers should be secured in such a way that no operative could enter the chamber while the beater was working. Against this order by the Chief Inspector an appeal was made to the Collector under Section 50. The Collector held that the requirement to lock the panel doors of the scutchers was not one which could be regarded as prescribed by Rule 21 (VI), and that therefore the Chief Inspector's note was an order under Section 18 (2). He then proceeded to consider the validity and propriety of that order in his capacity of the appellate authority appointed under Section 50. In these circumstances I am to say that the ruling of the Collector as to the particular provision of law under which the Chief Inspector's order should be held to have been passed in no way constituted him the author of the order, and that he was therefore both legally and equitably competent to decide the appeal against the same.

5. With regard to the other grounds on which the Association disputes the legality and propriety of the Collector's decision in this case, I am to observe that the decision of the appellate authority under Section 13 (1) of the Act is final, and that no provision exists for its subjection to further appeal or for its modification as the result of consideration by higher authority. Government are unable to accede to the proposal of the Association that the Chief Presidency Magistrate should be appointed to be the authority for hearing appeals under Section 50 of the Act.

6. The Association finally refer to Rule 20 under the Act which requires the provision of flat bars for the guarding of ring and throstle frames. In regard to this requirement they

pre-sume that it was prescribed at the instance of the Chief Inspector and without reference to themselves, and they ask that in future, where there is a difference of opinion between the department and the Association in regard to a proposed rule, Government should refer the question to independent expert opinion before coming to a final decision. In this connexion I am to invite attention to my letter No. 789 of the 29th January 1913, in which it was pointed out that your Association had an opportunity of submitting to Government any representation regarding the new rule which they might have been desirous of making. I am further to observe that the prescription in the rule of flat instead of round bars was introduced mainly as a result of a recommendation reported to have been made by the Deputy Chairman of your Association. Finally it is understood that, although no legal ground exists for such a concession, the rule has in actual practice been enforced only in respect of ring frames erected or re-erected after the rules under the present Act came into force. In the circumstances the Governor in Council is not prepared to re-open the question of the propriety of this rule, the objections to which, as represented by the Association, have already been fully considered; nor can he give any undertaking that, in every case of the existence of a strong difference of opinion between the department and the Association, independent expert opinion shall necessarily be consulted. But at the same time I am desired to convey to the Association the assurance that no new rule affecting the interests of millowners will be passed without that body being afforded every reasonable opportunity of submitting their representations to Government and without such representations receiving the most careful consideration at the hands of the latter.—I have, etc.,

J. L. RIEU,
Secretary to the Government of Bombay.

No. 329 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 14th September 1914.

THE SECRETARY TO GOVERNMENT,
GENERAL DEPARTMENT,
Bombay.

SIR,

I am directed to acknowledge receipt of your letter No. 4613, dated 10th ultimo, in connection with the administration in Bombay of the Indian Factories Act, and to convey to Government the thanks of my Committee for the assurance contained in the final paragraph thereof, to the effect that no new rule, affecting the interests of Millowners, will be passed without an opportunity being afforded my Committee of submitting their representations thereon and without such representations receiving the most careful consideration of Government.

2. In connection with the second paragraph of your letter under reply, regarding the appointment of Chief Inspector of Factories, I am to refer you to paragraph 111, of the Report of the Indian Factory Labour Commission 1908, volume I. Herein the Commission recommend that full-time Inspectors should have Indian experience of the main industry of the province and be allowed to pass 3 months with a Factory Inspector in England as soon after their appointment as possible. My Committee venture respectfully to submit that if these recommendations were given effect to, a class of Inspector would be created from which it would be possible to select when occasion arises a Chief Inspector possessing the expert technical knowledge which my Committee consider absolutely necessary to secure efficient factory inspection.

3. I am also to state that my Committee view with alarm the principle which appears to govern the selection of Inspectors for the post of Chief Inspector. Mere seniority as an Inspector should not, my Committee submit, be the sole qualification for such an important post as Chief Inspector, and I am to express a hope that Government will again

consider the advisability of demanding from Inspectors a thorough practical knowledge of, and working experience in, mill machinery before confirming those officials in the senior post.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

No. 7987.

GENERAL DEPARTMENT,
BOMBAY CASTLE, 7th October 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I am directed to acknowledge the receipt of your letter No. 329, dated the 14th September 1914, on the subject of the appointment of Chief Inspector of Factories in the Bombay Presidency.

2. In reply, I am to say that if, as is understood to be the case, the assurance which your Association desires to receive from Government is to the effect that no Inspector will be appointed to the post of Chief Inspector who has not, before being appointed as Inspector, acquired a technical knowledge of mill machinery by actual employment in a mill, then Government are not prepared, for the reasons stated in my previous letter, to bind themselves by any such undertaking. They believe that the degree of knowledge of mill machinery and of the actual conditions of work in a mill requisite to enable a Chief Inspector to form correct conclusions as to what is dangerous and what is not dangerous and as to what can reasonably be demanded in the way of precautions against danger can, given the necessary qualifications in other respects, be acquired by experience as an Inspector, and that the particular form of training desired by the Association is not an essential.

3. I am further to say, with reference to the concluding paragraph of your letter under reply, that there is no foundation for the assumption that mere seniority as Inspector will be the sole determining, or even a preponderant, consideration with Government in their selection of an incumbent of the post of Chief Inspector when such selection is made from the ranks of the Inspectors.—I have, etc.,

J. L. BIEU,
Secretary to Government.

Appendix C.

Rules under the Factories Act.

ASSESSORS' FEES.

No. 1587.

GENERAL DEPARTMENT,
BOMBAY CASTLE, 28th February 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I am directed to forward herewith for information and for any remarks which the Association may have to offer a copy of Government Notification No. 1586, dated the 28th February

1914, containing the draft amended Sub-rule (3) of Rule 30 of the rules published in Government Notification No. 3099-A, dated the 15th May 1912, under the Indian Factories Act, 1911.—I have, etc.,

J. M. ANTIA,
for Secretary to Government.

GENERAL DEPARTMENT.

Bombay Castle, 28th February 1914.

No. 1586.—The following draft of a rule which the Governor in Council proposes under Section 37 of the Indian Factories Act, 1911 (XII of 1911), to substitute for Sub-rule (3) of Rule 30 of the rules issued in Government Notification No. 3099-A., dated the 15th May 1912, is published for the information of all persons likely to be effected thereby; and notice is hereby given that the new draft rule will be taken into consideration on or after the 15th of June 1914 and that any objections or suggestions which may be received by the Secretary to Government in the General Department before that date will be considered by the Governor in Council:—

“(3) An assessor appointed in accordance with the provisions of clause (2) shall receive a fee of rupees twenty-five for each day or each part of a day during which the appeal may be heard. He shall also receive a reasonable sum to cover the cost of attending at any place with the appellate authority in connection with the appeal. The fee and the allowance shall be paid by Government. The appellate authority shall decide what is a reasonable sum for the purposes of the allowance. But, where assessors have been appointed at the request of the appellant and the appeal has been decided wholly or partly against him, the appellate authority may direct that the fees and the allowances of the assessors shall be paid in whole or in part by the appellant.”

By order of his Excellency the Right Honourable the Governor in Council,

J. L. RIEU,
Secretary to Government.

No. 141 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 18th April 1914.

THE SECRETARY TO GOVERNMENT,
GENERAL DEPARTMENT,
Bombay.

SIR,

I am directed to acknowledge receipt of your letter No. 1587, dated 28th February last, forwarding, for information, and for any remarks this Association might wish to offer a copy of Government Notification No. 1586, containing the draft amended Sub-rule (3) of rule 30 of the rules published in Government Notification No. 3099-A, dated 15th May 1912, under the Indian Factories Act, 1911.

I am to state in reply that while my Committee approve the proposed alteration they would respectfully suggest that Government might be pleased to consider the desirability of relieving an appellant who wins his case outright of all responsibility of costs in the appeal.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

Appendix D.

Certification of Children under the Indian Factories Act.

BOMBAY, 11th June 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

DEAR SIR,

We are having a great deal of trouble in having children certified for employment in our Mills as half and full timers.

From enquiries made we are led to believe that all the Mills in Bombay are being put to the same inconvenience and trouble and therefore beg to suggest that the matter be laid before the Committee of the Association, and such steps be taken as they may think necessary to remedy the defects in the present system of certifying children.

According to Chapter IV, Section 23, of the Indian Factory Act, 1911, every child employed in a factory must be in possession of a certificate.

On children who apply to us for employment being asked for their certificates, they invariably state that they have never worked in a Mill before, but when sent to the Certifying Surgeon are refused certificates on the grounds that they have already been certified.

If the Mill authorities desire to employ a child placed in this position the only course open to them is to apply for a duplicate under section 37 (2) (c) 12, which provides for the issue of duplicates on payment of a fee of Re. 1 which is credited to Government.

The Certifying Surgeon states however that no duplicate certificate will be issued unless the numbers of the previous certificate of the children with the dates of issue are quoted, and a statement made that the previous certificates have been lost.

While we are aware that many of the children do their utmost to deceive the doctor and obtain two or three certificates which they possibly sell or pass on to their younger relatives, the present position of children who state they have never worked in a Mill before and whom the doctor states have already been certified is an extremely hard one.

Many of the children placed in this position have very possibly never been employed in a factory before and yet they are refused certificates and cannot therefore obtain work.

Even if they have worked in a factory before and have lost their certificates it is not likely that this class of persons will be able to quote the number and date of the lost certificates.

We would like the Committee to understand that we are not complaining in any way of the action of the Certifying Surgeon.

We quite see that his position is an extremely difficult one, misled as he is by many of children who go to him to be passed.

The present system of certifying children is however so faulty that it is impossible for the Certifying Surgeon except in a few cases to state with any degree of certainty whether the children have been certified before.

And even if he is practically certain that the child has been before him before it is certainly improbable that he will be able to find the child's certificates among the many thousands he issues every year.

We have considered the matter very carefully in order to see what steps can be taken to remedy the present defects and would suggest that instead of issuing certificates as at present, a certificate should be issued certifying children for employment in a specified Mill, and when the children leave the particular Mill for which the certificate is issued, the Manager of the Mill be made to return the Certificate to the Doctor.

In this way the number of children certified in Bombay would tally with the number employed in the Mills.

If a child sought employment in another Mill in Bombay he would then be forced to apply for a fresh certificate.

If necessary a charge of two or four annas might be made for each certificate thus issued and this could be paid by the Mill engaging the child.

When we visited the Certifying Surgeon in the above connection he complained that a great number of children were employed for 6 hours in one Mill and six hours in another thus working the whole day.

We beg to suggest that if the Agents of Mills forced the children to attend the Mill all day, though they were allowed to play for half that time this might be stopped.

We believe this practice has been in force in many Mills in Bombay for a number of years and has worked well.—We are, etc.,

KILLICK NIXON & Co.,
Agents,
KOHINSOOR MILLS CO.. LD.

No. 240 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 7th July 1914.

A. H. A. SIMCOX, Esq., I.C.S.,
COLLECTOR OF BOMBAY.

SIR,

I am directed to represent that my Committee have recently had under consideration the system at present in force of certifying children for employment in Mills as half and full timers, and as a result of the discussion that took place, it was decided to approach you in the matter and endeavour to arrange an interview at which the various points raised might be considered.

I have, therefore, the honour to request that you will kindly let me know whether you can arrange to receive in your office a small deputation of, say, 5 members of the Committee of this Association. I am also to request that if possible, the Certifying Surgeon might be invited to attend on the occasion.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

No. F. I.-281 of 1914.

BOMBAY COLLECTOR'S OFFICE,
FACTORY DEPARTMENT,
BOMBAY, 9th July 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I have to thank you for your letter No. 240, dated the 7th instant and to say that I shall be very glad to meet any deputation that may care to come here at 4 p.m. on Wednesday, the 15th July 1914, if this will suit.

2. Kindly inform me if you agree to date and time so that I may advise the Certifying Surgeon and the Chief Inspector of Factories.—I have, etc.,

A. H. A. SIMCOX,
Collector of Bombay.

No. 244 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 10th July 1914.

THE COLLECTOR OF BOMBAY.

SIR,

I have the honour to acknowledge receipt of your letter No. F. I.-281 of the 9th instant, and in reply to inform you that the members of the deputation of this Association will be pleased to call on you on Wednesday, 15th instant at 4 p.m.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

No. 806 of 1914.

FACTORY INSPECTION OFFICE,
BOMBAY, 30th September 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I have the honour to forward herewith for the information of your Association, a copy of the circular, dated the 15th September 1914, issued to the Managers of the Textile Factories, regarding instructions on the certification of children under the Indian Factories Act, 1911. —I have, etc.,

J. D. F. ENGEL,
Chief Inspector of Factories,
Bombay Presidency.

FACTORY INSPECTION OFFICE,
BOMBAY, 15th September 1914.

CIRCULAR.

*Instructions regarding the certification of children under
the Indian Factories Act, 1911.*

1. Children sent to the Certifying Surgeon for certification of age and physical fitness should be accompanied by a Clerk or Time-keeper from the Mill, who must produce the children's Register prescribed by Section 35 (Rule 26) and enter the names and other particulars pertaining to the children who have been granted certificates, and obtain the signature of the Certifying Surgeon against the names so entered.

2. The certificates granted shall be taken by the Clerk or Time-keeper and handed over to the Manager of the Mill, who will, on demand by an Inspector of Factories, be responsible for the production of a certificate for each child employed in the Mill.

3. Certificates corresponding to the names in the Register, and relating to children who have severed their connection with the Mill, or who have been absent from work without leave.

for an uninterrupted period of three months, or who are known to be employed in some other Mill shall also be produced on demand, and shall forthwith be taken charge of by the Inspector and returned to the Certifying Surgeon through the Inspector appointed under Government Resolution No. 7296-A, dated the 30th October 1912, as the Inspector to whom all notices must be sent.

4. A column should be provided in the Register for the entry of the approximate age of the child as stated in the certificate.

5. Certificates will be granted to children (if qualified) whether they have been previously certified or not; and the name of the Mill presenting the children for examination shall be endorsed on the certificate, without which no certificate will be accepted.

6. Certificates will only be of value to the Mill in whose favour they are granted (they should therefore not be transferred from one Mill to another).

7. Any child who desires to leave the Mill in which he is employed may, in the presence of the Inspector of Factories, obtain his certificate from the Manager. The Inspector shall endorse the certificate in favour of the other Mill, and send it to the Manager of the Mill. He shall also make an endorsement to that effect against the name of the child in the Register.

8. Any certificates, for purposes of the Indian Factories Act, shall on demand be handed over to an Inspector of Factories, who shall grant a receipt for them, and return them to the Manager, when done with, at the earliest possible date.

(Signed) J. D. F. ENGEL,
Chief Inspector of Factories, Bombay Presidency.

No. 770 of 1914.

Copy forwarded to the Manager of the _____ Mill, for information and guidance.

FACTORY INSPECTION OFFICE,
BOMBAY, 15th September 1914. }

J. D. F. ENGEL,
Chief Inspector of Factories,
Bombay Presidency.

Appendix E.

Hours of Employment of Children.

No. 4592-A.

GENERAL DEPARTMENT,
BOMBAY CASTLE, 10th June, 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I am directed to forward herewith a copy of Government Notification No. 4591, dated the 10th June 1914, publishing provisionally certain amendments to the rules promulgated under the Indian Factories Act, 1911, and to request that your Association will favour Government with their opinion on the proposed amendments.—I have, etc.,

PALANJI N. DAVER,
for Secretary to Government.

GENERAL DEPARTMENT.

∫ *Bombay Castle, 10th June 1914.*

No. 4591.—The following draft of a notification which it is proposed to issue in exercise of the powers conferred by Section 37 of the Indian Factories Act, 1911 (XII of 1911) is published as required by Section 39, Sub-section (1), of the said Act for the information of all persons likely to be affected thereby; and notice is hereby given that the draft will be taken into consideration by the Governor in Council on or after the 15th day of September 1914.

2. Any objections or suggestions which may be sent to the Secretary to Government in the General Department before the date aforesaid will be considered by the Governor in Council.

Draft Notification.

In exercise of the powers conferred by Section 37 of the Indian Factories Act, 1911 (XII of 1911), the Governor in Council is pleased to amend the Bombay Factory Rules,* 1912, published in Government Notification No. 3099-A, dated the 15th May 1912, as follows, namely:—

Below Rule 28 of the said rules the following rule shall be added, namely:

- “ 28A. (1) No child shall be employed in a textile factory except on a system of shifts to be approved by the Inspector.
- (2) No child shall be employed in a textile factory continuously for any period exceeding three hours.
- (3) Every child employed in a textile factory shall be relieved of all work for a period of not less than three hours after each period of employment.”

By order of His Excellency the Right Honourable the Governor in Council,

J. L. RIEU,
Secretary to Government.

No. 285 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 6th August 1914.

THE SECRETARY TO GOVERNMENT,
GENERAL DEPARTMENT,
Bombay.

SIR,

I have the honour to acknowledge receipt of your letter No. 4592-A, dated the 10th June 1914, forwarding copies of Government Notification No. 4591, and requesting the opinion of my Committee on the proposed amendments to the rules under the Indian Factories Act, 1911, therein provisionally published.

2. In reply I am directed to state that my Committee are not in favour of the suggested Rule 28-A whereby (1) No child shall be employed in a textile factory except on a system of shifts to be approved by the Inspector, (2) No child shall be employed in a textile factory continuously for any period exceeding three hours, and (3) every child so employed shall be relieved of all work for a period of not less than three hours after each period of employment. My Committee respectfully submit that a system of three hour shifts, if rendered compulsory, would result in considerable inconvenience to Millowners.

3. I am further to point out that my Committee, after consultation with the Association's Solicitors, are of opinion that the proposed amendment of the Bombay Factory Rules, 1912, by a notification of the nature of the draft submitted would be *ultra vires* of the Governor in Council and for the following reasons:—

4. By Section 31 (1) of the Indian Factories Act, 1911, it is enacted that subject to the control of the Governor General in Council the Local Government may make rules for the

* Published at pages 748—751 of Part I of the *Bombay Government Gazette* of the 23rd May 1912.

purpose of carrying into effect the provisions of the Act. By Section 37 (2) it is enacted that in particular and without prejudice to the generality of the foregoing power, such rules may provide for the various matters specified in that Sub-section. The employment of children in factory is not one of the matters specified in Sub-section (2) of Section 37.

5. By Section 32 of the Act, which applies to textile factories only, it is enacted that no child shall be employed in any textile factory for more than six hours in any one day. It would appear that apart from any other section of the Act, the Governor in Council would have power under Section 37 (1) to make rules for the purpose of carrying into effect the provisions of Section 32.

6. By Section 26 of the Act, however, it is enacted that the manager of a factory shall fix specified hours for the employment of each child employed in such factory, and no child shall be employed except during such hours.

7. A textile factory (and the proposed amendment of the rules is confined to textile factories only) is a factory: *vide* definition of textile factory in Section 2 (9) of the Act. The fixing of the hours during which a child shall work in any factory including a textile factory, is therefore vested by Section 26 of the Act in the manager of the factory.

8. That the legislature intended that the administration of the factory should remain with the management is, my Committee think, evidenced by Sections 21 (1) and 36 (1) of the Act. Section 21 (1) enacts that in every factory there shall be fixed for each working day, at intervals not exceeding six hours, periods of not less than half an hour, during which all work shall be discontinued. Section 36 (1) enacts that there shall be affixed in some conspicuous place near the main entrance of the factory a notice containing the standing orders of the factory upon the following matters, namely:—

“(d) the hours of employment of women and children respectively if not employed in shifts.”

“The standing orders of the factory” can, my Committee think only mean the standing orders of the management of the factory.

9. It would therefore appear to my Committee that Section (1) of the proposed Rule 28-A over-rides the provisions of Section 26 of the Act, while Sections (2) and (3) of the proposed Rule 28-A override those of Section 21 (1) of the Act.

10. My Committee are consequently of opinion that the proposed new Rule 28-A is *ultra vires* of the Governor in Council and that the proposed amendments could only be made by amending the Act.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

Appendix F.

Working Hours of Mills.

No. F. I.-1126 of 1914.

BOMBAY COLLECTOR'S OFFICE,
FACTORY DEPARTMENT,
BOMBAY, 9th April 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I have the honour to invite reference to Government Resolution, General Department, No. 8706, dated the 17th December 1912, and to enquire if you have to suggest any changes

in the sets of morning and evening hours at present in force in Mills in the Presidency proper, and if so, to request you to kindly communicate your suggestions to this Office with reasons in support thereof.—I have, etc.,

E. L. SALE,
Collector of Bombay.

No. 183 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 8th May 1914.

THE COLLECTOR OF BOMBAY,
Bombay.

SIR,

I am directed to acknowledge receipt of your letter No. F. I./126, dated the 9th ultimo, in connection with the sets of morning and evening hours at present in force in Mills in this Presidency, and to inform you, in reply, that my Committee have no suggestions to put forward in this connection.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

Appendix G.

Rules under the Bombay Boiler Inspection Act.

No. 7.

GENERAL DEPARTMENT,
BOMBAY CASTLE, 3rd January 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I am directed to forward herewith 10 copies of two sets of draft rules under the Bombay Boiler Inspection Act entitled respectively "The Bombay Boiler Act Administration Rules" and "the Bombay Boiler Inspection Rules," and to request that Government may be favoured with the views of your Association on the proposed rules.—I have, etc.,

J. L. RIEU,
Secretary to Government.

RULES UNDER THE BOMBAY BOILER INSPECTION ACT, 191 .

GENERAL DEPARTMENT.

Bombay Castle, 191 .

No. .—In exercise of the powers conferred by sections of the Bombay Boiler Inspection Act, 191), (Bom. of 191), the Governor in Council is pleased to make the following rules, namely:—

Preliminary.

Division of Rules. 1. (1) These rules are divided into three Parts as follows:—

Part I.—Bombay Boiler Act Administration Rules.

Part II.—Bombay Engineers' Examination Rules.

Part III.—Bombay Boiler Inspection Rules.

Definitions. (2) In these rules, unless there is anything repugnant in the subject or context,—

- (a) "the Act" means the Bombay Boiler Inspection Act, 191 ;
- (b) "Section" means a section of the said Act ;
- (c) "the Collector" means
- (i) in the City of Bombay, the Collector of Bombay,
 - (ii) in Aden, the First Assistant Resident, and
 - (iii) elsewhere, the chief local officer in charge of the revenue administration of a district ;
- (d) "Aden" means the Settlement of Aden ;
- (e) the "Presidency proper" includes every part of the Presidency of Bombay other than Aden and Sind ;
- "The Presidency" includes Sind and every other part of the Presidency of Bombay except Aden, and "Mofussil" means any part of the Presidency except the City of Bombay ;
- (f) "Office" means the Bombay Boiler Inspection Office in which all records in connection with the working of the Act in the area where it is located are kept ;
- (g) "Inspection" means the inspection of boilers under the Act, and "inspection fees" mean fees leviable under sections 8 and 19 and these Rules.

PART I.

Short title. 2. The rules in this Part may be called the Bombay Boiler Act Administration Rules, 191 .

Inspector and inspections.

Duties and emoluments of Inspectors. 3. (1) No Inspector shall undertake any professional work unconnected with his duties under the Act.

(2) The emoluments of Inspectors shall consist—

(a) in Aden, entirely of inspection fees, and

(b) in the Presidency, entirely of monthly salaries payable by Government.

(3) Inspection fees received in the Presidency shall be placed to the credit of Government.

Boiler-inspection Office. 4. The location and charge of the offices for the undermentioned areas shall be as follows :—

Area.	Location.	Officer in charge.
For Aden	The Residency Office ...	Inspector.
For the Presidency proper.	The Town Custom House, Bombay.	Chief Inspector.
For Sind	Office of the Collector of Karachi.	Collector.

Duties of Chief Inspector or Inspectors. 5. (1) The Chief Inspector shall direct all work in connection with inspection duties within the Presidency proper and shall check and approve the calculations and other particulars for boilers submitted by the Junior Inspectors.

He shall keep the following records, namely :—

(a) a Register of boilers within the Presidency with their dimensions and other particulars,

(b) an Index containing the designations of mills and factories within the Presidency with the number and horse power of the boilers and engines and the name of the engineer in charge and the grade and number of his certificate,

- (c) an account of fees paid for inspection, and
- (d) such other records as may, from time to time, be required in conducting the work of the office.

(2) The Chief Inspector shall act under the orders of the Collector of Bombay.

He shall make to the Collector of Bombay and to the Collectors of the Districts in the Presidency all reports concerning the working of the Act in their respective charges. He may, whenever he thinks such a course necessary or desirable, make any particular inspection or visit any place wherein a boiler is kept in any part of the Presidency in order to supervise the work and proceedings of the Junior Inspectors or for purposes of enquiry into accidents to boilers or into their working conditions.

Aden Inspector's duties. 6. Inspection in Aden shall be conducted by an Inspector who shall

- (a) act under the orders of the Political Resident, and
- (b) make reports to that officer through the Collector.

Ordinary duties of Junior Inspectors. 7 (1) Inspections shall ordinarily be made by a Junior Inspector.

(2) All Junior Inspectors shall

- (a) be subordinate to the Chief Inspector,
- (b) submit every week to the Chief Inspector or, in the case of the Junior Inspector in Sind, the Collector of Karachi, copies of their diaries for his information and record,
- (c) make reports to the Chief Inspector or, in the case of the Junior Inspector in Sind, the Collector of Karachi,
- (d) submit for the check and approval of the Chief Inspector, all calculations of boiler strengths and pressures made by them in respect of their inspections.

Records to be kept by Junior Inspectors. 8. Every Junior Inspector shall keep the following records, namely :—

- (a) a diary of the work which he performs from day to day in which he shall enter the name of each place visited ; each piece of work performed by him under the Act ; the fees earned on account of such work and such additional particulars as he or his superior from time to time thinks necessary,
- (b) an inspection book for each boiler inspected in which he shall record his inspection notes and calculations and,
- (c) such other statements and records as may from time to time be required,
- (d) the Inspector in Sind shall, in addition to the foregoing requirements, keep such records for the Division of Sind as are required to be kept in the Head Office for the rest of the Presidency.

Subordination of Inspectors in the Presidency to Collectors. 9. Every Junior Inspector in the Presidency shall act

- (a) in respect of travelling and office work, under the orders of the Collector of Bombay, or, in the case of the Junior Inspector in Sind, the Collector of Karachi : and
- (b) in respect of inspections in the mofussil and any action connected therewith, under the orders of the Collector of the district in which any such inspection is required or made.

10. An Inspector against whose proceedings an appeal is made shall attend every meeting of any Commission appointed under Section 5 to hear such appeal and shall make statements on such matters and submit such plans to the Commission as he thinks necessary, or as are called for by the Commission.

Duties of Inspectors with respect to Commissions

Provisions as to inspection of boilers.

11 (1) Inspections shall be carried out in accordance with Part III of these rules.

(2) Upon receipt of an application for the inspection of a boiler and after ascertaining that the fees chargeable for inspection have been paid, the Chief Inspector, if the inspection is to be made within the Island of Bombay or its vicinity, or the Inspector, if the inspection is to be made in the mofussil, shall issue a notice informing the applicant of the date upon which the inspection is to be made.

If the date fixed upon for the inspection by the Inspector is not convenient to the applicant, the latter shall inform the Inspector of the fact as early as possible and the Inspector may, if his other arrangements permit, fix another date.

(3) The inspection notice shall contain instructions as to the manner in which the boiler and its appurtenances are to be prepared for inspection and, if on visiting the Inspector finds that the owner or person in charge of the boiler to be examined has failed to comply in any material point with the requirements of the inspection notice, he shall defer his inspection and report the case to the Chief Inspector for orders.

The same procedure shall be observed with regard to witnessing hydraulic tests and steam tests.

12 (1) The inspection fee shall cover the thorough inspection, hydraulic test and steam test, when such are required, subject to the condition that the examination of the boiler is completed within six months from the date of commencement of inspection in accordance with Schedule B of the Act.

But, when a visit is made by the Inspector and he finds that any material requirement specified in his inspection notice has not been complied with and that in consequence he is unable to complete any part of the examination of the boiler or its appurtenances, the additional fees leviable under Schedule B of the Act shall be charged, which, together with the ordinary fee paid before the commencement of the examination, shall be the fees for examination under Section 8 (4) of the Act.

The remaining part of the examination shall not be proceeded with until such additional fees are paid.

(2) Fees paid in excess and fees paid for an inspection which for any reason not due to any fault or omission of the boiler-owner has not been made, shall be refunded if a refund is applied for within one year from the date of payment but no fee or part of a fee, not being in excess, shall be refunded if the inspection is once begun.

(3) When an owner is willing to accept a certificate for a period of less than twelve months in order to approximate the date of annual inspection to that of other boilers in the locality, a certificate for such period less than twelve months as may be necessary for such approximation of dates may be granted at a reduced fee, to be calculated at one-twelfth of the ordinary fee for each full month, portions of a month not being reckoned.

(4) Inspection fees shall, until further notice, be levied according to the following scale:—

	Rs.
(a) For each boiler not exceeding 20 N. H. P.	20
(b) For each boiler exceeding 20 N. H. P. but not exceeding 30 N.H.P. ...	25
(c) For each boiler exceeding 30 N. H. P. but not exceeding 50 N.H.P. ...	35
(d) For each boiler exceeding 50 N. H. P.	40

The nominal horse power of a boiler shall, in determining inspection fees, be ascertained by the rule for the determination of nominal horse power of boilers under Part III of these rules.

The period specified in a provisional order granted under Section 6 (2) or in an original certificate granted under Section 10 shall begin from the date of the inspection after the hydraulic test.

Date from which a certificate or provisional order is to be in force.

For ordinary inspections for which a hydraulic test is not required the period of the certificate should date from the day on which the inspection is completed.

13. Duplicate certificates under Section 11 of the Act shall be signed by the Chief Inspector and all ordinary certificates issued from the Head Office shall be countersigned by him.

Commissions.

14 (1) Elsewhere than in Aden, Commissions appointed by Government under Section 5 shall consist of three members, one of whom shall be President of the Commission.

(2) In Aden the Commission shall consist of one person appointed by Government, who shall perform the duties hereinafter imposed on the President of a Commission elsewhere.

(3) The appointments and the terms for which they are respectively made shall be notified in the *Bombay Government Gazette*.

15. Members of Commissions shall assemble at the request of the Collector at his office, or at such other place as he may specify, whenever necessary for hearing appeals under Section 13 or determining questions under Section 16, or any matter relating to the Act, and a clerk of the Boiler Office or of the Collector's Office will act as Clerk to the Commission.

16. Every member of a Commission shall be entitled to receive in Bombay a fee of thirty rupees and elsewhere of such amount as may from time to time be prescribed by Government for each district, for each meeting of the Commission at which any duty prescribed by the Act is performed by the Commission and which he attends from the beginning to the end thereof. In the mofussil every member of a Commission shall also be entitled to travelling expenses, if any have been incurred by him.

17. Where it is alleged that any Engineer in charge of a boiler or boilers of any horse-power is incompetent or addicted to drunkenness or has been guilty of any serious misconduct or negligence, it shall be the duty of the Collector to enquire into such allegation and at the close of such enquiry to make such recommendation to Government with reference to Section 27 as he thinks fit.

Appeals and enquiries under Section 16.

18. Every appeal under Section 13 shall be made in writing, either in English or in the vernacular.

19. It may either be presented personally to the Collector or sent by post.

20. The petition of appeal shall be accompanied by the original of the reasons given in writing by the Inspector, for the refusal of the certificate or by a certified copy of such reasons.

21. The petition shall state the grounds of appeal against the reasons given by the Inspectors for refusing the certificate.

(1) On receipt of an appeal forwarded by the Collector, the Commission shall issue a notice to the appellant stating a date not later than that within which the appeal must, under section 14, be heard, on which it is proposed to hear the appeal, and informing him that if he wishes to be heard in support of the appeal or to produce evidence, he must be present either in person or by an authorised agent, with his evidence, on the date specified.

(2) The notice shall be sent to such address as shall be entered in the petition of appeal.

(3) If the petitioner is not present on the date fixed, the appeal shall be decided in his absence.

23. Where it appears to the Collector that enquiry should be made with regard to any Enquiry. of the matters mentioned in sub-section (1) of section 16, he shall inform the Commission, which shall then take action under the section. The Commission may also take action under the section of its own motion.

24. (1) Notice shall be sent by the Commission to the person regarding whose Notice of enquiry. certificate an enquiry is to be held, specifying briefly the charge made and fixing the date of the enquiry.

(2) On such date, he may either submit a written statement, or may be present in person or by authorised agent, and he shall be allowed to produce any evidence he may have bearing on the facts under enquiry.

25. The Commission may, at its discretion, summon any witness whose evidence Witnesses. it considers necessary for the purposes of any enquiry held by it.

26. All decisions of the Commission shall be in accordance with the votes of Decision. the majority of the members. The President shall have a casting vote.

27. The proceedings of the Commission shall be in writing and shall be signed by the Proceedings. President. A copy of any order passed shall be given to the person affected by it, if he applies for it, on payment of copying charges and stamp fees, if any.

28. (1) If the Collector has reason to believe, from any cause whatever, that an Enquiries under section 27, sub-section 1. enquiry should be made under section 27, sub-section (1), in order to ascertain whether an Engineer possessing a certificate of competency or service is incompetent or addicted to drunkenness or has been guilty of any serious misconduct or negligence he may either make such enquiry personally or cause it to be made by an Assistant or Deputy Collector.

(2) The Collector shall appoint as assessor in such enquiry—

(a) in the City of Bombay or the City of Karachi, a member of the local Boiler Commission;

(b) elsewhere, any person resident in the district who holds a first class certificate of competency under the Act and who appears to the Collector to be a fit and proper person to be an assessor.

When the Collector is unable to find such a person within the limits of his district, he shall request the Collector of Bombay to depute an assessor, and the Collector of Bombay shall comply with such request.

(3) The enquiry shall be held in presence of the Engineer whose conduct forms the subject of the enquiry, and who shall be allowed to make any statement he may wish to make and to produce evidence in his defence.

(4) The Collector shall forward to Government the record of the enquiry together with the opinions of the officer conducting the enquiry and of the assessors, and shall make such recommendation with reference to section 27 as he may think fit.

(5) The assessor shall be paid fees at the rate of Rs. 30 for the first hour of his attendance at the enquiry and Rs. 15 for each subsequent hour, subject to a limit of Rs. 50 per diem. In the case of an assessor deputed by the Collector of Bombay under the last sentence of sub-rule (2) of this rule, the rate of fee shall be fixed by the Collector of Bombay, and the assessor shall also be paid travelling expenses.

29. Any owner of a boiler who engages an Engineer shall at once furnish to the Boiler Particulars to be given on engagement of Engineer. Department particulars of the name and qualifications of the said Engineer, with the number and date of issue of his certificate.

CONTENTS.

PART III.

The Bombay Boiler Inspection Rules.

	Rule.	Sub-rule or Clause.	Page.		Rule.	Sub-rule or Clause.	Page.
PRELIMINARY.				HYDRAULIC TESTS—contd.			
Short title ... ..	...	...	...	Hydraulic test to determine fitness in certain cases ...	20	8	
Authority for rules... ..	...	...	...	Test, except in certain cases to be witnessed when boiler is in position ...	20	9	
Date of enforcement ...	...	...	...	Mountings to be in place at tests... ..	20	10	
GENERAL RULES FOR THE GUIDANCE OF INSPECTORS.				STEAM TESTS.			
Duties of Inspectors ...	1	...	...	Procedure regarding steam tests... ..	21	1 & 2	
Pressure not to be determined by calculation	2	...	...	Standard pressure gauges to be used	21	3	
Inspection and hydraulic test to be taken before issue of provisional order.	3	...	...	MATERIAL FOR BOILERS.			
Inspection, hydraulic test and steam test to be taken before issue of certificate..	4	...	...	Most suitable material for boilers	22	1	
Pressure not to be altered without authority	5	...	...	Material manufactured and inspected abroad	22	2	
Submission of plans... ..	6	...	...	Inspection of material by well-known makers in Great Britain	22	3	
Boilers built abroad	7	...	...	Steel maker's certificate ...	22	4	
Plans and particulars required for new boilers and for extensive alterations	8	...	...	Bessemer steel and open hearth basic steel	22	5	
Procedure at subsequent inspections... ..	9	...	...	STEEL—			
Precautions regarding concealed parts	10	...	...	Process of manufacture ...	23	1	
Entries in inspection books.	11	...	...	Freedom from defect and treatment of test pieces.	23	2	
Repairs to boilers	12	...	...	Selection of test pieces ...	23	3	
Inspector to enter boiler at inspections when possible.	13	...	...	Number of tests in certain cases	23	4	
Procedure regarding inspection of small boilers	14	...	...	Duplicate tests	23	5	
Preparation required for thorough inspection	15	...	...	Stamping of material ...	23	6	
Preparation required for hydraulic test	16	1	...	Material proving unsatisfactory to be rejected... ..	23	7	
Preparation required for steam test	16	2	...	Standard test pieces ...	23	8	
Engraving of Registry Number	16	3	...	Bending tests	23	9	
MEASUREMENT OF FIRE GRATE.				Plates—Number of tests .	23	10	
External cylindrical furnaces of horizontal boilers... ..	18	1 & 2	...	Do. —Preparation of test specimens	23	11	
Chain grate stokers	18	3	...	Do. —Temper bends ...	23	12	
Locomotive and Vertical Type Boilers	18	4	...	Do. —Tensile strength and elongation... ..	23	13	
Externally fired boilers	18	5	...	Do. —Bend tests... ..	23	14	
Special fire grates	18	6	...	Angle Rivet and Stay Bars—Number of tests	23	15	
DETERMINATION OF NOMINAL HORSE POWER.				Do. —Tensile strength and elongation of stay and angle bars.	23	16	
Reciprocating engines	19	...	...	Do. —Bend tests	23	17	
Turbine engines	19	...	...	Rivet bars—Tensile strength and elongation of rivet bars	23	18	
Boilers	19	...	...	Rivets—Nature of tests ...	23	19	
HYDRAULIC TESTS.				<i>Steam Pipes and Boiler Tubes, etc.</i> —Solid drawn steel steam pipes and boiler tubes, etc., subject to internal pressure ...			
New boilers	20	1	...	<i>Steam Pipes and Boiler Tubes, etc.</i> —Solid drawn steel tubes subject to external pressure ...			
Small boilers... ..	20	2	...	<i>Steam Pipes and Boiler Tubes, etc.</i> —Lap welded steel tubes subject to external pressure ...			
Tests after re-erection ...	20	3	...				
Standard pressure gauges to be used: gaugings	20	5	...				
When shell is to be bared ...	20	6	...				
Examination after test ...	20	7	...				

X9(M71).231, 4M75:1

E4

112737

CONTENTS—continued.

	Rule.	Sub-rule or Clause.	Page.		Rule.	Sub-rule or Clause.	Page.
MATERIAL FOR BOILERS —contd.				RULES AND FORMULÆ FOR DETERMINING WORKING PRESSURES— contd.			
<i>Steam Pipes and Boiler Tubes, etc.</i> —General re- quirements regarding tubes	23	23		CURVED END PLATES ...	32	...	
STEEL CASTINGS	24	1		Hemispherical ends in two or more pieces, Equa- tion (2)	32	1	
Number of tests	24	2		Hemispherical or dished ends of drums and Vertical Type Boilers, Equation (5)	32	2	
Tensile strength and elongation	24	3		Hemispherical or dished ends of drums subject to external pressure, Equa- tion (4)	32	3	
Bend tests	24	4		Dished ends of Lancashire and Cornish Type Boil- ers, Equation (5)	32	4	
WROUGHT IRON	25	1		General requirements, Equation (5)	32	5	
Iron lap welded tubes subject to external pres- sure	25	2		Material below require- ments	32	6	
COPPER —Plates	26	1					
Do. —Bars	26	2		FLAT SURFACES	33	...	
RULES AND FORMULÆ FOR DETERMINING WORKING PRESSURES.				Equation (7)	33	1	
Rules and formulæ to be observed in making calcu- lations	27	...		Material below require- ments	33	2	
SHELL—				Constants—Regularly spaced bolt or screw stays as in Marine Type and Locomotive Type Boilers, Equation (8) ...	33	3	
<i>Design, Construction and Workmanship</i>	28	...		Irregularly spaced gusset or riveted stays as in the ends of Lancashire Cornish and some Loco- motive and Vertical Type Boilers, Equation (9)	33	4	
Minimum thickness of plate and arrangement of seams	28	1		Circular flat ends as in crown plates of Vertical Type Boilers, etc. ...	33	5	
Double butt strapped seams given preference; formation of seams ...	28	2		Circular flat ends of drums and bolted covers	33	6	
Welded seams and local heating	28	3		Plate margins, Equation (10)	33	7	
Compensation and staying of openings in boiler shells	28	4					
Shell weakened by lines of holes below strength of longitudinal seam ...	28	5		STAYS AND BOLTS ...	34	...	
Stand blocks and pad pieces	28	6		Direct bolt, screw and tube stays, Equation (11)	34	1	
<i>Tensile and shearing strengths to be used in calculations</i>	29	...		Diagonal rod or bar stays Gusset stays, Equations (12), (13), (14), (15), (16), (17), (18), and (19). Bolts of ends, covers and small shells, Equation (20)	34	2	
Minimum tensile strength to be used in calcula- tions	29	1		Up take stays of Vertical Type Boilers, Equation (21)	34	3	
Steel plates for which no proofs of tests are pro- duced	29	2		Table of stresses allowed. Welded stays	34	4	
Steel rivets	29	3		Minimum thickness of stay tubes	34	5	
Iron rivets	29	4		Material below require- ments	34	6	
Copper plates and rivets. Tensile strength to be re- duced in certain cases ...	29	5		Stays in tension and com- pression	34	6	
DETERMINATION OF THE STRENGTH OF SHELL ...	30	...		GIRDER STAYS	35	...	
Strength of riveted seams	30	1		Solid or split girders of rectangular section sup- ported at ends only, Equation (22)	35	1	
Rivets in double shear ...	30	2					
Strength of circumferen- tial seams	30	3					
Strength of welded seams	30	4					
Solid rolled sections	30	5					
Working pressure—Equa- tion (1)	30	6					
FACTOR OF SAFETY FOR BOILER SHELLS	31	1					
TABLE OF ADDITIONS TO THE FACTOR OF SAFETY FOR BOILER SHELLS	31	2					

CONTENTS—*continued.*

	Rule.	Sub-rule or Clause.	Page.		Rule.	Sub-rule or Clause.	Page.
RULES AND FORMULÆ FOR DETERMINING WORKING PRESSURES— <i>contd.</i>				RULES AND FORMULÆ FOR DETERMINING WORKING PRESSURES— <i>contd.</i>			
GIRDER STAYS—<i>continued.</i>				FURNACES AND FIRE- BOXES—<i>continued.</i>			
Girders of I or other sec- tion supported at ends only, Equation (33) ...	35	2		Flanged ring furnaces of Horizontal Boilers, Equation (33) ...	37	4	
Plate and bolts ...	35	3		Corrugated furnaces of Horizontal Boilers, Equ- ation (33) ...	37	5	
Slung girders ...	35	4		Material below require- ments ...	37	6	
Girders supported by angle bars on shell ...	35	5		PIPES AND TUBES, Equa- tion (34) ...	38	...	
Fire-box roofs of special form ...	35	6		FITTINGS AND ACCESSORIES.			
Material below require- ments ...	35	7		The requisite fittings ...	39	...	
Girders of cast steel ...	35	8		Safety Valves, Equations (35), (36) and (37) ...	40	...	
TUBE PLATES ...	36	...		Steam pressure gauge ...	41	...	
Compression—Equation (24) ...	36	...		Glass Water Gauge and Test Cocks ...	42	...	
Staying—Equation (25) ...	36	2		Steam and Water Stop Valves ...	43	...	
Minimum thickness of steel and iron plates— Equation (26) ...	36	3		Blow Down Cocks, Valves and Pipes ...	44	...	
Minimum thickness of copper plates. Equa- tion (27) ...	36	5		Tester Cock ...	45	...	
FURNACES AND FIRE- BOXES—	37	...		Scum Cocks ...	46	...	
Plain circular furnaces of Horizontal and Vertical Type Boilers, Equations (28) and (29) ...	37	1a		Fusible Plug ...	47	...	
Cross tubes ...	37	1b		Manholes, mouthpieces and doors, Equations (38) and (39) ...	48	...	
Screwed stays in vertical type fire-boxes ...	37	1c		Steam pipes ...	49	...	
Small cylindrical fire- boxes, Equation (30) ...	37	1d		Economisers and Superheat- ers ...	50	...	
Hemispherical furnaces and dished furnace crowns of Vertical Type Boiler, Equation (31) ...	37	2		Salinometers and Thermo- meters ...	51	...	
Up takes of Vertical Type Boilers ...	37	3		APPENDIX.			
				Rules and formula for rivet- ed joints of boiler shells ...	...	...

PART III.

THE BOMBAY BOILER INSPECTION RULES.

191 .

PRELIMINARY.

Short title. *The rules in this part may be called the Bombay Boiler Inspection Rules, 191 .*

These rules are issued in pursuance of the Bombay Boiler Inspection Act, 191 , in
Authority for Rules. *supersession of the Bombay Rules for determining the duties of In-
spectors, 1902.*

Date of enforcement. *These rules shall come into force on the
, and shall not be retrospective in effect.*

GENERAL RULES FOR THE GUIDANCE OF INSPECTORS.

1. Inspectors are required by the Act to register boilers, determine the pressures at
Duties of Inspectors *which they are to be allowed to work and to grant certificates there-
for. See sections 7, 8 and 10 of the Act.*

2. (1) The Inspector shall ascertain the permissible working pressure for a boiler by making a series of calculations of the strength of the various parts ;
Pressure to be determined by calculation. such calculations being based on his measurements and, if satisfied with their correctness, on the dimensions and other particulars relating to the material and construction stated in the maker's certificates. He shall, in making his calculations, take due account, after careful examination of the material, workmanship and details of construction of each part.

(2) In his examination the Inspector may, if he deems necessary, bore the plates or other parts to ascertain their thickness.

(3) In making his calculations the Inspector is to be guided by the formulæ, factors and constants applicable to the parts in the rules for the time being in force.

If no formulæ, factor or constant applicable to the parts be contained in the rules, the Chief Inspector shall in his discretion, determine the fitness of such parts.

(4) The strength of the weakest part so calculated or determined shall determine the permissible working pressure of the boiler.

3. After carefully examining the boiler and its fittings internally and externally, and ascertaining by calculation the permissible working pressure, the
Inspection and hydraulic test to be taken before issue of provisional order. Inspector shall, before granting a provisional order under section 6, test the fitness of the boiler under water pressure in accordance with the requirements of Rule 20.

4. No Inspector shall grant an original certificate for a boiler, until he has fully satisfied himself as to its fittings, construction, material and workmanship ;
Inspection, hydraulic test and steam test to be taken before issue of certificate. calculated its permissible working pressure in accordance with the rules in force and obtained the Chief Inspector's approval to the amount, nor until he has satisfactorily tested the boiler under water pressure and under steam in accordance with the requirements of Rules 20 and 21.

5.* A pressure once allowed on a boiler is under no circumstances to be increased without the written authority of the Chief Inspector.
Pressure not to be altered without authority.

6. (1) In the case of boilers made or altered in the Bombay Presidency for use within the Presidency, the Boiler Inspection Department may receive for
Submission of plans. examination, before the commencement of the work, plans and particulars of the designs or alterations proposed in order to avoid questions as to design and material arising during the examination of the finished boilers.

(2) All such plans and particulars shall be submitted for examination to the Chief Inspector and he shall furnish the proposers with his opinion as to whether he is satisfied with the design and fitness of the parts for the intended pressure or, if not, what modifications may be necessary therein.

(3) When plans and particulars of boilers or of proposed alterations have been so received and approved, the Inspector in making his examination prior to granting a certificate, shall see that the designs, as approved, have been carefully followed out and that the materials correspond with the approved particulars furnished ; and he shall further carefully examine the workmanship and hydraulically test the boiler in accordance with the rules in force.

7. In determining the permissible working pressure for boilers made, and imported
Boilers built abroad. from, abroad the Boiler Inspection Department will take into account and make suitable allowance for those built under the supervision of a competent inspecting authority recognized by the Department when a certificate to the effect that the boiler had been supervised during its construction and complied with the requirements of the Department's rules in force at the time for the intended pressure, is produced.

8. (1) The plans and particulars to be supplied with every new boiler about to be registered and in the case of extensive repairs to old boilers, must be Plans and particulars required for new boilers and for extensive alterations. in English measurements and text and are :-

- (a) A fully dimensioned drawing showing a longitudinal section and an end view of the boiler.
- (b) A maker's specification or certificate containing a description of the boiler with its principal dimensions ; particulars of the nature of the material used in its construction ; the thickness of the plates ; the diameter of, and method of forming, the rivet holes in the shell plates or any peculiarity in the formation of the shell, such as solid rolling or welding ; the hydraulic test pressure to which it was subjected and the intended working pressure.
- (c) In the case of steel boilers, the plate maker's certificates of tests of material, which should contain the dimensions of the various plates or other parts ; the cross dimensions of the test pieces ; the actual breaking load on the test piece and the breaking load in tons per square inch on the test piece ; the percentage of extension and length on which it was measured ; particulars of bend tests ; the numbers stamped on the plates or parts and the numbers of the charges from which they were made.

(2) The maker's drawing and certificates of manufacture must bear a number corresponding with the maker's number of the boiler and must be signed by the makers or Works Manager of the Works. In this respect the signature of agents or representatives in other parts will not be recognized.

(3) The steel maker's test results certificate must bear the name of the firm who made the steel and the name of the firm who made the plates and bear a certificate initialed by the Test House Manager in the form given under Rule 22.

(4) The drawings may consist of legible contact prints on strong paper and they, together with the other papers hereinbefore mentioned, shall be filed in the Boiler Inspection Office.

9. The Inspector in making subsequent inspections should, among other things, care- Procedure at subsequent inspections. fully gauge and record the circularity of furnaces of boilers having circular furnaces ; note for renewal any broken or slack rivets in gusset stays or elsewhere or fractured gusset angle bars ; carefully examine the bends of furnace flanges, corners of dished, or flanged, end and crown plates for grooving or fracture ; sound screwed stays for breakages ; test smoke tubes for thinning ; bore wasted plates when necessary to ascertain their thickness ; examine all mountings internally and externally and have all internally fitted manhole and other doors tried in place to satisfy himself of their fit.

10. Particular attention should be paid to the external parts of boilers in way of Precautions regarding concealed parts. seating blocks especially when the situation is damp and, having regard to many cases in which serious defects have been discovered, Inspectors should take care, in order to ensure proper inspection, that boilers, the whole of the outside of which cannot be readily examined, are cleared, whenever they consider it necessary, of any concealing covering, supports or fittings. If the owners in any special case have any good reasons for not wishing to clear them when the Inspector requires it, the Inspector should submit the whole case in detail to the Chief Inspector for his consideration and orders. The Inspector must, however, recollect that he is not to certify as efficient any boiler respecting which he cannot thoroughly satisfy himself. Boilers which have been so cleared should, if the Inspector considers it necessary, be subjected to the hydraulic test before the brickwork is rebuilt. See Rule 20.

11. Inspectors should record in their inspection books the dates on which boilers are inspected, when and to what extent they have been cleared from brickwork or other coverings and whether the boilers were set or not when examined, and if not set, where they were examined.

12. (1) The Inspector should state in his certificate what requirements, if any, with regard to hydraulic test, removal of lagging, brickwork or other concealing part should be complied with at the next inspection so as to enable the owner to have the same properly carried out at that time, but omission to do so is not to deter the Inspector from requiring a hydraulic test or further removal of concealing parts which he may consider necessary for his inspection.

(2) He should, for the same reason, also state in his certificate his requirements regarding the renewal or repair of any part that may be considered fit only for the period of the certificate.

(3) When the Inspector is unable to grant a certificate he should inform the owner in writing of his reasons for refusing to issue a certificate and state what repairs or renewals to the boiler are, in his opinion, necessary before he will grant the same.

13. Extensive repairs such as renewal of furnaces, end plates, parts of shell, fire-boxes, girders, etc., should be supervised, so far as his other duties will permit, by the Inspector, and at such times when fire-boxes and smoke tubes of locomotive type boilers are withdrawn advantage of the opportunity should be taken to inspect the internal parts otherwise inaccessible to close inspection.

The renewed parts should be treated as parts of a new boiler and must comply with the rules in force at the time for the intended pressure. See Rules 6 (3), 8 and 20 (3), regarding repairs and subsequent hydraulic test.

14. (1) At every inspection of a steam boiler the Inspector shall, if the internal construction and size of the boiler will allow of it, go inside it, and make a thorough examination of it.

(2) When the internal construction or size of a boiler will not allow of the Inspector getting inside it, he should act in accordance with the provisions for such cases made under Rule 20 (2).

(3) If for special reasons, and for special reasons only, the Inspector cannot go inside a boiler, he shall distinctly state on the face of his certificate his reasons for not being able to do so.

(4) Whenever he is prevented from getting into a boiler by the position of removable stays he must order the removal of the stays and see the same properly replaced before granting his certificate.

(5) If any part of a boiler near the uptake, fire-boxes or furnaces is so constructed that the Inspector cannot examine it, he is not to give a certificate, but shall report the case to the Chief Inspector for his orders.

(6) If the boiler is too hot or not sufficiently clean for the Inspector to examine the inside efficiently and with safety and convenience, he should decline to examine the boiler, and absolutely refuse to grant a certificate, until he can make an efficient internal examination.

(7) An Inspector who has to enter a boiler which is connected by steam or water pipes to another boiler containing hot water or steam should, before doing so, satisfy himself that the steam or hot water communication is effectively disconnected to secure immunity from the danger of steam or hot water being turned into the boiler while he is inside it.

15. Small boilers must be inspected and fitted in the same way as large boilers and must have safety-valves, water ganges and all other fittings complete which must comply with the same regulations as large boilers.

Procedure regarding inspection of small boilers.

16. (1) At every inspection of a boiler for the grant or renewal of a certificate the boiler should be empty and cool with all doors, fire-bars, bearers and fire-bridges removed and all valves and cocks forming the boiler mountings opened up and taken apart. All parts should be thoroughly cleaned inside and outside and fire flues, smoke boxes and tubes should be swept.

Preparation required for thorough inspection.

All valves and cocks should be ground and faced when necessary before the Inspector's visit ; provision should be made for the removal of lagging, brickwork or other concealing part, or for the drilling of plates, if required by the Inspector, and for verifying the safety valve dimensions and weights.

Proper provision to the satisfaction of the Inspector must be made for effectively disconnecting the boiler if connected to another under steam.

The certificate of the engineer or driver in charge of the boiler should be available for the Inspector's inspection and it is desirable that he should accompany the Inspector at his inspection of the boiler.

(2) Hydraulic tests in the case of boilers not being inspected for the first time should, except when the Inspector expressly requires otherwise, be prepared after the thorough inspection.

Preparation required for hydraulic tests.

The chests of all mountings subject to steam pressure should be in place as well as all doors and the same properly jointed. All air should be displaced and the boiler filled with water. The safety valves should be jammed down, or removed and the chest openings blank flanged (it is bad practice to screw down spring loaded safety valves to the test pressure as the springs in so doing may be injured). The tester cock should be in order for receiving the Inspector's standard pressure gauge and the nipple for connecting the Inspector's test pump hose, if the owner does not supply his own pump and fittings, should be in place and ready and if possible, a test not exceeding the working pressure of the boiler should be taken before the Inspector's visit to test the tightness of the door joints. See Rule 20 for other requirements regarding hydraulic tests.

(3) For steam tests, which are required only in the case of newly-registered boilers and for boilers of which the pressure has been altered, see Rule 21.

Preparation required for steam test. An Inspector, however, may, when visiting a factory for any purpose, verify the correctness of the safety valves and pressure gauge of a boiler under steam by comparison with his standard pressure gauge.

17. (1) The registry number of every boiler shall be cut in the front plate thereof in such position as shall be pointed out by the Inspector. The device to be so engraved shall consist of the letters RY. above the letters No. divided by a horizontal line, the letters to be followed by the number in figures, the former to be one-half inch and the latter one and a quarter inch in height, the whole to be enclosed in a rectangular figure one-sixteenth of an inch clear from the letters and figures, thus :—

Engraving of Registry Number.

RY.
—
No. 1234

The engraving shall not be less than one sixty-fourth of an inch in depth.

(2) In the case of small boilers the letters and figures of the device may, in the discretion of the Chief Inspector, to whom each case shall be referred, be reduced to one quarter of an inch in height.

(3) Engraving slips for tracing the device on the boiler will be supplied by the department. The slip should be pasted on the boiler on the place pointed out by the Inspector and the engraving should be completed and ready for verification by the Inspector at the time of the hydraulic test.

(4) Inspectors should satisfy themselves before allowing a registry number to be cut that there is no other registry number on the boiler. Registry numbers of other provinces should be allowed to remain for identification purposes. A note of such number or device should be entered in the Inspector's inspection book.

MEASUREMENT OF FIRE GRATE.

18. (1) The fire grates of cylindrical flued boilers in which it is possible to increase the length of the grate over the respective lengths in the following cases by altering the position of the bridge should be taken as having a length of 5 feet in cases in which the mean internal diameter of the furnaces does not exceed 2'-7" and of 6 feet in which the mean internal diameter of the furnaces exceeds this amount.

The grate surface in such cases is to be taken as the product of the mean internal horizontal diameter of the furnace into the length 5 feet or 6 feet, as the case may be, and the number of furnaces.

(2) In other cases of cylindrical flued boilers the grate surface should be computed in the same way except that the actual length of the fire grate should be taken, measured from the inner edge of the dead plate to the front of the bridge.

(3) In the case of chain grate stokers of externally fired boilers the grate surface is to be ascertained from the mean width of the furnace, measured from wall to wall at the level of the bars, and the length of the grate, measured from the inside edge of the shoot or hopper to a point above the centre of the roller at the back end of the grate.

(4) In cases of ordinary fire grate of loco-type and vertical type boilers the grate areas are to be computed from the average width of the grate, measured from side to side of the furnace or fire-box at the level of the bars, and the average length of the furnace or fire-box at the same level.

(5) In the case of externally fired boilers having ordinary grates, the surface should be computed from the average width of the grate, measured from side to side of the furnace walls at the level of the bars, and the mean length of the grate, measured from the inner edge of the dead plate to the front of the bridge.

(6) In the case of special fire grates for burning fuel other than coal or where owing to the construction or position of the grate or its equivalent, no one of the foregoing rules may apply, the Inspector should report to the Chief Inspector for instructions.

DETERMINATION OF NOMINAL HORSE POWER.

19. The nominal horse power of engines and boilers shall, for all-rating purposes under the Act, be calculated as follows:—

Engines.

For compound condensing engines having two or more cylinders.

$$\frac{S}{30} = \text{N. H. P.}$$

For compound non-condensing engines having two or more cylinders.

$$\frac{S}{33} = \text{N. H. P.}$$

For simple condensing and non-condensing engines the figures in the foregoing equations should be divided by 3 in each case to equal the nominal horse power.

S = the sum of the squares of the diameters in inches of all the cylinders.

For turbine engines.

$$6N (D^2 - d^2) = \text{N. H. P.}$$

N = the number of high pressure turbines.

D = internal diameter of high pressure casing in inches at the first ring of blades.

d = external diameter of the high pressure rotor in inches.

Boilers.

$$\frac{4 \times A}{3} = \text{N. H. P.}$$

A = area in square feet of the fire grate surface measured in accordance with Rule 18.

When the number representing the nominal horse power of a boiler is not a whole number, the fraction should be neglected and the whole number only entered in the Inspector's certificate.

HYDRAULIC TESTS.

20. (1) Every new boiler shall be hydraulically tested in the presence of an Inspector to not less than $1\frac{1}{2}$ times the approved working pressure, see Rule 4, which pressure the boiler must satisfactorily withstand without appreciable leakage or undue distortion or deflection of its parts for at least fifteen consecutive minutes. If the test is not satisfactory the working pressure allowable by calculation must be suitably reduced, unless the owner is willing to make such alterations as will enable the boiler to satisfactorily withstand the hydraulic test, when, after alteration, the boiler must be again examined, the pressure being re-calculated, if necessary, and tested to the satisfaction of the Inspector.

New boilers.

(2) When the internal construction or size of a boiler, will not allow of the Inspector getting inside it or of examining closely all its parts he should see it tested by hydraulic pressure to $1\frac{1}{2}$ times the approved working pressure at each certificate inspection.

Small boilers.

(3) All boilers except those examined under the provisions of sub-section 6 of section 8 and such small boilers as are mentioned in the proviso to the sub-section shall, after re-erection in a position different from that under which they previously obtained a certificate, be hydraulically tested. A hydraulic test should also be made before granting an increased pressure certificate or after repairing a boiler unless the Chief Inspector authorizes the Inspector to waive such test. The amount of the test pressure to be applied to old boilers should be from $1\frac{1}{4}$ to $1\frac{1}{2}$ times the working pressure.

Tests after re-erection.

(4) The Inspector may at any inspection, if he considers it necessary, apply a hydraulic test to any boiler.

(5) When carrying out hydraulic tests Inspectors are to use the pressure gauges supplied by the Boiler Inspection Department. The tests should always be accompanied by careful sets of gaugings and measurements, taken before, during and after the test, to ascertain the amount of bulging and permanent set, if any.

Standard pressure gauges to be used: gaugings.

Particular attention should be paid in obtaining accurate gaugings of circular furnaces of new boilers for future reference.

(6) Every boiler at its first inspection and subsequent hydraulic test must be entirely bared of lagging or brick work and boilers that are to be hydraulically tested at every inspection need only have their lagging again removed at the 5th, 8th, 10th and subsequent annual inspections provided the Inspector has no reason to suspect the existence of external corrosion or other defect. This procedure may, however, be departed from at the discretion of the Chief Inspector to whom each case should be referred before any departure is made.

(7) After the application of the hydraulic test the Inspector shall, before issuing a certificate or provisional order for the boiler, carefully examine the boiler inside and outside and satisfy himself that it has satisfactorily withstood the test.

(8) In any case in which the safe working pressure to be allowed for a boiler cannot, owing to peculiar construction of one or more of the parts, be determined by calculation in the ordinary way the Inspector shall, under the direction of the Chief Inspector, subject the boiler to hydraulic test for the purpose of determining the fitness of the part or parts for the intended pressure.

The amount of the test pressure to be applied in such a case must not exceed $1\frac{1}{2}$ times the least working pressure found by calculation for other parts of the boiler or the intended working pressure, whichever is the lesser.

Should the parts of the boiler show undue deflection or indication of permanent set during the progress of the test the pressure must not be increased over the amount at which such indications are observed. The working pressure, if the test is otherwise satisfactory, to be allowed for the part will be $\frac{4}{7}$ ths of the test pressure.

(9) All hydraulic tests, except those of boilers examined under the provisions of sub-section 6 of section 8, shall be conducted only after the erection of the boiler in situ. Boilers examined for a certificate under sub-section 6 of section 8 shall, at the next inspection in situ, be hydraulically tested to $1\frac{1}{2}$ times the working pressure.

(10) The chests of safety-valves, stop and feed valves, below down cocks and pipes and all mountings and fittings that will be subject to steam pressure when the stop valve is shut, should be in place and be tested with the boiler at every hydraulic test of a boiler in situ.

STEAM TESTS.

21. (1) Every newly-registered boiler and every other boiler of which the pressure has been altered shall, before the issue of a certificate for such boiler, be tested under steam to the satisfaction of the Inspector.

The safety-valves should, at the time of the test, be left free and capable of being adjusted to the approved working pressure to be granted in the certificate.

After adjustment of the valves to the correct blowing pressure the boiler should be tried under full steam and full firing for at least 20 minutes with the feed water shut off and the stop valve closed, during which time the Inspector should note the accumulation of pressure. Should the accumulation of pressure exceed 10 per cent. of the loaded pressure the Inspector should withhold his certificate and report the case to the Chief Inspector.

The Inspector should note the loading and adjustment of the safety-valves at the correct blowing off pressure for entry in the certificate.

(2) On finishing the safety-valve test the Inspector should satisfy himself that the water gauges and test cocks are in working order and that the feed water apparatus will put a sufficient quantity of water into the boiler.

(3) When witnessing safety-valve tests Inspectors are to use the standard pressure-gauges supplied by the Department for the purpose. No steam-gauge to be used. Standard pressure gauges should be used without having a syphon filled with water between it and the boiler.

MATERIAL FOR BOILER.

22. (1) Material complying with the following requirements under the various heads with regard to quality, ultimate strength, elongation, temper and bend tests, or other test when specified, will, in determining working pressures for boilers constructed thereof, be considered by the Department as the most suitable material for the construction of boilers and as such, on the production of sufficient proof in support of same, will be given an advantage over material which cannot be proved to comply in every respect with these requirements.

(2) In the case of material manufactured abroad the Inspector mentioned in the following rules may be an Inspector acting on behalf of any Inspecting Authority which is recognized by the Department as competent.

(3) In the case of material made and tested by well known makers in Great Britain the certificate of the makers will be accepted in lieu of one from an Inspecting Authority.

(4) When the material is mild steel, then before the mill sheets are signed, the maker shall furnish the Inspectors with a certificate guaranteeing that the material has been made by the open hearth process of "acid" or "basic" quality and that it has been subjected to, and has withstood satisfactorily, the tests above described in the presence of the Inspector.

The following form of certificate will be accepted if printed on each mill sheet with the name of the firm and initialled by the Test House Manager:—

"We hereby certify that the material described below has been made by the open hearth process of "acid" or "basic" quality and is that which has been satisfactorily tested in the presence of your Inspector, our Test House Manager, in accordance with the standard tests."

(5) Boilers built of Bessemer steel whether of "acid" or "basic" quality must not be passed. Boilers built of open hearth basic quality plates may be accepted but the material should be treated as tested or untested iron as the case may be.

STEEL.

23. (1) All steel intended for use in the construction of boilers shall be made by the open hearth process. Boiler plates shall be of acid quality; but the other portions of boilers may be made of either acid or basic steel.

(2) The finished material shall be free from cracks, surface flaws and laminations. No hammer-dressing, patching, burning or electric welding is permissible, and if any material is annealed or otherwise heat treated, the test pieces shall be similarly and simultaneously treated with the material before they are tested. No further heating or forging of the specimens may be done and all the necessary preparation shall be made in a machine.

(3) All the test pieces required shall be selected by the Inspector, and, except where otherwise specified, the tests shall be made in his presence at the place of manufacture, and before the despatch of the material; and the stamping of test pieces shall be done after all the heating or annealing is completed.

(4) When a number of articles are cut from one plate or bar, the number of tests required shall be the same as that required from the original piece, provided the articles have not been further heated and can be identified as having formed part of the original piece.

Number of tests in certain cases.

(5) Should either a tensile or a bend test fail to fulfil the test requirements, and the Inspector considers that the test piece does not fairly represent the quality of the material, two duplicate specimens may, if the maker wishes, be tested; and if the results obtained from both are satisfactory the quality of the article shall be judged therefrom and not from the original test which failed. If, however, either of the duplicate tests fails, the article or articles represented shall be rejected.

Duplicate tests.

(6) Every article shall be stamped with a number or identification mark such that the charge of steel from which it was made can be readily identified. In addition to this, plates and bars shall be stamped with the maker's name or trade mark and with the results of any tests which are made from them.

Stamping of material.

(7) In the event of any material proving unsatisfactory in the course of working or machining, it shall be rejected notwithstanding any previous certification of satisfactory testing.

Material proving unsatisfactory to be rejected.

(8) The gauge length and the parallel portion of the test pieces shall be as shown in the appended sketches. The form of the ends to be as required in order to suit the various methods employed for gripping the test piece. Should any tensile test piece break at a point outside the middle half of its gauge length, the test may, at the maker's option, and with the Inspector's approval, be discarded, and another test made from the same plate or bar.

Standard test pieces.

(9) The specimens sheared from plates and angle bars for bending tests, shall not be less than $1\frac{1}{2}$ inches wide; but, for small bars, the whole section may be used. The bending specimens of round bars shall be of the full diameter of the bars, as rolled, and the bending tests of castings shall be made with rectangular test pieces, 1 inch wide by $\frac{3}{4}$ inch thick, which shall be machined to size and have the corners rounded to a radius of $1/16$ th inch; they shall be bent over their thinner section.

Bending tests.

Plates.

(10) A tensile and a bending test shall be taken from each plate, as rolled; but, when the weight of the plate exceeds two-and-a-half tons a tensile and a bending test shall be taken from each end. Bending tests only need, however, be made from plates for which a greater stress than is allowed for iron is not wished. The bending tests of plates not intended to be worked in the fire or exposed to flame may be made with strips in the same condition as the plates; those from other plates should be made with strips which have been tempered.

Number of tests.

(11) Test specimens may be cut from the plates, either lengthwise or crosswise, and whenever practicable, the rolled surfaces shall be retained on two opposite sides of the test piece.

Preparation of test specimens.

In all cold and temper bend tests of samples .5 inches in thickness and above, the rough edge caused by shearing may be removed by filing or grinding; and samples 1 inch in thickness and above may have the edges machined.

(12) For temper bends, the samples should be heated to a blood-red and quenched in water at a temperature not exceeding 80° Fahrenheit.

Temper bends.

(13) The tensile strength of plates not intended to be worked in the fire or exposed to flame, shall be between 27 and 32 tons per square inch; that of other plates from 26 to 30 tons per square inch.

Tensile strength and elongation of plates.

The elongation shall not be less than 20 per cent. in a length of 8 inches for material $\cdot 375$ inch in thickness and upwards which is required to have a tensile strength of 27 to 32 tons per square inch, and not less than 23 per cent. if the tensile strength is required to be between 26 and 30 tons per square inch. For material under $\cdot 375$ inch in thickness, the elongation may be reduced; but for each eighth of an inch of diminution in thickness the reduction shall not be more than 3 per cent. below the elongation named above.

- (14) Bending test pieces shall withstand being bent, without fracture, until the sides are parallel at a distance apart of not more than three times the thickness of the specimen.
- Bend tests.

Angle, Rivet and Stay Bars.

- (15) At least two tensile tests shall be taken from each charge of steel; but when the number of bars, as rolled, from one charge exceeds 15, an additional test shall be made from each further 15 bars of portion thereof. In round bars $1\frac{1}{2}$ inches in diameter and under the number given above shall, in each case, be 50 in place of 15.
- Number of tests.

A cold or temper bend test shall be made from each angle-bar rolled, and a cold and a temper bend from every 15 stay-bars as rolled from each charge. No bending tests need be made from rivet bars.

- (16) The tensile strength of longitudinal stays and angle bars shall be between 27 and 32 tons per square inch with an elongation of not less than 20 per cent. measured on the appropriate standard test piece (A or B). For bars for combustion chamber or fire-box stays the tensile strength shall be between 26 and 32 tons per square inch, with an elongation of not less than 23 per cent. measured on the standard test piece. But when stay bars are tested on a gauge length of four times the diameter (test piece F), the elongation shall be 24 per cent. and 28 per cent. respectively.
- Tensile strength and elongation of stay and angle bars.

For angle bar under $\cdot 375$ inch in thickness the elongation may be 3 per cent. below that specified for plates.

- (17) Bending test pieces of bars shall withstand being bent, without fracture, until the sides are parallel at a distance apart of not more than three times the thickness or diameter of the specimen.
- Bend tests.

Rivet Bars.

- (18) The tensile strength of rivet bars shall be between 26 and 30 tons per square inch, with an elongation of not less than 25 per cent. measured on the standard test piece B. or 30 per cent. if measured on test piece F.
- Tensile strength and elongation of rivet bars.

Rivet.

- (19) A few rivets of each size shall be selected by the Inspector from the bulk and shall be subjected to the following tests:—
- Nature of tests.
- (a) The rivet shanks to be bent cold and hammered until the two parts of the shank touch, without fracture on the outside of the bend.
- (b) The rivet heads to be flattened while hot, until their diameter is two-and-a-half times the diameter of the shank without cracking at the edges.

Steam Pipes and Boiler Tubes, &c.

- (20) The makers should take a few samples from each batch of tubes and test them for tensile strength and elongation. A bending test should also be made by them from the scrap end of each tube drawn.
- Solid-drawn steel steam pipes and boiler tubes, &c., subject to internal pressure.

Tensile and bending tests should also be made in the Inspector's presence from specimens selected by him in the following proportion, from the tubes made from each charge:—

Tubes up to and including 3 inches in diameter: 1 in 40 or part thereof.

- Tubes above 3 inches up to and including 4 inches in diameter: 1 in 20 or part thereof.
- Tubes above 4 inches up to and including 5 inches in diameter: 1 in 10 or part thereof.
- Tubes above 5 inches up to and including 7 inches in diameter: 1 in 6 or part thereof.
- Tubes above 7 inches in diameter: 1 in 4 or part thereof.

The tensile strength should range between 23 and 30 tons per square inch and the elongation should not be less than 23 per cent. in a length of 8 inches or 21 per cent. if the thickness of the tubes is less than $\frac{1}{4}$ th of an inch.

(21) If no allowance over that given for iron tubes is required a few bending tests should be made from the scrap ends of the stay tubes, but special tests Solid-drawn steel tubes subject to external pressure. need not be made from the ordinary tubes if the Inspector finds the general quality of the material satisfactory and he is satisfied. If allowance over iron is required, the number of the test for tensile strength and elongation should be similar to those for solid-drawn steam pipes except that the tensile strength should range between 26 and 30 tons per square inch.

(22) If no allowance over that given for iron tubes is required, a few bending tests Lap-welded steel tubes subject to external pressure. should be made from the scrap ends of the stay tubes or the strips from the ordinary tubes if the general nature of the material has been found satisfactory and the Inspector is satisfied. If allowance over iron is required, tensile and bending tests should be made from 25 per cent. of the strips from which the stay tubes are made and drift tests from 5 per cent. of the scrap ends or the finished tubes.

The tensile strength should range between 26 and 30 tons per square inch and the elongation should be at least 20 per cent. in a length of 8 inches when the strips are tested in their normal condition.

(23) All the tubes should be tested by the makers to a suitable hydraulic pressure: these General requirements regarding tubes. tests need not be witnessed by the Inspector if he is satisfied that the tubes have been duly tested by the makers.

The hydraulic test should not, in any case, be less than three times the working pressure and it should not exceed four times the pressure given by the rule:

$$\frac{6,000 \times \text{thickness in inches,}}{\text{diameter in inches,}}$$

in the case of lap-welded tubes or five times that pressure in the case of solid-drawn steel tubes.

All the tests mentioned should be made in the Inspector's presence except where otherwise stated, and such means as may be necessary should be taken to satisfy the Inspector that the specimens he may have to test have been cut from the tubes they represent.

If any of the tubes described above are made in long lengths and passed by the Inspector in that condition, the number of tests required may be calculated on the number of tubes as made notwithstanding that they may afterwards be cut up into shorter lengths.

Solid-drawn tubes of a thickness exceeding $\frac{1}{4}$ th inch should be finished by the hot-drawn process. All cold-drawn tubes should afterwards be efficiently annealed.

STEEL CASTINGS.

24. (1) All steel castings shall be thoroughly annealed at a uniform temperature and shall be allowed to cool down prior to removal from the annealing furnace: and if subsequently heated with the Inspector's approval, shall again be similarly annealed, if required, by the Inspector.

Test pieces shall not be cut off till stamped by the Inspector, which shall not be done until the castings have been annealed.

(2) No test need be made from unimportant steel castings or for steel castings which are used for articles usually made of cast iron, if the scantlings are not materially reduced below what would be required if cast iron were used. Where full allowance over wrought steel is desired, steel castings shall be tested as follows :—

At least one tensile and one bending test shall be made from the casting from each charge.

Where more than one casting is made from one charge, at least one tensile and one bending test shall be made from the castings run from one common pouring head.

(3) The tensile strength of steel castings shall be between the limits of 35 and 40 tons per square inch with an elongation of not less than 15 per cent. measured on the standard test piece C, D or E.

(4) The bending test pieces must withstand being bent, without fracture, through an angle of 60° the internal radius of the bend being not greater than one inch.

Where allowance over wrought steel is not required bending tests as above only will be taken, but the test piece must withstand, without fracture, being bent through an angle of 120 degrees, the internal radius of the bend being not greater than one inch.

WROUGHT IRON.

25. (1) If full allowance for iron shell plates and rivets is required, the material must be tested as in the case of mild steel.

The character and number of the tests should be similar to those for steel shell plates and rivets.

For plate tests the elongation measured in a length of 8 inches should be not less than 16 per cent. with or 10 per cent. across the grain.

For rivet bars the elongation measured in a length of 8 inches should not be less than 25 per cent.

(2) Special tests need not be made if the general nature of the material has been found satisfactory and the Inspector is satisfied.

COPPER.

26. (1) Rolled copper plates should have a tensile strength of not less than 14 tons per square inch: test strips should give an elongation, measured on a length of 8 inches of not less than 35 per cent. and should stand bending double without signs of fracture on the outside of the bend.

(2) Copper bars for stays or rivets should have a tensile strength of not less than 14 tons per square inch with an elongation measured on a length of 8 inches, of not less than 40 per cent. A test specimen should stand bending double without signs of fracture on the outside of the bend.

RULES AND FORMULÆ FOR DETERMINING WORKING PRESSURES.

27. An Inspector in making his calculations prior to granting a certificate under the Act shall be guided in so doing by the following rules and formulæ appropriate to the several parts.

Boilers well designed, well constructed and made of good material should have an advantage in the matter of determining the working pressure over boilers inferior in any of

the above respects as, unless this is done the superior boiler is placed at a disadvantage and good workmanship and material will be discouraged. The following rules are therefore prescribed:—

SHLL.

Design, Construction and Workmanship.

Minimum thickness of plate. 28. (1) Shell plates must not be less than $\frac{1}{4}$ inch in thickness.

Each ring of plate in the shell should preferably be made up of a single piece and have its longitudinal seam well out of line with those of the adjoining ring.

Arrangement of seams. In horizontal boilers the longitudinal seams should be in the steam space arranged alternately on each side of the crown and clear of the brick work flues.

(2) For longitudinal seams butt joints fitted with inner and outer covering strips with two or more rows of rivets on each side of the butt are desirable and Double butt strapped seams given preference: formation of seams. boilers having this form of joint will be given preference over others in the matter of determination of pressure.

The ends of shell plate rings where butted should be given the same curvature in the rolls as the rest of the ring. The setting should not be done by hammering.

Butt straps should be cut from plates not from bars. They must be of as good quality as the shell plates and for the longitudinal seams must be cut across the fibre. They should be carefully bent in the rolls to the required curve.

Thinning of the ends of butt straps which tuck under the adjoining rings of the shell plate should be done by machinery, not by heating and hammering.

All rivet holes should be drilled after the plates, straps, and angles are in position. The plates should afterwards be taken apart and the burrs on the edges of the holes removed.

The diameter of the rivets should in no case be less than the thickness of the plates of which the shell is made.

The rivet heads should be sound, well formed and central with the shank, and the plate about the rivets should not show marks of having been squeezed in the riveting machine.

(3) Welded seams in boiler shells are undesirable and must not be passed except in the case of shells or barrels not exceeding 2 feet in internal diameter and then only if at least one covering strip is fitted over the weld and securely riveted to the shell.

Welded seams and local heating.

Small steam domes having welded seams may, if the weld appears satisfactory, be passed without covering strips.

All steel plates that have been flanged or locally heated should be carefully annealed after being so treated.

(4) The neutral part of boiler shells under steam domes and where large openings are made in shells to receive other parts of the structure, the sides, so out away, must be efficiently stiffened and stayed as serious accidents have arisen from the want of such precautions. See Rule 48 for compensation for openings in shells.

Compensation and staying of openings in boiler shells.

(5) Inspectors should be careful to see that the shell of a boiler is not weakened by lines of holes for stays, rivet holes for gusset stay angles, tubes or openings not fully compensated, below the strength of the riveted seams. When such is the case the working pressure as determined in the ordinary way must be proportionally reduced.

Shell weakened by lines of holes below strength of longitudinal seams.

6. Stand blocks or pad pieces for carrying mountings should be of wrought iron or mild steel either pressed or welded and of substantial proportions. Stand blocks and pad pieces. Blocks formed from angle sections by bending round and welding the edges are preferable to those having the flanges welded on. Inspectors should refuse to accept any block showing imperfect welds or surface fractures at the corners of the flanges.

Stand blocks and pads should be carefully bedded to the boiler and the riveting should be pitched to ensure a tight joint.

The jointing faces to which the mountings are bolted should be machined and be level when the boiler is in its working position. With ordinary sized stand blocks or pads no additional compensation for the hole cut in the shell is needed. If, however, the net section of the stand block within four inches of the shell plate is less than the section of the shell plate cut away, a reinforcing ring must be fitted.

TENSILE AND SHEARING STRENGTHS TO BE USED IN CALCULATIONS FOR SHELL.

29. (1) In ascertaining the strength of the shells of cylindrical steel or iron boilers, the actual minimum tensile strength of the plates, as found by the tests, is to be used in the calculations for determining the working pressure, but in no case is a greater strength than 32 tons per square inch nor a lesser strength than 24 tons to be adopted for steel shell plates. Any steel having a lesser tensile strength than 24 tons per square inch should be treated as iron.

For tested iron plates no greater strength than 23 tons per square inch with the grain should be used in the calculations. When there is no proof that iron plates have been tested in accordance with Rule 25 but the Inspector is satisfied that the material is of good quality and suitable for boilers a tensile strength of 21 tons per square inch with the grain and 18 tons per square inch across the grain may be assumed.

(2) Steel plates for which there are no proofs of tests but with which the Inspector is otherwise satisfied as being of good ordinary quality may be credited with a tensile strength of 24 tons per square inch.

Should the Inspector not be able to satisfy himself that the plates are of good ordinary quality steel, they should be treated as being of untested iron.

(3) Steel rivets complying with the requirements of Rule 23 may be allowed a shearing strength of 23 tons per square inch.

Steel rivets for which there are no proofs of tests but with which the Inspector is otherwise satisfied may be allowed a shearing strength per square inch of 21 tons.

(4) Iron rivets complying with the requirements of Rule 25 may be allowed a shearing strength of $\frac{4}{5}$ ths of the minimum tensile strength of the rivet bars. Iron rivets for which there are no proofs of tests but with which the Inspector is otherwise satisfied may be allowed a shearing strength of 17 tons per square inch of section.

(5) Copper plates in tension which are not exposed to heated gases or flame may be allowed a tensile strength of 3,500 pounds per square inch.

Copper plates should not be used for superheated steam.

Copper rivets may be allowed a shearing strength of 3,000 pounds per square inch.

(6) The tensile strength to be used in calculation should be reduced 10 per cent. in the case of externally fired boilers in which the shell plates are exposed to the direct impact of flame and in the case of shell plates into which tubes are expanded.

DETERMINATION OF THE STRENGTH OF SHELL.

Strength of riveted seams.

30. (1) The strength of riveted shell seams is to be determined by the formulæ for riveted seams in the Appendix to these rules.

When the pitch of the rivets does not exceed the maximum for the particular kind of joint found by the formula under the Appendix and the spacing of the rows of rivets and thickness of butt straps, if any, are not less than the rules for the particular kind of joint required, the strength of the seam is to be determined from a comparison of the tensile strength of the plate section between the rivet holes and the shearing strength of the rivets: the tensile and shearing strengths per square inch of section to be used in the calculation being those appropriate to the material and conditions in accordance with Rule 29.

The lesser of the strength sections so found should be expressed as a percentage of the strength of the unperforated plate and, provided the shell is not weakened to a greater extent elsewhere in any of the ways mentioned in sub-rule 5 of Rule 28, in that form used in the calculation for determining the working pressure of the shell.

When the pitch of the rivets exceeds the maximum found by the formula under the Appendix or the spacing of the rivets, diagonally or between the rows, or the thickness of the butt straps is less than that required by the rule for the particular kind of joint, the percentage strength of seam which would otherwise be used in the calculation for determining the working pressure of the shell should be proportionally reduced.

Rivets in double shear. (2) The section of rivets in double shear should be taken as twice that of the single shear section.

Strength of circumferential seams. (3) Circumferential seams should have a strength percentage at least equal to half that of the longitudinal seams.

(4) The welds of welded seams if satisfactory may be credited with a strength of 66 per cent. of the solid plate. The thickness of the covering straps over the weld should be in accordance with the rules for butt straps in the Appendix. The strength of the rivet section on each side of the weld should not be less than 33 per cent. of the solid plate: when these conditions are fulfilled the strength percentage of the seam may be taken as that of the plate between the holes.

Solid rolled sections. (5) Shells formed from solid rolled sections may be given full allowance provided the thickness is uniform.

(6) *Working Pressure for Shell.*

$$\frac{S \times \% \times 2 \times T}{F \times D} = \text{Working pressure in pounds... (1) per square inch.}$$

S = Tensile strength in pounds per square inch of section of shell plate material in accordance with Rule 29.

% = Least strength percentage of seam found as outlined above.

T = Thickness of shell plates in inches.

F = Factor of safety in accordance with Rule 31.

D = Greatest internal diameter of the shell in inches.

FACTOR OF SAFETY FOR BOILER SHELLS.

31. (1) When cylindrical shells of boilers are made of material complying with the requirements of Rules 23 or 25 and:—

(a) All rivet holes drilled in place and the plates afterwards taken apart and burrs removed

(b) The longitudinal seams are fitted with double butt straps, of equal width when double riveted, and each of at least the thickness required in the Appendix for the particular kind of joint.

(c) The longitudinal seams are at least double riveted.

(d) The boilers have been open to inspection during the whole period of construction by an Inspector under the Act or in the case of boilers built abroad by an Inspector acting on behalf of an inspecting authority recognized by the department as competent: then, subject to any addition for conditions specified in the following table, 4·5 may be used as the factor of safety for boiler shells. See Rule 29, for the strengths of plates and rivets to be used in making the calculations. But when any of the above conditions are not complied with or when therefore any of the conditions specified in the following table the additions therein should be made to the factor of safety according to the circumstances of each case.

(2) TABLE OF ADDITIONS TO THE FACTOR OF SAFETY FOR BOILER SHELLS.

Material.

The following additions to the factor of safety are to be made when:—

A = ·5 No iron or steel makers' certificate of test of material for tensile, elongation and bending tests is produced.

B = ·1 The tensile strength of steel plates is between 24 and 27 tons per square inch; for each ton below 27 tons.

Construction.

C = ·4 A boiler has not been built under the supervision of an Inspector under the Act or of an inspecting authority recognized by the department as competent.

D = ·5 There is no proof that the holes in the shell seams have been bored in place and the plates afterwards taken apart and burrs removed.

E = The workmanship is in any way doubtful and the Inspector is not satisfied that the additions given in this table are sufficient to meet the circumstances, the Chief Inspector shall make such extra addition under this head as he deems fit.

Design.

Longitudinal seams.

F = 1·0 The seams are lapped and single riveted.

G = ·2 The seams are lapped and double riveted.

H = ·1 The seams are lapped and treble riveted.

I = ·75 The seams are single butt strapped and single riveted.

J = ·2 The seams are single butt strapped and double riveted.

K = ·4 The seams are double butt strapped and single riveted.

L = ·1 The seams are double butt strapped and single riveted through one of the butt straps.

M = ·5 The seams of shells are welded and fitted with a single butt strap, single riveted.

N = ·5 The seams are exposed to the impact of flame.

Circumferential seams.

O = ·1 The seams, other than the end seams, of shells over 3 feet 6 inches in internal diameter are single riveted.

P = ·2 The seams, other than the end seams of shells over 3 feet 6 inches in internal diameter and of a length exceeding four diameters are single riveted.

CURVED END PLATES.

32. The working pressure for curved end plates may be found by the following formulae :

(1) *Hemispherical ends* made up of two or more pieces and subject to internal pressure.

$$\frac{2 \times T \times \% \times S}{R \times F} = \text{Working pressure in pounds (2) per square inch.}$$

T = Thickness of plate in inches.

% = Percentage strength of riveted seam.

S = Ultimate strength of the plate in pounds per square inch in accordance with Rule 29.

R = Radius of hemisphere in inches measured from the inside of the outer strake of plate.

F = Factor of safety in accordance with Rule 31.

Such ends should comply with the requirements for shell plates.

(2) *Hemispherical or dished ends of drums and Vertical Type Boilers* formed in one piece and subject to internal pressure.

$$\frac{22000 \times T}{R \left(1 + \frac{D}{30K} \right)} = \text{Working pressure in lbs. (3) per square inch.}$$

T = Thickness of plate in inches.

R = Radius of hemisphere or dish in inches measured from the inside of the plate.

K = Radius of corner of flange in inches measured from the inside of the plate.

D = Diameter in inches of the cylindrical part to which the end plate is attached.

The radius R should not exceed the diameter of the cylindrical part to which the end plate is attached.

(3) *Hemispherical or dished ends of drums* formed in one piece and subject to external pressure.

$$\frac{12000 \times T}{R \left(1 + \frac{D}{30K} \right)} = \text{Working pressure in lbs. (4) per square inch.}$$

T = Thickness of plate in inches.

R = Radius of hemisphere or dish in inches measured from the outside of the plate.

K = Radius of corner of flange in inches measured from the inside of the plate.

D = Diameter in inches of the cylindrical part to which the dished end is attached.

The radius R should not exceed the diameter of the cylindrical part to which the end plate is attached.

(4) *Dished ends of Lancashire and Cornish Type Boilers* with external or internal flanges for furnaces, formed in one piece and subject to internal pressure.

$$\frac{24000 \times T}{R \left(1 + \frac{D}{30K} \right)} = \text{Working pressure in lbs. (5) per square inch.}$$

T = Thickness of plate in inches.

R = Radius of dish in inches measured from the inside of the plate.

K = Radius of corner of flange in inches measured from the inside of the plate.

D = Diameter in inches of the cylindrical part to which the end plate is attached.

The radius R should not exceed one and a half times the diameter of the shell to which the dished end plate is attached.

(5) No account should be taken of the influence of the uptake tube in vertical type boilers when determining working pressures by the foregoing rules except in the case of dished shell crown plates, having uptakes, which work out to a greater pressure under flat plate rules. See Rule 33 (5).

Dished plates should be pressed to shape and flanged at one operation and thoroughly annealed after all flanging and fitting is done. The radii of the corners of the flanges should be as large as possible to avoid excessive stresses, leading to grooving and fracture, at these parts.

The radius R of the dished part may be found as follows:—

$$R = \frac{C^2 + H^2}{2H} \dots \dots \dots (6)$$

C and H are the lengths in inches of half the base line or chord on which H is measured and the height of the dish so measured, respectively.

(6) Equations 3, 4 and 5 are applicable only in the case of steel complying with the requirements of Rule 23. For steel having a tensile strength between 24 and 26 tons but otherwise complying with the requirements of Rule 23, the working pressures found from the foregoing formulæ should be reduced in the proportion 26 to S, where S is the minimum tensile strength of the plate.

For steel having a tensile strength below 24 tons and for iron plates the working pressures found from the foregoing formulæ should be reduced 16 per cent.

FLAT SURFACES.

33. (1) The pressure to be allowed on flat surfaces may be determined by the following formulæ:—

$$\frac{C(t + 1)^2}{Q - 6} \text{ Working pressure in lbs. } \dots \dots (7) \text{ per square inch.}$$

t = Thickness of the plate in sixteenths of an inch.

Q = The square of the pitch of the stays from centre to centre when the pitches are equal, or,

The mean of the squares of the pitches when they are unequal or,

The half of the square of the diameter of the largest circle that can be inscribed through the centre of the bounding stays, rivets, bolts or other points of support when the staying is circular or irregular. When flat plates are flanged and have rounded corners the inscribed circles should be drawn through the point at which the rounded corner begins.

C = A constant according to the following tables which should be modified for material other than steel complying with the requirements of rule 23, as follows:—

(2) For steel having a tensile strength between 24 and 26 tons, but otherwise complying with the requirements of Rule 23, the constant C should be multiplied into $\frac{S}{24}$, where S is the tensile strength of the plate.

For steel having a tensile strength below 24 tons or for which no proof of tests is produced and for iron plates the constant C should be reduced 16 per cent.

For copper plates the constant C should be reduced 50 per cent.

CONSTANTS FOR FLAT SURFACES.

(3) Regularly spaced bolt or screw stays as in Marine Type and Locomotive Type Boilers.

(a) Plates not exposed to the impact of heat or flame—

Construction.	Constant.
Doubling strips not less in width than two-thirds the pitch of the stays and not less in thickness than the plates securely riveted to the outside of the plate; stays fitted with nuts on both sides of the plate	260
Washers not less in diameter than two-thirds the pitch of the stays and of the same thickness as the plate securely riveted to the outside of the plate; stays fitted with nuts on both sides of the plate; or, doubling strips not less in width than two-thirds the pitch of the stays and not less in thickness than the plate; stays screwed into doubling strips and plate and fitted with nuts on the outside	... 230
Washers outside the plate at least three times the diameter of the stay in width and two-thirds the thickness of the plate; stays fitted with nuts on both sides of the plate	... .. 180
Stays fitted with nuts on both sides of the plate	... .. 165
Stays screwed into the plate and fitted with nuts outside	... .. 125
Stays screwed into the plate and riveted over to form substantial heads: or, stay tubes screwed into the plate and expanded	... .. 85

(b) Plates exposed to the impact of heat or flame with steam in contact with the plates—

Construction.	Constant.
Stays fitted with nuts and washers, the latter being at least three times the diameter of the stay and two-thirds the thickness of the plate	... 80
Stays fitted with nuts on both sides of the plate	... .. 75
Stays screwed into the plate and nutted	... .. 55
Stays screwed into the plate and riveted over to form substantial heads	... 45

(c) Plates exposed to the impact of heat and flame with water in contact with the plate—

Construction.	Constant.
Stays screwed into the plate and fitted with nuts	... .. 110
Stays screwed into the plate and riveted over to form substantial heads: or, stay tubes screwed into the plate and expanded	... .. 75

(d) When plates are not exposed to the impact of heat or flame and doubling plates covering the whole of the flat surfaces are securely riveted to the plates the working pressure may be found by the following formula:—

$$\frac{C [(t + 1)^2 + (t_1 + 1)^2]}{Q - 6} = \text{Working pressure in pounds per square inch} \quad (8)$$

t = Thickness of plate in sixteenths of an inch.

t₁ = Thickness of doubling plate in sixteenths of an inch.

C = Constant applicable to the case as given above.

Q = The surface supported as defined under equation (7).

(e) When doubling plates do not cover the whole of the flat surfaces, but are fitted between the rows of supporting stays the strength allowed for them should be two-thirds only of that which would be allowed for similar doubling plates extending beyond and embracing the supporting stays.

(f) The area of the tubes in the space bounded by the stay tubes in the body of tube plates may be deducted from Q.

(g) When plates are stiffened by T or L bars and a greater pressure is required than that allowed by the use of the foregoing constants the case should be submitted for the consideration of the Chief Inspector.

(4) *Irregularly spaced gusset or riveted stays as in the ends of Lancashire, Cornish and some Locomotive and Vertical Type Boilers.*

(a) Plates not exposed to the impact of heat or flame—

Construction.	Constant.
Gusset stays having double angles securely riveted to shell and ends or stays having substantial T pieces or double angles riveted to end plate.	140

A reduction of ten per cent. to be made for exposure to the impact of heat or flame.

(b) When irregular flat surfaces are stiffened by suitable T or L bars securely riveted to the plates the above constants may be increased thirty per cent. Such stiffening bars should be placed so as to transmit their load in a direct manner to the gusset stays or shell plates.

(c) The part where the largest circle can be inscribed through the bounding points of support in the end plates of Lancashire type boilers is sometimes between the gusset stays and the furnaces. These spaces should be measured as well as those between the gusset stays.

(d) The space containing the manhole on the end plates of Lancashire type boilers should be measured in the same way as the other spaces and the working pressure determined from the following formula :—

$$\frac{C[(t + 1)^2 + (t_1 + 1)^2]}{\frac{D^2}{2} - 6} = \text{Working pressure in pounds per square inch ... (9)}$$

t = Thickness of end plate in sixteenths of an inch.

t₁ = Thickness of manhole frame or compensating ring in sixteenths of an inch.

D = Diameter of circle as defined under equation (7).

C = Constant applicable to the construction as follows :—

Construction.	Constant.
Manhole frame of wrought or cast steel carried up over the door in the form of a peak having a turned-in flange of a depth, including the thickness of the flat part, not less than four times the thickness of the end plate and a thickness not less than the thickness of the end plate placed close to the gusset stays and securely riveted to the end plate	160
When the manhole frame as above is not formed with a peak	140
When a flat compensating ring only is fitted	100

(5) *Circular flat ends supported at edges and about centres, with or without bolt stays, as in the crown plates of Vertical Boilers and end plates of small Cornish Type Boilers.*

Plates not exposed to the impact of heat or flame—

Construction.	Constant.
Plates supported at edges and about centres only by riveted or suitably bolted seams or with a ring of double nutted bolt stays	100

A reduction of ten per cent. to be made for exposure to the impact of heat or flame.

When bolt stays are fitted, with washers of the same thickness as the plate and securely riveted thereto, the circle of largest diameter D should pass through the centres of the washer rivets, but when the washers are not riveted or when none are fitted the circle should pass through the centres of the bolts.

(6) *Circular flat ends supported at ages only as in drum ends and bolted covers.*

Plates not exposed to the impact of heat or flame—

Construction.	Constant.
Plates flanged and riveted to shell or secured to angle ring or flange on shell by rivets or suitably spaced bolts	200
A reduction of 10 per cent. to be made for exposure to the impact of heat or flame.	

(7) *Plate margins.*

The amount of support in relief of stays credited to the sides, shells, or furnaces, to which flat plates are attached may be determined by the following formula :—

$$\sqrt[3]{\frac{C(t+1)^3}{B}} + 6 = A \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad (10)$$

A = Length in inches of the part of the flat plate supported by the sides, shell, furnace or uptake, measured from the centre of the seam rivets or, where the plates are flanged, from the inside of the flange.

t = Thickness of plate in sixteenths of an inch.

B = Intended boiler pressure in pounds per square inch.

C = Constant having values as follows :—

Plates not exposed to the impact of heat or flame.

Construction.	Constant.
Parts of plate next to riveted or suitably bolted side or shell seams...	240
Parts of plate next to riveted or suitably bolted furnace or uptake seams ...	200

A reduction of ten per cent. to be made for exposure to the impact of heat or flame.

For material other than steel complying with the requirements of Rule 23 the above constants should be suitably reduced as in sub-rule 2.

STAYS AND BOLTS.

34. The pressure to be allowed on flat surfaces is not dependent on the stiffness of the plate alone, the supporting stays also must be strong enough to withstand the load on the plate and in this respect the working pressure to be allowed for stays and bolts should be determined by the following formulæ :—

(1) *Direct bolt, screw, and tube, stays.*

$$\frac{A \times S}{A_1} = \text{Working pressure in pounds per square inch} \quad \dots \quad \dots \quad \dots \quad (11)$$

A = Net sectional area of the stay, measured over the bottom of the threads of least section.

S = Stress in pounds allowed per square inch of net section of stay for tension or compression in accordance with the Table.

A₁ = Area in square inches of the surface supported by one stay.

Ordinarily the area of the stay itself should not be deducted from A₁ the product of the pitches of the stays, but in the body of tube plates the area occupied by the tubes within the contained surface should be deducted.

When the surfaces supported by stays are semi-circular as in the upper parts of end plates and smoke-box tube plates of locomotive type boilers or annular as in the crown plates of vertical type boilers A_1 in the first case may be taken as the area of the surface contained within the margins credited to shell and to screwed stays, fire door ring or tube stays, and in the second case as the area of the annulus between the margins credited to uptake and shell. When bolt staying is necessary the stays must be properly distributed and as such in the foregoing cases the aggregate net stay section may be used as A in the formula.

(2) *Diagonal rod or bar stays.*

The sectional area of a diagonal rod or bar stay should bear the same proportion to that of a direct stay that the length of the diagonal stay bears to the length of the perpendicular line from the end of the diagonal stay to the surface supported.

The ends of diagonal stays should not be bent, but attached to the flat surface with bevelled washers and nuts or by riveted blocks or angles and well fitting shackle pins. They may be attached to the shell plate by a riveted palm. In such cases and in the case of similarly fitted direct stays, Inspectors should base their calculations, when determining the working pressure, on the section of least strength whether stay, rivets, shackle or pin, and allow working stresses on the sections in accordance with the Table.

(3) *Gusset stays.*

When gusset stays are attached to end and shell plates by double angles not less in thickness than the gusset plates and all rivet holes are drilled and the rivets are properly spaced and formed the working pressure to be allowed for ordinary shaped gusset stays should be found by the following formulæ: the least pressure so found being the permissible working pressure for the stays:—

Plate sections.

$$\frac{(G - N_{11} D) T \times S}{A} = \text{Working pressure in pounds per square inch} \quad \dots \quad \dots(12)$$

$$\frac{(G_1 - D) T \times S}{A} = \text{Working pressure in pounds per square inch} \dots \quad \dots(13)$$

Rivet sections.

$$\frac{N_1 \times D_2 \times .7854 \times S_1}{A} = \text{Working pressure in pounds per square inch} \dots \quad \dots(14)$$

$$\frac{N_{11} \times D_2 \times .7854 \times 2 \times S_{11}}{A} = \text{Working pressure in pounds per square inch} \dots(15)$$

$$\frac{N_{111} \times D_2 \times .7854 \times 2 \times S_{11}}{A} = \text{Working pressure in pounds per square inch} \dots(16)$$

$$\frac{N_{1111} \times D_2 \times .7854 \times S_{11}}{A} = \text{Working pressure in pounds per square inch} \quad \dots(17)$$

G = Depth in inches of gusset plate, measured from edge to edge of plate through the line of rivets attaching gusset plate to end plate angles.

G_1 = Depth in inches of gusset plate, measured from edge to edge of plate normal to the slant edge of plate through the rivet nearest to end plate in the joint attaching gusset plate to shell angles.

T = Thickness of gusset plate in inches.

D = Diameter of rivets in inches.

S = Nominal stress per square inch on gusset plate as per Table.

S_1 = Tensile stress in pounds per square inch on rivet section as per Table.

S_{11} = Shearing stress in pounds per square inch on rivet section as per Table.

N_1 = Number of rivets attaching gusset angles to end plate.

N_{11} = Number of rivets attaching end plate angles to gusset plate.

N_{111} = Number of rivets attaching shell angles to gusset plate.

N_{1111} = Number of rivets attaching shell angles to shell plate.

A = Area in inches of flat plate supported by gusset stay which, in the case of end plate of Lancashire and Cornish type boilers, should be measured in the following manner :—

The margins allowed under Rule 33 (7) for shell and furnace should be marked on the end plate and the lengths of the centre lines of the gussets between the margin lines measured, also the distance between each pair of gusset lines from the middle of the smaller in a line normal to the other. Then, if L and L_1 be the lengths of two adjacent gusset lines and if the distance between them be W the area contained by the gusset lines and the shell and furnace margin lines may be apportioned between the gusset stays thus :—

$$\frac{W(3L+L_1)}{8} = \text{Portion of area in square inches supported by } L \text{ line gusset ... (18)}$$

$$\frac{W(3L_1+L)}{8} = \text{Portion of area in square inches supported by } L_1 \text{ line gusset ... (19)}$$

The portion of the area on the other side of each gusset should, except when of triangular form, be found in a like manner and its amount added to that already found to make up the total area A supported by each gusset stay.

(4) Bolts of ends, covers and small shells.

When circular ends, covers or small shells are attached by bolts or studs the working pressure for the bolts or studs should be found by the following formula :—

$$\frac{A \times S}{A_1} = \text{Working pressure in pounds per square inch (20)}$$

A = Aggregate net bolt section in square inches.

S = Stress allowed per square inch of net section of bolts as per Table.

A_1 = Area in square inches of the surface supported by the bolts which, when the bolts are at the outer edge only may be taken as the area of the circle having a diameter midway between that of the bolt circle and the inner side of the shell, or flange, carrying the bolts, and when there are bolts about the centre of the end or cover as well as at the edge, the central circular area to be deducted should be measured in a similar way. Areas occupied or supported by tubes within the contained surface should be deducted.

When a circular flat end of iron or steel is bolted or riveted to a cylindrical shell and is fitted with a stay in the centre the stay should be of sufficient size to support the pressure acting on a surface equal to that of a circle having a diameter of one half of that in the first case of the foregoing definition of A_1 .

(5) Uptake stays of Vertical Type Boilers.

When crown plates are not fitted with smoke tubes the uptakes of vertical type boilers should, in their capacity as stays, be sufficiently strong to satisfy the rule :—

$$\frac{A \times S}{A_1} = \text{Working pressure in pounds per square inch (21)}$$

A = Least net section of uptake tube or of rivets or bolts connecting uptake to furnace or shell crown plates.

S = Stress allowed per square inch of section of uptake tube, rivets or bolts, as the case may be, as per Table.

A_1 = Area in square inches of the annular space on the shell crown plate around the uptake tube which, when no bolt or other stays are fitted, may be taken as extending to midway between inside of shell and outside of uptake. When bolt stays are fitted the space may be taken as that within the inner circle of the annulus supported by the stays.

The requirements regarding uptake tube stays apply to uptakes fitted to curved and flat crown plates.

(6) Table of stresses allowed for stays, bolts and stay rivets per square inch of net section.

Description of stay.	Material and stress.		
	Steel in accordance with Rule 23.	Iron or steel not in accordance with Rule 23.	Copper.
	Lbs.	Lbs.	Lbs.
Solid rod fitted with nuts... ..	9,500	7,500	.....
Screwed steam or water space stays fitted with nuts	9,250	7,250	.....
Screwed steam or water space stays riveted over to form substantial heads	9,000	7,000	5,500
Bolts or studs up to 7/8 inch diameter	4,500	3,500	.....
Bolts or studs above 7/8 inch diameter	6,000	5,000	.....
Stay tubes, screwed	8,000	6,500	.....
Round, or flat bar, link stays	9,000	7,000	.....
Link stay pins in shear	8,000	6,500	.....
Uptake stays	4,000	3,500	.....
Gusset stays	9,000	7,000	.....
Gusset, or uptake stay, rivets in tension	8,000	6,500	.....
Gusset, or uptake stay rivets in shear	9,000	7,000	.....

Welded stays. Iron stays which have been welded may be allowed a working stress of 5,000 pounds per square inch of net section.

Steel stays which have been welded have been found unreliable. Welded steel stays should therefore not be passed. This does not, however, apply to stay tubes which have been welded longitudinally.

Minimum thickness of stay tubes. The net thickness of stay tubes should not in any case be less than three-sixteenths of an inch.

Material below requirements. Steel stays having a tensile strength between 24 and 27 tons but otherwise complying with the requirements of Rule 23 may be allowed a working stress midway between those given in the table for steel and iron.

Stays in tension and
compression.

The stresses given in the table, except where expressly stated,
may be applied for stays in tension or compression.

GIRDER STAYS.

35. The working pressure to be allowed for girder stays supporting the tops of fire boxes, combustion chambers or other parts of a boiler when the girders are not exposed to a greater temperature than the ordinary temperature of steam, may be found by the following formulæ:—

- (1) *Solid or split girders of rectangular section supported at ends only.*

$$\frac{20,000 \times T \times D^2}{L \times P} = \text{working pressure in pounds per square inch} \quad \dots (22)$$

T = Thickness of girder in inches.

D = Depth of girder at middle in inches.

L = Inside length of fire-box in inches between the end or side plates supporting the girders.

P = Pitch or distance apart of girders in inches.

- (2) *Girders of I or other section supported at ends only.*

$$\frac{120,000 \times I}{L^2 \times P \times X} = \text{working pressure in pounds per square inch} \quad \dots (23)$$

I = Moment of inertia of section round neutral axis.

X = Distance in inches of the farther edge of section from neutral axis.

- (3) The working pressure for the supporting bolts and for the plate between them should be found in the ordinary way. The distance between the centre of the nearest bolt stay and the inside of the plate supporting the girder, or centre of edge seam rivets, as the case may be, should not exceed half the pitch of the bolt stays plus the distance allowed for margins under Rule 33 (7).

When girders rest on end or side plates of fire-boxes, etc., they should be directly fitted and bedded to the edges and corners of the supporting plates and have sufficient bearing surface at these parts to allow transmission of the load to the supporting plates without crushing.

- (4) When girders are supported in any other way than by the end or side plates of the fire-box the calculation for determining the working pressure should be made in accordance with the changed conditions of loading.

The length of the strip of fire-box top plate supported by the girder may be taken as the inside length of the box in the direction of the girder less twice the distance allowed for margins of flat plates under Rule 33 (7).

A nominal stress of 15,000 pounds per square inch of girder section may be allowed in the case of steel complying with the requirements of Rule 23.

Slings, links, pins and connections to shell of slung girders should be sufficiently strong to carry the whole load that would otherwise be carried by the girders.

- (5) In the case of girders supported at the ends only by substantial angle bars riveted to the shell the length L of the girder may, when the girder extends over the full breadth of the angle face, be taken as the distance between the centres of the angle faces, and, when this length substantially agrees with the inside width of the fire-box roof plate, the pressure to be allowed on the girders may be determined by the ordinary formula.

Fire-box roofs of special form.

(6) The case of fire-box roofs of curved or special form should be submitted for the consideration of the Chief Inspector.

(7) The constants 20,000 and 120,000 in the foregoing formulæ are to be used only for Material below requirements. girders of steel complying with the requirements of Rule 23. For steel having a tensile strength between 24 and 27 tons but otherwise complying with the requirements of Rule 23 the constant applicable should be multiplied into $\frac{S}{27}$, S being the minimum tensile strength of the plate.

For steel having a tensile strength below 24 tons and for iron plates the constants should be reduced 16 per cent.

(8) For cast steel complying with the requirements of Rule 24 the constant applicable should be multiplied into $3 \frac{5}{27}$ but when bending tests only in accordance with Sub-rule 4 of the same rule have been made no allowance over mild steel should be made and in the case of cast steel for which no proofs of tests are produced the girders should be treated as being equal to ordinary wrought iron.

TUBE PLATES.

Compression.

36. (1) The working pressure to be allowed for fire-box or combustion chamber tube plates which are subject to compressive stresses due to the pressure on the roof plate may be determined by the following formula:—

$$\frac{C(P-D)T}{L \times P} = \text{working pressure in pounds per square inch} \quad \dots \quad (24)$$

P = Pitch in inches of the tubes in one row from centre to centre; measured horizontally in upright fire-boxes when the tubes are chain-pitched or diagonally when the tubes are zigzag pitched and the diagonal pitch is less than the horizontal.

D = Internal diameter of ordinary tubes in inches.

T = Thickness of tube plate in inches.

L = Extreme length of fire-box or chamber in inches measured from the water side of tube plate and back plate.

C = A constant having the following values:—

28,000 for steel complying with the requirements of Rule 23.

$28,000 \times \frac{S}{27}$ for steel having a tensile strength between 24 and 26 tons but otherwise complying with the requirements of Rule 23, S being the minimum tensile strength of the plate.

22,000 for steel plates having a tensile strength below 24 tons and for iron plates.

9,000 for copper plates.

(2) Tube plates of Locomotive and Vertical Type Boilers.

Staying.

The parts of the tube plates which lie outside the tubes should be stayed in accordance with the rules for flat plates, see Rule 33, in cases in which the size of the surface necessitates such staying.

In the body of tube plates of locomotive type boilers and of crown tube plates of vertical type boilers which are not specially stayed the calculated resistance of the tubes against slipping out of the holes.

$$R = \frac{(P_h P_v - D^2 \times .7854) B}{D \times 3.1416} \quad \dots (25)$$

should not exceed 140 pounds per inch of circumference for tubes expanded in parallel holes when the workmanship is satisfactory.

P_h = Horizontal pitch of tubes in inches.

P_v = Vertical pitch of tubes in inches.

D = External diameter of tube in inches.

B = Working pressure in pounds per square inch.

(3) To provide sufficient resistance against expanded tubes slipping out of the holes flat
*Minimum thickness of steel and iron tube plates. tube plates of iron or steel should not be less in thickness than $\frac{3}{8}$ inch and when the external diameter D of the tube at the part of attachment exceeds $1\frac{1}{2}$ inches the thickness should not be less than $.2 + .12 D$ inch. ... (26)

For copper tube plates the thickness should not be less than $\frac{1}{4}$ inch and when the
Minimum thickness of copper tube plates. external diameter D of the tube at the part of attachment exceeds $1\frac{1}{2}$ inches the thickness should not be less than $.3 + .2D$ inch. ... (27)

FURNACES AND FIRE-BOXES.

37. The working pressure to be allowed for furnaces and fire-boxes should be found from the following formulæ:—

(1) *Plain circular furnaces of Horizontal and Vertical Type Boilers.*

(a) The thickness of plain furnace and fire-box plates must not be less than $\frac{1}{4}$ inch.

$$\frac{C \times T^2}{(L + 1) D} = \text{Working pressure in pounds per square inch.} \quad \dots (28)$$

Provided it does not exceed that found by the following formula:—

$$\frac{C \times T}{10D} = \text{Working pressure in pounds per square inch.} \quad \dots (29)$$

T = Thickness of the furnace plate in inches.

L = Length in feet of the furnace from centre to centre of rings or riveted seams at ends.

D = Greatest external diameter of the furnace in inches.

C = A constant according to the following conditions:—

107,500 when the longitudinal seams are welded or double riveted and fitted with single butt straps or single riveted and fitted with double butt straps.

95,500 when the longitudinal seams are single riveted and fitted with single butt straps or lapped double riveted and bevelled.

89,500 when the longitudinal seams are lapped double riveted and not bevelled.

83,500 when the longitudinal seams are lapped single riveted and bevelled.

77,500 when the longitudinal seams are lapped single riveted and not bevelled.

A deduction of 10 per cent. should be made in the constants for vertical fire-boxes in which the diameter does not decrease at least 1 inch per foot of height.

The foregoing constants are applicable only to furnaces constructed of steel complying with the requirements of Rule 23 which are as truly circular in form as the type of longitudinal seam will permit and, when the seams are riveted, the holes have been drilled in place. When there is no proof that the holes have been drilled in place, the constant for steel or iron, as the case may be, should be reduced 7½ per cent. and, if the workmanship is otherwise not of the best quality, the constants should be further suitably reduced.

(b) When cross tubes are fitted they should be riveted, not welded, to the furnace tube. The longitudinal seams of ordinary sized cross tubes may be welded: the seam should not be exposed to the direct impact of flame. No allowance should be made for cross tubes in calculating the strength of the furnace tubes or fire-box.

(c) When fire-boxes of vertical type boilers are fitted with one or more rows of screwed stays in vertical screwed stays not less than ¾ inch in diameter and having a horizontal pitch not exceeding 7 inches the length L in equation 28 should be measured from the stays to foundation or crown seam, whichever is the greater distance.

No allowance should otherwise be made for screwed stays unless the stays and plate are fit under flat plate rules for the intended pressure.

(d) For well-made plain cylindrical fire-boxes of motor wagon, fire-engine, or similar small cylindrical fire-boxes, of solid section, or with welded longitudinal seams, and material in accordance with the requirements of Rule 23 when the length L does not exceed two feet and the furnaces are practically true circles the working pressure should be found from the following formula:—

$$\frac{12000 \times T}{D} = \text{Working pressure in pounds per square inch.} \quad \dots (30)$$

T and D have the same significance as in equation (29).

Hemispherical furnaces and dished furnace crowns of Vertical Type Boilers.

(2) For well-made hemispherical furnaces and dished furnace crowns formed in one piece not less than 5/16 inch thick of material complying with the requirements of Rule 23 the working pressure should be found from the following formula:—

$$\frac{10000 \times T}{R \left(1 + \frac{D}{30K}\right)} = \text{Working pressure in pounds per square inch.} \quad \dots (31)$$

T = Thickness of plate in inches.

R = Radius of hemisphere or dish in inches measured from the outside of the plate.

K = Radius of corner of flange in inches measured from the outside of the plate
(when the plate is hemispherical, $K = R = \frac{D}{2}$)

D = Diameter in inches of the cylindrical part to which the curved crown plate is attached.

The radius R should not exceed the diameter of the cylindrical part to which the curved crown plate is attached.

No account should be taken of the influence of the uptake tube in dished furnace crowns when determining working pressure by this rule unless the crown plate works out to a greater pressure under flat plate rules. See Rule 33 (5).

Uptakes of Vertical Type Boilers.

(3) As the internal chimney tubes or uptakes of vertical type boilers where they pass from the fire-box through the steam space are especially liable to injury from over-heating unless careful precautions are observed while steam is being raised their strength should be greater than that of ordinary furnaces. The working pressure should be found from equations 28 and 29 but the constants used in each case should be one half only of those for plain circular furnaces. See Rule 34 (5) for the strength of uptakes considered as stays. Uptakes should preferably be welded, not riveted, longitudinally.

It is recommended that uptakes should be protected by a cast iron liner having an air space all round it or saved from being unduly heated by other efficient means.

Flanged ring furnaces of Horizontal Boilers.

(4) When horizontal furnaces of ordinary diameter are constructed of a series of drums welded longitudinally and the ends of each drum flanged and riveted together and so forming the furnace then, provided the following conditions are complied with, the working pressure may be found from the formula:—

$$\frac{10750 \times T}{3 \times D} \left(5 - \frac{L \times 12}{60T} \right) = \text{working pressure in pounds per square inch.} \quad (32)$$

T = Thickness of plate in inches.

D = Greatest external diameter of furnace in inches.

L = Length between centres of flanges in inches, which must not exceed 120 T—12 inches.

The inner radii of the bends of the flanges should not be less than one inch. The diameter of the rivets should not be less than $\frac{1}{2}$ inch greater than the thickness of the plate.

The depth of the flanges from the water side should not be less than three times the diameter of the rivet plus 1 inch.

The centres of the rivet holes should not be less than one and a half times their diameter from the edge of the flange and the depth of the caulking ring should not be less than three times the diameter of the rivets.

The rings should be turned and be not less in thickness than one-half that of the furnace plate.

The holes in the flanges and rings should be drilled in place if practicable but if not drilled in place they should be drilled smaller than required and afterwards rimmed out until the holes are quite fair.

The flanging should be performed at one heat in a suitable flanging machine and after all welding and flanging operations are completed each drum should be efficiently annealed. The finished drum should be circular in form.

Equation 32 is applicable only to furnace drums of material complying with the requirements of Rule 23 and with the foregoing conditions. When the length L exceeds 120 T—12 inches or the conditions following the formula are not complied with the working pressure should be determined by the formulæ for plain furnaces.

Corrugated furnaces of Horizontal Boilers.

(5) Machine made furnaces of the Fox, Morison or Deighton corrugated types; of the Purves ribbed and grooved type; of the Brown's cambered type or of the Leeds Forge Company's bulb type, provided they are practically true circles and the plates are not less than 5/16 inch thick may be allowed the working pressure found from the following formula:—

$$\frac{C \times T}{D} = \text{Working pressure in pounds per square inch.} \quad \dots (33)$$

C = 14,000 when the pitch of the corrugations in the Fox type furnace does not exceed 6 inches and in the Morison and Deighton type furnaces does not exceed 8 inches and in the ribbed and grooved or cambered types does not exceed 9 inches and the conditions specified hereafter are observed.

C = 15,000 when the pitch of the bulbs in the Leeds Forge Company's type furnace does not exceed 8 inches and the conditions specified hereafter concerning them are observed.

T = Thickness in inches measured at the bottom of the corrugation, camber or plain part.

D = External diameter in inches measured at the bottom of the corrugation or camber or over the plain parts between the ribs or bulbs.

In the Fox, Morison and Deighton type furnaces the depth from top of corrugation outside to bottom of corrugation inside should not be less than 2 inches.

The ribs of ribbed and grooved furnaces should not be less than $1\frac{1}{8}$ inches above the plain parts and the depth of the grooves not more than $\frac{3}{4}$ inch.

In Browns cambered furnace the thickness at the centre of the ribs should be not less than $\frac{3}{16}$ inch greater than the thickness at the bottom of the camber: the tops of the ribs should be curved to a radius of $1\frac{3}{8}$ inches, the grooves beneath the ribs to a radius of $\frac{45}{64}$ inches and the height of the ribs above the bottom of the camber should not be less than $1\frac{1}{8}$ inches.

In the bulb type furnace the depth from the top of the bulb to the plain part at the middle of the pitch should not be less than $2\frac{1}{2}$ inches.

In each of these descriptions of furnaces the plain parts at the ends, measured from the centre of the nearest corrugation rib or bulb to the water side of the end, or tube plate, or centre of riveted seam when the end plates are flanged, should not exceed 9 inches. When the plain parts at the back ends are made conical with a flange extending all round a length of $10\frac{1}{2}$ inches may be allowed between the water side of the back tube plate and the centre of the corrugation or rib.

When this method of construction is adopted the vertical section through the neck piece should be kept as circular as is practicable, the set up at the bottom should not exceed 8 inches measured over the plates and in no case should the vertical axis exceed the horizontal one by more than $14\frac{1}{2}$ per cent. The plates at the end should not be unduly thinned in the flanging.

If the furnace is riveted in two or more lengths the case should be submitted to the Chief Inspector for consideration.

Furnances in general.

(6) The constants in the foregoing formulæ are to be used only when the material is steel complying with the requirements of Rule 23. For steel having a tensile strength between 24 and 26 tons but otherwise complying with the requirements of Rule 23 the working pressures found from the foregoing formulæ should be reduced in the proportion 26 to S, when S is the minimum tensile strength of the plate.

For steel having a tensile strength below 24 tons and for iron plates the working pressures found from the foregoing formulæ should be reduced 16 per cent.

All furnace and fire-box plates that have been welded, flanged or worked in the fire should be efficiently annealed after all such operations are completed.

PIPES AND TUBES.

38. The working pressure to be allowed for pipes and tubes may be found from the following formula:—

$$\frac{C \times T}{D} = \text{Working pressure in pounds per square inch} \quad \dots \quad (34)$$

T = Thickness of the tube in inches.

D = Internal diameter of the tube in inches.

C = A constant as follows:—

7,000 for solid-drawn tubes of steel complying with the requirements of Rule 23.

6,000 for lap-welded wrought iron tubes of good material and for well made copper pipes when the joints are brazed or for solid drawn copper pipes not over ten inches in diameter.

The thickness T in the formula should in the case of brazed and solid drawn copper pipe be reduced 1/16th inch and 1/32nd inch, respectively.

FITTINGS AND ACCESSORIES.

THE REQUISITE FITTINGS.

39. Every boiler must be fitted with at least—

Two safety-valves.

A steam pressure gauge.

A glass water gauge.

Two test cocks or in lieu thereof a second glass water gauge.

A steam stop valve.

A non-return feed valve.

A blow down cock or valve.

A cock or other attachment for Inspector's test gauge.

A manhole if the size of the boiler permits and such hand holes and mudholes as are necessary for effectively cleaning out the boiler.

It is recommended that large boilers be fitted with scum cocks and all boilers of ordinary types with fusible plugs.

If two or more boilers are connected each boiler must be fitted complete with all the requisite fittings as if it were an entirely separate boiler.

The feed valve in such a case must be capable of external adjustment.

SAFETY VALVES.

40. (1) The Inspector should at every examination of the boiler satisfy himself that the safety-valves and parts appertaining to them are in good working order. See Rule 21 regarding "Steam Tests."

(2) Two safety-valves are required to be fitted to every boiler; they should not be less in diameter than one inch and may be carried in one chest. In the case of small boilers if it is wished to fit valves of less than one inch diameter the case, as it stands, should be submitted for the consideration and orders of the Chief Inspector.

(3) Inspectors must see that in all new boilers, and in others whenever alterations can be easily made, the safety-valve-chests are placed directly on the boiler or on short stand-blocks or pads riveted to the boiler. The neck of the chest should be as short as its construction will permit.

(4) Distance pieces or tee pieces connecting with stop valves or pipes between the safety-valve-chests and the boiler are not to be passed nor should any connection for the supply of steam that is made direct to the safety-valve-chest itself be passed except in the case of small boilers into which a person cannot enter and then only if the arrangement is approved by the Chief Inspector.

(5) No boiler or steam chamber is to be so constructed, fitted or arranged that the escape of steam from it through the safety valves can be wholly or partially intercepted by the action of any other valve or constructive detail.

(6) The openings in the boiler-shell for the safety-valves must be left free and uncovered on the inside and must not be connected with steam-collecting pipes or other internal pipes.

(7) Each safety-valve should have a lift at least equal to one-fourth of its effective diameter; the openings for the passage of steam to and from the valves, and the waste steam pipe, if any, should each have an area not less than the effective area of valve or combined area of valves when there are more than one.

When a waste steam pipe is fitted of sufficient height to cause an appreciable additional load on the valve by a lodgment of condensed steam or rain water, a drain pipe must be fitted to the bottom of the waste steam pipe or valve chest.

Inspectors should be careful to see that the safety-valves have proper lift and that there is a free means of escape for the waste steam.

Means should be provided in every case to prevent the valves being lifted out of their seats through any cause. It is desirable that valve seats should be secured by studs and nuts.

In the case of lever valves if the lever is not bushed with brass the pins must be of brass: iron and iron working together must not be passed. The springs of spring loaded valves should have a sufficient number of coils to allow a compression under the working load which will admit of the valves lifting at least one-fourth of the effective diameter.

The springs of direct loaded safety-valves should not as a rule be less than $\frac{1}{4}$ inch in thickness and should comply with the following formula:—

$$\sqrt{\frac{L \times D}{C}} = \text{Thickness of wire in inches} \quad \dots \quad \dots \quad \dots \quad \dots \quad (35).$$

L = load on the spring in pounds.

D = diameter of the coil from centre to centre of wire in inches.

C = 8,000 for round steel.

C = 11,000 for square steel.

The weights of lever and weight safety-valves should be secured against an alteration of position which would increase the load on the valve by means of an abutment on the lever or by split pins through the lever and in the case of spring loaded valves washers or ferrules must be fitted under the adjusting screws for the same reason.

(8) The Inspector shall declare the limits of the resistance to steam pressure to which the safety-valves must be regulated.

(9) When the Inspector has determined the amount of pressure, he is to order the valves to be weighted accordingly and the weights or springs to be fixed in such a manner as to preclude the possibility of their shifting or in any way increasing the pressure, and if considered necessary he is to see this order carried out. The Inspector shall certify that the valves have been ordered to be so regulated, stating the pressure and weights, and further that their condition is as required by the rules in force. This declaration shall be entered on his certificate issued under the Act.

The responsibility incurred by an Inspector in issuing a certificate before he is fully satisfied on these points is very grave, since by the law he is responsible for certifying that the boiler (as shown in his statement) with all its necessary appurtenances is to the best of his judgment in good condition.

(10) Should it at any time come to an Inspector's knowledge that the weights have been shifted or the loading of the valves otherwise altered, or that the valves or constructive details have been in any way interfered with so as to increase the pressure without the sanction of the Chief Inspector he is at once to report the facts to that officer.

(11) The Inspector is to examine the whole of the valves, weights and springs at every inspection and satisfy himself that they are correct and in good order.

(12) When calculating the permissible load on a safety valve, that area of valve should be taken on which the steam can exert an effective opening pressure when the valves are closed but in computing the safety-valve area required by the Rule the least area of the bore of the valve seat or passage leading to it should be used.

(13) The area of safety-valves per square foot of fire-grate surface should not be less than that given by the following formulæ :—

The fire-grate area for this purpose is to be measured in the same way as for rating purposes under Rule 18.

Natural draught.

$$\frac{37.5}{P + 15} = A \quad \dots \quad \dots \quad \dots \quad 36.$$

P = Boiler pressure in pounds per square inch.

A = Area of safety valve required for each square foot of grate surface.

Forced draught.

$$\frac{A \times C}{20} = A_1 \quad \dots \quad \dots \quad \dots \quad 37.$$

A = Area as in the case of natural draught.

C = Estimated consumption of coal per square foot of grate in pounds per hour.

A₁ = Area of safety-valve required for each square foot of grate surface.

STEAM PRESSURE GAUGE.

41. Pressure gauges must be marked in pounds per square inch and should have a range at least seventy-five per cent. greater than the working pressure of the boiler to which it is attached.

A syphon pipe for containing water and a stop-cock must be fitted between the pressure-gauge and boiler.

Inspectors should frequently examine boiler pressure-gauges and compare their readings with the standard test gauge. No newly registered boiler should be passed until the pressure-gauge has been compared with the standard gauge.

GLASS WATER GAUGE AND TEST COCKS.

42. Inspectors shall see that these fittings are in working order and that the bottom fitting of the glass water gauge and lowest test cock are fixed at a safe level.

In locomotive type boilers the lowest visible part of the water gauge glass must be at least two inches above the highest part of the fire-box roof plate.

Glass water-gauges must be so placed as to be easily seen and reached by the boiler attendant. The fittings should be of substantial make having large passage ways through them; the gauge cocks when open should have their handles in a vertical direction and each handle should be plainly marked with a line indicate the direction of the passage way through the cock.

A pointer marking the working water level should be fitted to each water gauge glass and suitable glass guards are recommended to be provided.

STEAM AND WATER STOP VALVES.

43. (1) A steam stop valve must always be fitted between the boiler and the steam pipe and, except in the case in which a superheater forms an integral part of the boiler itself, between the boiler and the superheater. Where two or more boilers are connected with a steam receiver or any other vessel a steam stop valve must always be fitted between the boiler and such receiver or vessel.

(2) Steam stop valves should be attached directly to the boiler itself or to suitable pads or stand-blocks riveted to the boiler and the neck of the valve-chest should be reasonably short. Exception to this rule will be made in the case of a large boiler in which the steam pipes, for the purpose of drainage, or owing to obstruction, are desired to be connected to the steam stop valve at a higher level than would be obtained under the rule, in which case a vertical stand pipe, not exceeding three feet in height, may be passed between the stop valve and the boiler.

Such stand pipes must be of strong construction of wrought iron, mild steel or cast steel. Cast iron pipes for such a purpose must not be passed. The flanges of wrought iron or mild steel pipes must be riveted to the pipes at each end and there should be no branches on the pipe for other connections.

(3) Exception to the rule will also be made in the case of a large boiler in which it is desired to fit a tee piece, for the purpose of providing a branch connection between the steam stop valve and the boiler. Such tee pieces must be of strong construction of wrought iron, mild steel or cast steel not exceeding eighteen inches in height: cast iron tee pieces should not be passed.

A stop valve must be fitted directly to each tee piece branch.

(4) The approval of the Chief Inspector must be obtained in all cases in which it is desired to fit a stand pipe or tee piece between the stop valve and boiler.

(5) Cast steel is recommended for the bodies of steam stop valves.

(6) Feed check valves must be attached directly to the boiler. Where two or more boilers are connected to one feed pipe the feed check valve must be capable of external adjustment and shutting down.

BLOW-DOWN COCKS, VALVES AND PIPES.

44. (1) At every inspection Inspectors should see that these fittings are in order. Cast iron is an unsuitable material for the connecting pipe between the boiler and the blow-down cock or valve and pipes of this material must not be passed.

(2) When inspecting Lancashire and Cornish boilers Inspectors should see that the waste pipe attached to the blow-down cock or valve is not rigidly bound in earth or brick-work but is free to follow the movement of the boiler without unduly stressing the elbow pipe.

TESTER COCK.

45. (1) This fitting is intended for the attachment of the Inspector's standard pressure gauge when verifying the correctness of the boiler pressure gauge and when testing the boiler under water and steam pressure.

The screw to receive the Inspector's gauge should be tapped $\frac{3}{4}$ " Whitworth thread and the cock or other attachment carrying the receiving screw must be capable of being shut off from the boiler. The tester cock or other attachment should be connected to the steam space of the boiler near to the boiler pressure gauge.

(2) In the case of small boilers that are hydraulically tested at each inspection it is recommended that a plug hole tapped $\frac{3}{4}$ " Whitworth thread be provided for the attachment of the Inspector's pump hose.

SCUM COCKS.

46. Inspectors should see that these fittings where provided are in working order.

FUSIBLE PLUG.

47. Inspectors should see that this plug, where provided, is at that part of the boiler where the heat of the fire produces the greatest effect. The outside and inside of the plug should be kept clean and the fusible material should be periodically renewed.

MANHOLES, MOUTHPIECES AND DOORS.

48. (1) Manholes, mouthpieces and doors should preferably be made of mild steel pressed into form.

(2) For pressures over 100 pounds the manhole frame whether raised or otherwise, should preferably be weldless.

(3) Mouthpieces, doors or bridges of cast iron or malleable cast iron must not be passed.

(4) For manholes on the front ends of Lancashire type boilers the frame should preferably be formed with a deep turned-in flange having its inner edge faced to receive the door joint. The frame should be carried well up above the door in the form of a peak to add rigidity to the end plate and be single riveted so as to allow the gusset stays by which the plate is supported to be placed nearer each other than would otherwise be the case. See Rule 33 (4).

(5) All internally fitted doors must be formed with a spigot, pressed or otherwise, which must be a good fit in the hole. The clearance between the spigot and the edge of hole should not be more than one-sixteenth of an inch all round; doors having a greater clearance than this should not be passed.

(6) Manholes in cylindrical shells should be placed in the middle of a plate and not near a circumferential seam.

(7) Openings in the shells of cylindrical boilers when oval should have their shorter axis placed longitudinally. All manholes and openings exceeding twelve square inches in area must be stiffened with compensating rings of at least the same effective sectional area as the plates cut out and not less in thickness than the plates to which they are attached.

(8) The percentage of compensating section should be determined by the following rule:—

$$\frac{100 (W - D) 2 \times Tr.}{(L + 2 D) T_s} = \text{Percentage strength of compensating ring} \quad \dots (38)$$

W = Width of compensating ring in inches.

L = Length of opening in shell measured in a longitudinal direction in inches.

D = Diameter of rivet holes in inches.

Tr = Thickness of compensating ring in inches.

T_s = Thickness of shell plate in inches.

(9) Parts of raised manhole frames within four inches of the shell may, in addition to the ring, be considered as compensating section and should be computed in the foregoing manner.

(10) When openings in flat surfaces are not fitted with compensating rings, the plates being flanged instead, the total depth D of the flange should not be less than that given by the following equation :—

$$\sqrt{W \times T} = D \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad (39).$$

D = Depth of flange, including thickness of plate, in inches.

W = Width of opening in plate in inches.

T = Thickness of plate in inches.

STEAM PIPES.

49. (1) Inspectors should examine and test steam pipes when new and whenever there is reason to believe that steam pipes are in any way defective or unfit for the pressure. See Rule 38 for determination of working pressure.

(2) In all cases in which a socket expansion joint is fitted to a bent steam pipe, the Inspector should require a fixed gland and bolts to be fitted in order to prevent the end of the pipe being forced out of the socket. Fixed glands and bolts should also be fitted to the expansion joints of straight steam pipes, as cases have occurred, particularly with small straight pipes in which the ends of the pipes have been forced out of the sockets.

ECONOMISERS AND SUPERHEATERS.

50. Inspectors should see that the safety valves of economisers and of superheaters that can be shut off from the boiler are in proper working order. Superheaters that cannot be shut off from the boiler should be inspected and tested as part of the boiler.

SALINOMETERS AND THERMOMETERS.

51. Inspectors shall see that every engineer or driver in charge of a boiler has available for his use for the purpose of testing the density of the water in the boiler, a salinometer and a thermometer and that the same are kept in good working order.

APPENDIX.

RIVETED JOINTS OF CYLINDRICAL BOILER SHELLS.

Formulae for ordinary chain riveted and zigzag riveted joints and for joints of these descriptions when every alternate rivet in the outer or in the inner and middle rows has been omitted.

The symbols used are :—

A = Area of one rivet hole in inches.

D = Diameter of rivet holes in inches.

E = Distance from edge of plate to centre of rivet in inches.

N = Number of single shear rivet sections per pitch.

P = Greatest pitch of rivets in inches.

P_D = Ordinary diagonal pitch of rivets in inches.

P_{D_1} = Diagonal pitch of rivets in inches between inner and middle rows of rivet in joints, Figures 21 and 25.

R = Distance between rows of rivets in inches.

R_1 = Distance between inner and middle rows of rivets in joints, Figures 21, 22, 25 and 26, in inches.

S = Tensile strength in tons per square inch of shell plate section in accordance with Rule 29.

S₁ = Shearing strength in tons per square inch of rivet section in accordance with Rule 29.

T = Thickness of shell plate in inches.

T₁ = Minimum thickness of each butt strap in inches.

% = Percentage strength of plate, rivet or combined plate and rivet section, as the case may be, compared with the solid plate.

When joints are used in boiler construction other than those shown in the accompanying sketches, or when any of the rivets are pitched less than two diameters apart the particulars of such joints should be submitted for the consideration of the Chief Inspector.

PLATE AND RIVET SECTIONS.

$$\frac{100 (P-D)}{P} = \% \text{ Plate section} \dots \dots \dots (1)$$

$$\frac{100 \times A \times N \times S_1}{P \times T \times S} = \% \text{ Rivet section} \dots \dots \dots (2)$$

$$\frac{100 (P-2 D)}{P} + \frac{100 \times A_1 \times N_1 \times S_1}{P \times T \times S} = \% \text{ Combined plate and rivet section.} (3)$$

When the sectional areas of the rivets are not the same in all the rows, the sum of the various single shear sections (A^I N_I + A_{II} N_{II}) or (A_I N_I + A_I^I N_{II} + A_{III} N_{III}) as the case may be, in which A_I N_I, A_{II} N_{II} and A_{III} N_{III} are the single shear sections in the outer, middle and inner rows of rivets, respectively, should be substituted for A × N in equation (2).

Equation (3) is applicable only to joints in which every alternate rivet is omitted in the outer or in the outer and inner rows as in Figures 7, 8, 11, 12, 15, 16, 19, 20, 21, 22, 25 and 26.

The least percentage found from equations (1), (2) or (3) is to be taken as the percentage of strength of the joint compared with the solid plate.

BUTT STRAPS.

Butt straps of the same material as the shell plates: minimum thickness.

.....

Single butt straps covering welded seams should not be less than the thickness of the shell plates.

Single butt straps having ordinary riveting—

$$\frac{9 \times T}{8} = T_1. \dots \dots \dots (4)$$

Single butt straps having every alternate rivet in the outer row omitted—

$$\frac{9 \times T (P-D)}{8 (P-2 D)} = T_1. \dots \dots \dots (5)$$

Double butt straps of equal width having ordinary riveting as in Figures 2, 5, 6, 17 and 18—

$$\frac{5 \times T}{8} = T_1. \dots \dots \dots (6)$$

Double butt straps of equal width having every alternate rivet in the outer, or in the outer and inner rows omitted as in Figures 7, 8, 19, 20, 21 and 22—

$$\frac{5 \times T (P-D)}{8 (P-2 D)} = T_1. \dots \dots \dots (7)$$

Double butt straps of unequal width having ordinary riveting as in Figures 9 and 10—

$$\frac{13 \times T}{16} = T_1, \text{ wide strap} \quad \dots \dots \dots (8)$$

$$\frac{7 \times T}{16} = T_1, \text{ narrow strap} \quad \dots \dots \dots (9)$$

For Figures 23 and 24—

$$\frac{3 \times T}{4} = T_1, \text{ wide strap} \quad \dots \dots \dots (10)$$

$$\frac{1 \times T}{2} = T_1, \text{ narrow strap} \quad \dots \dots \dots (11)$$

Double butt straps of unequal width having every alternate rivet in the outer row omitted as in Figures 11 and 12—

$$\frac{3 \times T (P-D)}{4 (P-2 D)} = T_1, \text{ wide strap} \quad \dots \dots \dots (12)$$

$$\frac{1 \times T (P-D)}{2 (P-2 D)} = T_1, \text{ narrow strap} \quad \dots \dots \dots (13)$$

For Figures 25 and 26—

$$\frac{11 \times T (P-D)}{16 (P-2 D)} = T_1, \text{ wide strap} \quad \dots \dots \dots (14)$$

$$\frac{9 \times T (P-D)}{16 (P-2 D)} = T_1, \text{ narrow strap} \quad \dots \dots \dots (15)$$

PITCH AND SPACING OF RIVETS.

Maximum Pitches for Riveted Joints

$$(C \times T) + 1\frac{1}{8} = P \quad \dots \dots \dots (16)$$

T = Thickness of plate in inches.

P = Maximum pitch of rivets in inches provided it does not exceed 10½ inches.

C = Constant applicable from the following Table :—

Number of rivets in one pitch.	Constants for Lap and Single Butt Strap Joints.	Constants for joints having Double Butt Straps.
1	1.81	1.75
2	2.62	3.50
3	3.47	4.63
4	4.14	5.52
5	...	6.00

When the work is first class such pitches may be adopted so far as safety is concerned, yet in some cases, it may be well not to adopt the greatest pitch found by the formula. The maximum pitch should not, however, exceed 10½ inches with the thickest plates for boiler shells. If in any case the pitch is found to exceed that arrived at by the foregoing formula for the particular description of joint and thickness of plate, the case should be submitted to the Chief Inspector for consideration.

DIAGONAL PITCHES.

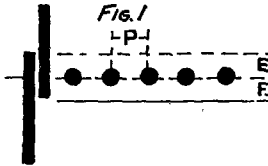
The diagonal pitches of the rivets of the joints shown in the accompanying sketches should not be less than those found by the following formulæ :—

Ordinary zigzag riveted joints as in Figures 3, 5, 9, 13, 17 and 23—

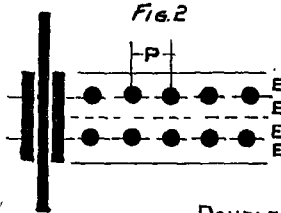
$$.6 P + .4 D = P D \quad \dots \dots \dots (17)$$

THE BOMBAY BOILER INSPECTION RUI
APPENDIX.

SINGLE RIVETED JOINTS.

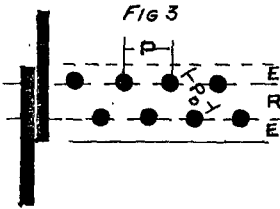


$$\begin{aligned} \text{MAX. PITCH} &= 1.31 \times T + 1\frac{5}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times S_1}{P \times T \times S} \\ E &= 1.5 \times D \end{aligned}$$

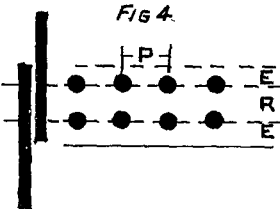


$$\begin{aligned} \text{MAX. PITCH} &= 1.75 \times T + 1\frac{5}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 2 \times S_1}{P \times T \times S} \\ E &= 1.5 \times D \\ \text{BUTTSTRAPS} &= \frac{5 \times T}{B} \end{aligned}$$

DOUBLE RIVETED JOINTS



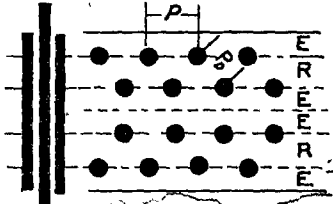
$$\begin{aligned} \text{MAX. PITCH} &= 2.62 \times T + 1\frac{5}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 2 \times S_1}{P \times T \times S} \\ R &= \frac{\sqrt{((1P+4D)(P+4D))}}{10} \\ P_D &= .6P + .4D \\ E &= 1.5 \times D \end{aligned}$$



$$\begin{aligned} \text{MAX. PITCH} &= 2.62 \times T + 1\frac{5}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 2 \times S_1}{P \times T \times S} \\ R &= 2 \times D \\ E &= 1.5 \times D \end{aligned}$$

THE BOMBAY BOILER INSPECTION RULES 191 .
APPENDIX .

FIG. 5



$$\text{MAX. PITCH} = 3.5XT + \frac{1\frac{5}{8}}{8}$$

$$\text{PLATE \%} = \frac{100(P-D)}{P}$$

$$\text{RIVET \%} = \frac{100XA \times 4XS_1}{PXT \times S}$$

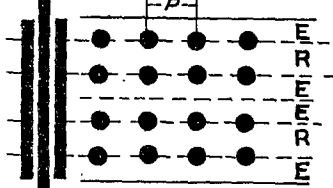
$$R = \frac{\sqrt{(11P+4D)(P+4D)}}{10}$$

$$P_D = .6P + .4D$$

$$E = 1.5XD$$

$$\text{BUTT STRAPS} = \frac{5XT}{8}$$

FIG. 6



$$\text{MAX. PITCH} = 3.5XT + \frac{1\frac{5}{8}}{8}$$

$$\text{PLATE \%} = \frac{100(P-D)}{P}$$

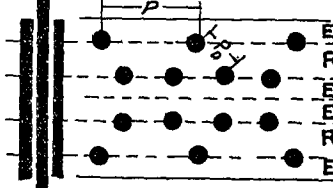
$$\text{RIVET \%} = \frac{100XA \times 4XS_1}{PXT \times S}$$

$$R = 2XD$$

$$E = 1.5XD$$

$$\text{BUTT STRAPS} = \frac{5XT}{8}$$

FIG. 7



$$\text{MAX. PITCH} = 4.63XT + \frac{1\frac{5}{8}}{8}$$

$$\text{PLATE \%} = \frac{100(P-D)}{P}$$

$$\text{RIVET \%} = \frac{100XA \times 6XS_1}{PXT \times S}$$

$$\text{COMB. \%} = \frac{100(P-2D)}{P} + \frac{\text{RIVET \%}}{3}$$

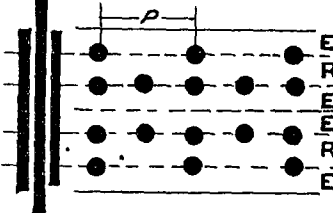
$$R = \frac{\sqrt{\left(\frac{11P+D}{20}\right)\left(\frac{11P+D}{20}\right)}}{20}$$

$$P_D = .3P + D$$

$$E = 1.5XD$$

$$\text{BUTT STRAPS} = \frac{5XT(P-D)}{8(P-2D)}$$

FIG. 8



$$\text{MAX. PITCH} = 4.63XT + \frac{1\frac{5}{8}}{8}$$

$$\text{PLATE \%} = \frac{100(P-D)}{P}$$

$$\text{RIVET \%} = \frac{100XA \times 6XS_1}{PXT \times S}$$

$$\text{COMB. \%} = \frac{100(P-2D)}{P} + \frac{\text{RIVET \%}}{3}$$

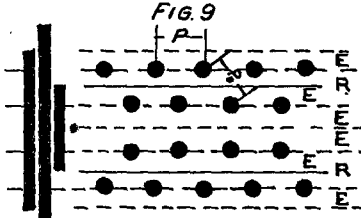
$$R = \frac{\sqrt{\left(\frac{11P+4D}{10}\right)\left(\frac{11P+4D}{10}\right)}}{10} \text{ OR } 2D$$

$$E = 1.5XD$$

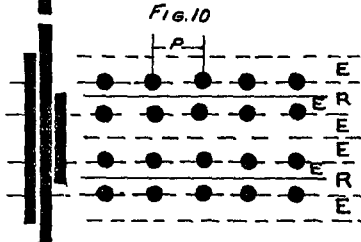
$$\text{BUTT STRAPS} = \frac{6XT(P-D)}{8(P-2D)}$$

THE BOMBAY BOILER INSPECTION RULES 191.

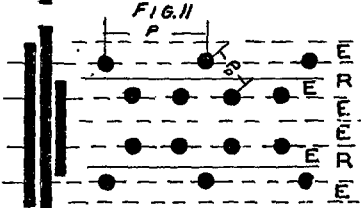
APPENDIX



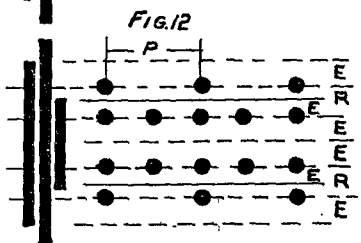
MAX. PITCH = $3.5 \times T + 1\frac{5}{8}$
 PLATE % = $\frac{100(P-D)}{P}$
 RIVET % = $\frac{100 \times A \times 3 \times S}{P \times T \times S}$
 $R = \sqrt{\frac{11(P+4D)(P+4D)}{10}}$
 $P_2 = .6P + .4D$
 $E = 1.5 \times D$
 BUTT STRAP WIDE = $\frac{13 \times T}{16}$
 Do. NARROW = $\frac{7 \times T}{16}$



MAX. PITCH = $3.5 \times T + 1\frac{5}{8}$
 PLATE % = $\frac{100(P-D)}{P}$
 RIVET % = $\frac{100 \times A \times 3 \times S}{P \times T \times S}$
 $R = 2 \times D$
 $E = 1.5 \times D$
 BUTT STRAP WIDE = $\frac{13 \times T}{16}$
 Do. NARROW = $\frac{7 \times T}{16}$



MAX. PITCH = $4.63 \times T + 1\frac{5}{8}$
 PLATE % = $\frac{100(P-D)}{P}$
 RIVET % = $\frac{100 \times A \times 5 \times S}{P \times T \times S}$
 Comb. % = $\frac{100(P-2D)}{P} + \frac{RIVET \%}{5}$
 $R = \sqrt{\frac{11}{20} P + D} + \frac{1}{20} (P + D)$
 $P_2 = .3P + D$
 $E = 1.5 \times D$
 STRAP WIDE = $\frac{3 \times T (P-D)}{4(P-2D)}$
 Do. NARROW = $\frac{7(P-2D)}{2(P-2D)}$

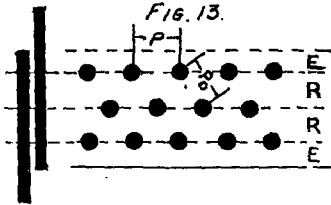


MAX. PITCH = $4.63 \times T + 1\frac{5}{8}$
 PLATE % = $\frac{100(P-D)}{P}$
 RIVET % = $\frac{100 \times A \times 5 \times S}{P \times T \times S}$
 Comb. % = $\frac{100(P-2D)}{P} + \frac{RIVET \%}{5}$
 $R = \sqrt{\frac{11(P+4D)(P+4D)}{10}}$ OR $2D$
 $E = 1.5 \times D$
 STRAP WIDE = $\frac{3 \times T (P-D)}{4(P-2D)}$
 Do. NARROW = $\frac{7(P-2D)}{2(P-2D)}$

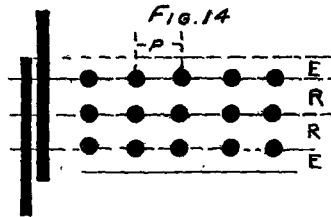
THE BOMBAY BOILER INSPECTION RULES 191.

APPENDIX.

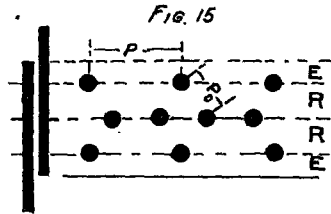
TREBLE RIVETED JOINTS.



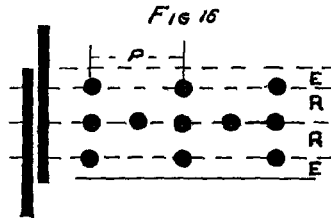
$$\begin{aligned} \text{MAX. PITCH} &= 3.47 \times T + \frac{15}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 3 \times S_1}{P \times T \times S} \\ R &= \sqrt{\frac{11P+4D}{10} (P+4D)} \\ P_0 &= .6P + .4D \\ E &= 1.5 \times D \end{aligned}$$



$$\begin{aligned} \text{MAX. PITCH} &= 3.47 \times T + \frac{15}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 3 \times S_1}{P \times T \times S} \\ R &= 2 \times D \\ E &= 1.5 \times D \end{aligned}$$



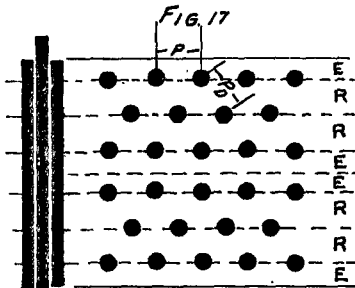
$$\begin{aligned} \text{MAX. PITCH} &= 4.14 \times T + \frac{15}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 4 \times S_1}{P \times T \times S} \\ \text{COMB \%} &= \frac{100(P-2D)}{P} + \frac{\text{RIVET \%}}{4} \\ R &= \sqrt{\left(\frac{11}{20}P+D\right)\left(\frac{1}{20}P+D\right)} \\ P_0 &= .3P + D \\ E &= 1.5 \times D \end{aligned}$$



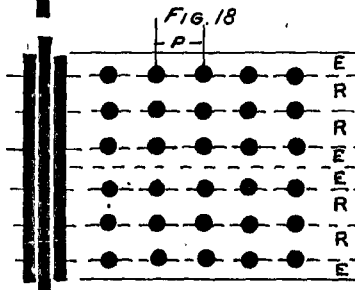
$$\begin{aligned} \text{MAX. PITCH} &= 4.14 \times T + \frac{15}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 4 \times S_1}{P \times T \times S} \\ \text{COMB. \%} &= \frac{100(P-2D)}{P} + \frac{\text{RIVET \%}}{4} \\ R &= \sqrt{\frac{11P+4D}{10} (P+4D)} \text{ OR } 2D \\ E &= 1.5 \times D \end{aligned}$$

THE BOMBAY BOILER INSPECTION RULES 191 .

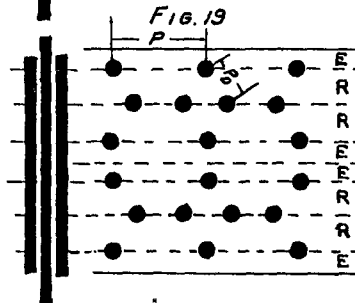
APPENDIX



$$\begin{aligned} \text{MAX. PITCH} &= 4.63 \times T + 1\frac{5}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 6 \times S_1}{P \times T \times S} \\ R &= \frac{\sqrt{(1P+4D)(P+4D)}}{10} \\ P_0 &= .5P + 4D \\ E &= 1.5 \times D \\ \text{BUTT STRAPS} &= \frac{5 \times T}{8} \end{aligned}$$



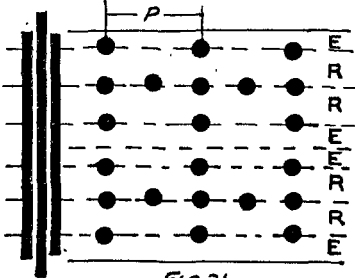
$$\begin{aligned} \text{MAX. PITCH} &= 4.63 \times T + 1\frac{5}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 6 \times S_1}{P \times T \times S} \\ R &= 2 \times D \\ E &= 1.5 \times D \\ \text{BUTT STRAPS} &= \frac{5 \times T}{8} \end{aligned}$$



$$\begin{aligned} \text{MAX. PITCH} &= 5.52 \times T + 1\frac{5}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 8 \times S_1}{P \times T \times S} \\ \text{COMB. \%} &= \frac{100(P-2D)}{P} + \frac{\text{RIVET \%}}{4} \\ R &= \sqrt{\left(\frac{11}{20}P+D\right)\left(\frac{1}{20}P+D\right)} \\ P_0 &= .3P + D \\ E &= 1.5 \times D \\ \text{BUTT STRAPS} &= \frac{5 \times T(P-D)}{8(P-2D)} \end{aligned}$$

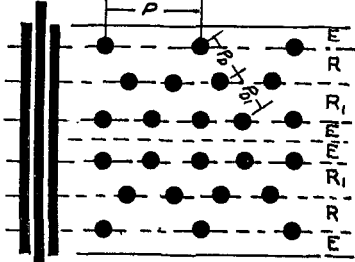
THE BOMBAY BOILER INSPECTION RULES 1911.
APPENDIX.

FIG. 20



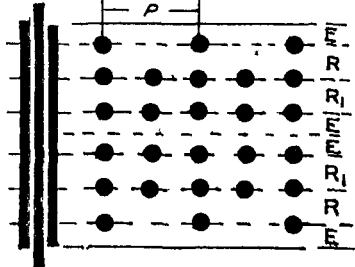
$$\begin{aligned} \text{MAX. PITCH} &= 5.52 \times T + \frac{1.5}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times B \times S_1}{P \times T \times S} \\ \text{COMB \%} &= \frac{100(P-2D)}{P} + \frac{\text{RIVET \%}}{4} \\ R &= \sqrt{\frac{(11P+4D)(P+4D)}{10}} \text{ OR } 2D \\ E &= 1.5 \times D \\ \text{BUTT STRAPS} &= \frac{5 \times T(P-D)}{8(P-2D)} \end{aligned}$$

FIG. 21



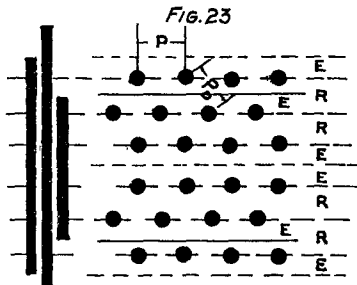
$$\begin{aligned} \text{MAX. PITCH} &= 6 \times T + \frac{1.5}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 10 \times S_1}{P \times T \times S} \\ \text{COMB \%} &= \frac{100(P-2D)}{P} + \frac{\text{RIVET \%}}{5} \\ R &= \sqrt{\frac{(11P+D)(P+D)}{20}} \\ R_1 &= \sqrt{\frac{(11P+8D)(P+8D)}{20}} \\ P_D &= .3P + D \\ P_{D1} &= .3P + .4D \\ E &= 1.5 \times D \\ \text{BUTT STRAPS} &= \frac{5 \times T(P-D)}{8(P-2D)} \end{aligned}$$

FIG. 22

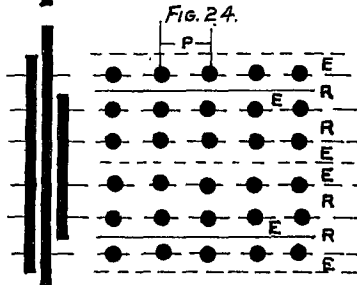


$$\begin{aligned} \text{MAX. PITCH} &= 6 \times T + \frac{1.5}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 10 \times S_1}{P \times T \times S} \\ \text{COMB \%} &= \frac{100(P-2D)}{P} + \frac{\text{RIVET \%}}{5} \\ R &= \sqrt{\frac{(11P+4D)(P+4D)}{10}} \text{ OR } 2D \\ R_1 &= 2 \times D \\ E &= 1.5 \times D \\ \text{BUTT STRAPS} &= \frac{5 \times T(P-D)}{8(P-2D)} \end{aligned}$$

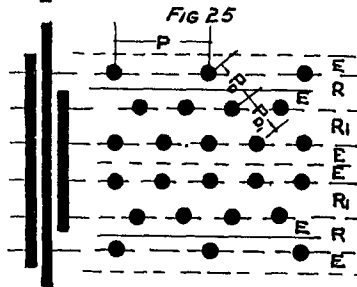
THE BOMBAY BOILER INSPECTION RULES 191.
APPENDIX.



$$\begin{aligned} \text{MAX. PITCH} &= 4.63XT + \frac{15}{8} \\ \text{PLATE \%} &= 100(P-D) \\ &\frac{P}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 5 \times S}{P \times T \times S} \\ R &= \sqrt{\frac{(HP+4D)(P+4D)}{10}} \\ P_0 &= .6P + .4D \\ E &= 1.6 \times D \\ \text{BUTTSTRAP WIDE} &= \frac{3XT}{4} \\ \text{DO NARROW} &= \frac{T}{2} \end{aligned}$$



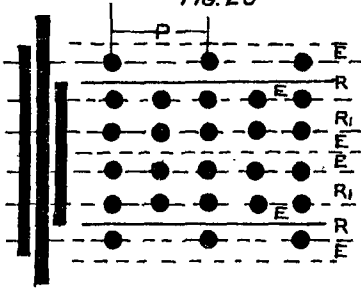
$$\begin{aligned} \text{MAX. PITCH} &= 4.63XT + \frac{15}{8} \\ \text{PLATE \%} &= 100(P-D) \\ &\frac{P}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 5 \times S}{P \times T \times S} \\ R &= 2 \times D \\ E &= 1.6 \times D \\ \text{BUTTSTRAP WIDE} &= \frac{3XT}{4} \\ \text{DO NARROW} &= \frac{T}{2} \end{aligned}$$



$$\begin{aligned} \text{MAX. PITCH} &= 6XT + \frac{15}{8} \\ \text{PLATE \%} &= 100(P-D) \\ &\frac{P}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 9 \times S}{P \times T \times S} \\ \text{COMB \%} &= \frac{100(P-2D)}{P} + \frac{\text{RIVET \%}}{9} \\ R &= \sqrt{\frac{(1/20 P + D)(1/20 P + D)}{20}} \\ R_1 &= \sqrt{\frac{(HP + 8D)(P + 8D)}{20}} \\ P_0 &= .3P + D \\ P_1 &= .3P + .4D \\ E &= 1.5 \times D \\ \text{STRAP WIDE} &= \frac{11XT(P-D)}{16(P-2D)} \\ \text{DO NARROW} &= \frac{9XT(P-D)}{15(P-2D)} \end{aligned}$$

THE BOMBAY BOILER INSPECTION RULES 191
APPENDIX.

Fig. 26



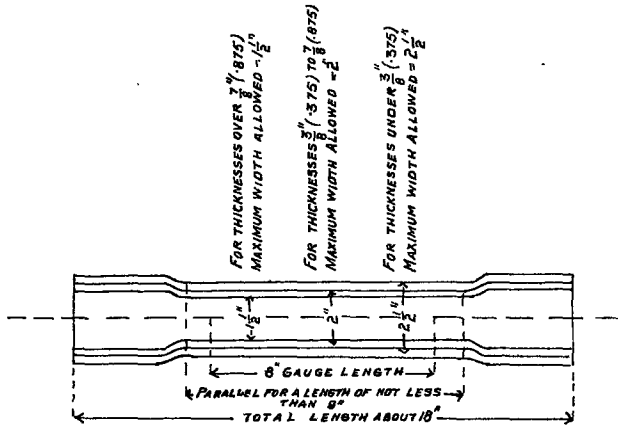
$$\begin{aligned} \text{MAX. PITCH} &= 6 \times T + 1\frac{5}{8} \\ \text{PLATE \%} &= \frac{100(P-D)}{P} \\ \text{RIVET \%} &= \frac{100 \times A \times 9 \times S_1}{P \times T \times S_2} \\ \text{COMB \%} &= \frac{100(P-2D)}{P} + \frac{\text{RIVET \%}}{9} \\ R &= \sqrt{\frac{(11P+4D)(P+4D)}{10}} \text{ OR } 2D \\ R_1 &= 2 \times D \\ E &= 1.5 \times D \\ \text{STRAP WIDE,} &= \frac{11 \times T(P-D)}{16(P-2D)} \\ \text{DO NARROW} &= \frac{9 \times T(P-D)}{16(P-2D)} \end{aligned}$$

THE BOMBAY BOILER INSPECTION RULES 191

STANDARD TESTPIECES— THE FORMS AND DIMENSIONS
OF TESTPIECES SHALL BE AS FOLLOWS : —
TENSILE TESTS.

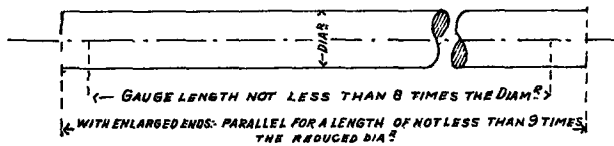
PLATES, TEE AND ANGLE-BARS

TEST PIECE A



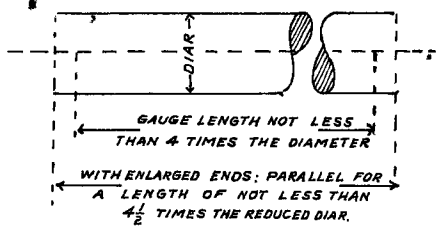
BARS, RODS AND STAYS.

TEST PIECE B.

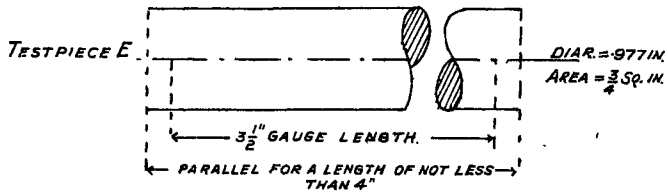
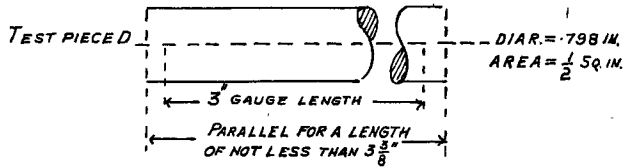
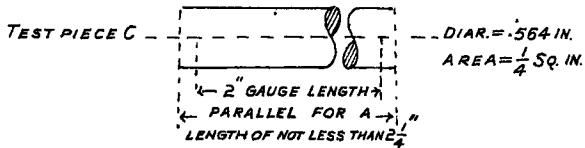


THE BOMBAY BOILER INSPECTION RULES 191 .

ALTERNATIVE TEST PIECE F. FOR TEST PIECES OVER 1 INCH DIAMETER.



FORGINGS AND CASTINGS TEST PIECES C, D AND E.



No. 3094.

GENERAL DEPARTMENT,
BOMBAY CASTLE, 21st April 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

In continuation of Government letter No. 7, dated the 3rd January 1914, I am directed to forward herewith 20 copies of each of the draft Bombay Boiler Inspection Amendment Act and revised Engineers' Examination Rules, and to request that Government may be favoured with the views of the Association on the amendments, etc., proposed therein.—I have, etc.,

PALONJI N. DAVER,
for Secretary to Government.

 No. 168 OF 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 28th April 1914.

THE SECRETARY TO GOVERNMENT,
GENERAL DEPARTMENT,
Bombay.

SIR,

With reference to your letter No. 3094 of the 21st instant, forwarding for an expression of the views of my Committee thereon, copies of the draft Bombay Boiler Inspection Amendment Act and revised Engineers' Examination Rules, I have the honour to draw your attention to this Association's letter No. 259 of the 18th November 1912, wherein were fully set forth the opinions of my Committee on the said draft Act and Rules.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

 No. 88 OF 1915.

MILLOWNERS' ASSOCIATION,
BOMBAY, 16th February 1915.

THE SECRETARY TO GOVERNMENT,
GENERAL DEPARTMENT,
Bombay.

SIR,

I have the honour to acknowledge receipt of your letter No. 7 of the 3rd January 1914, together with copies of two sets of draft rules under the Bombay Boiler Inspection Act entitled respectively "The Bombay Boiler Act Administration Rules" and "The Bombay Boiler Inspection Rules." As requested I have the honour to quote below the opinions of my Committee on the proposed rules:—

Part I of the Rules under the Bombay Boiler Inspection Act.—These rules appear to be a distinct departure from the existing rules under the Bombay Boiler Inspection Act and from the universal practice in such matters. To all intents and purposes the rules contemplate leaving the administration in the hands of one person, the Chief Inspector.

2. The practice in other Provinces of India and of the British Board of Trade is to place the administration in the hands of a President and a Committee; the consensus of opinion

among steam users in the Presidency is in favour of this system, and my Committee recommend its adoption as being both economical and efficient.

3. Administration by a Commission would cost, it is estimated, about Rs. 1,000 (one thousand) per annum, while the cost at present for one adviser is Rs. 18,000 out of an annual income of Rs. 72,000 from fees paid by the Bombay Millowners. The annual expenditure under the proposed new rules amounts roughly to Rs. 20,000 over and above this income, and apparently it is to meet this excess of expenditure or partly to relieve it, that the proposals contained in Rule 12 (4) have been put forward.

4. During the next two years, owing to the introduction of electric power into the Bombay Mills, it is safe to assume that the number of Boilers offered for inspection will be materially reduced, and that consequently there will be a falling off in the amount of fees paid into the Boiler Inspection Department. Further, Rule 5 does not now lay down that the Chief Inspector shall inspect Boilers and earn fees for the Department; he is merely to supervise the inspection work of seven Inspectors, who examine annually roughly 2,000 Boilers. In Great Britain one supervising Officer, on a less salary, has to control a much larger number of Inspectors examining between them some 20,000 to 30,000 Boilers.

5. For the foregoing reasons, my Committee are opposed to the introduction of Part I of the Rules under the Bombay Boiler Inspection Act. They submit that, if Government will be pleased to adopt the principle of administration that has worked so well in Bombay for the Smoke Nuisance Department and in Bengal for both the Boiler Inspection and Smoke Nuisance Departments, there will be no necessity to go further with the proposals contained in Part I of these Rules.

6. *Part III, Rule II, sub-section 3.*—My Committee suggest the following words might be added at the end of this rule “where the extraction of a rivet or other means will not give the desired information.”

7. *Rule III.*—This makes a hydraulic test compulsory, but in Rule 84 (3) of the present Boiler Act this is not compulsory. My Committee do not see the advantage of a hydraulic test being in all cases compulsory, especially when a Boiler is constructed in England and a certificate for hydraulic test from the maker or from a recognised Boiler Insurance Company can be produced. Each time the Boiler is subjected to a hydraulic test there are certain stresses put on the Boiler plates which result in straining the Boiler to a certain extent, and unless the Inspector has reason to fear that (a) the Boiler is not constructed according to Bombay Rules or (b) the Boiler has suffered damage during transit from England to India, my Committee do not see any advantage in a compulsory hydraulic test on its arrival here. But if Government insist on a hydraulic test on arrival, then it should be tested to say 10 per cent. over working pressure only.

8. *Inspection of Boilers.*—The procedure laid down under Rules 20 and 21 will necessitate three visits from the Inspector:—

- (a) After erection of the Boiler without any mountings or fittings.
- (b) For hydraulic test as per Rule 20 (1).
- (c) For steam test as required by Rule 21.

Although in Bombay an Inspector might be able to do this he cannot be expected to do so for upcountry Boilers, and my Committee therefore suggest Inspectors might be allowed to grant provisional working certificates without insisting on steam test.

9. *Rule 7.*—There appears to be a distinct attempt made in this and certain other rules to force all Boilers to be constructed under the supervision of an Insurance Company as 4 is to be added to the factor of safety if they are not so constructed. This will not only add to the cost of the Boilers, but certain Makers of Boilers of repute will be placed at a disadvantage, as some of them are at a distance from the headquarters of such Insurance Companies. Marshall Sons & Co., Ltd., for instance, are at Gainsborough, which is some distance from the leading Manchester Insurance Companies.

10. Further it would appear that this rule cannot be enforced in the case of Boilers shipped from stocks kept in England, for supply at Home or abroad. For instance, for small Boilers required for ginning factories upcountry, very often a wire has to be sent for prompt shipment to get it out in time to meet the ginning season. Such a Boiler would not have been constructed under the supervision of a recognised Boiler Authority, and they would be at a disadvantage as regards the factor of safety, although they may have been constructed strictly in accordance with the Rules in force here. My Committee suggest, therefore, that in Rule 7 the following words might be added, after the words "under the supervision of a competent inspecting authority recognised by the Department," "or constructed under these Rules by recognised firms of repute, approved by the Department," and are of opinion that an Insurance Company Certificate and test coupled with the Maker's Certificate as per copy of form attached, should be sufficient to meet the requirements of the authorities.

11. It is evident the General Rules as embodied in Part III for the construction of the Boilers have been copied from the rules of one of the Manchester Insurance Companies, as the following fittings mentioned in these rules are distinctive in rules of one Insurance Company, viz:—fusible plugs, testor taps, weldless manholes, single rivetted oval man-holes at front end with peak. These items add very considerably to the cost of the Boiler, and in the opinion of my Committee they are not necessary.

12. Rule 20 provides for a hydraulic test to one and three quarter times the working pressure, and further lays down that this pressure should withstand, without appreciable leakage or undue distortion or deflection of the parts of the Boiler, for at least 15 consecutive minutes. This is a much more stringent regulation than the present one which requires for working pressure higher than 120 lbs., 100 lbs. to be added for hydraulic test. The object of increasing the hydraulic test pressure is not clear. If this rule be enforced a Boiler having to work at 200 lbs. pressure will have to be tested hydraulically to 350 lbs. pressure and the amount of this pressure and the length of its duration will have a tendency to cause a permanent set in some of the plates of the Boilers. In the opinion of my Committee the present rule has proved satisfactory in working and the hydraulic pressure should not be increased.

13. Rule 22, para. 5, lays down that the boiler plates should be open hearth acid quality steel only, and if Boilers are constructed of open hearth basic quality steel, they will be placed at a disadvantage. My Committee do not understand why this exception to basic quality steel should be made, as this material is permitted by Lloyds. (See Lloyds Register, page 72, section 4, para. 2.) Opinions in England on this point are not unanimous and my Committee are therefore unable to put forward any strong recommendations, but quote two extracts (marked A) from a journal of the West of Scotland Iron and Steel Institute from papers read by Prof. A. Campion and Prof. J. C. Longbottom and also an extract (marked B) from a letter from the Parkgate Iron and Steel Company to whom a set of these draft rules was submitted for their comments, and trust they will receive due consideration by Government:—

(A) "Increasing difficulty of obtaining supplies of ores of sufficient richness and purity for the manufacture of pig iron suitable for converting into steel in acid lined furnaces, is likely to cause much larger adoption of the basic process in the near future. It appears probable, moreover, that at no distant date, the bulk of the steel required for constructional work, will be produced by the basic process.

Page 200:—"A consideration of the mechanical tests in conjunction with the microscopical results appears to indicate that basic steel is more sensitive to mechanical treatment than acid steel, but that it is less sensitive to heat treatment and requires a higher temperature and longer time in the furnace in order to remove the effects of work. On the other hand, basic steel is less easily overheated or deteriorated by excessive heating than acid steel. This suggests that basic steel plates would offer considerable advantages for Boiler furnaces and fire-box plates.

Page 203 :—“ The Authors wish in conclusion to emphasize what has already been stated that the results of work which they now have the pleasure to present for the consideration of the members of the Institute, represent only a very small proportion of the complete scheme. They, therefore, refrain from offering any definite conclusions as to the respective merits of acid and basic steel, but so far as can at present be seen, the one is as good as the other—at any rate in the form of plates—provided that equal care is exercised in the selection of material and working.

(B) “ With regard to Part III, page 1, Rule 8, paras. C and 3 we could readily comply with both these conditions, as it is already our practice to give such information on our test certificates.

“ As to Rule 22, page 5, para. 5, and Rule 23, page 5, para. 1, we note that Open Hearth Basic Steel is to be placed at a disadvantage as compared with Open Hearth Acid Steel in the building of Boilers. We think this is unfair to the Steel-Maker and also to the Boiler-Maker, and certainly to the User of the Boiler, as we shall try to show you.

“ The two processes of manufacture, *viz.*, Acid and Basic Open Hearth Steel, are practically identical, the same kind of furnace being used—the sole difference being that in the Acid furnace the bottom is made of siliceous sand, whereas in the Basic furnace the bottom is made of magnesian limestone. In the Acid furnace, with its sand bottom, only a small quantity of lime can be carried in the slag, and no purification whatever during the process is possible.

“ In the Basic furnace, with its magnesian limestone bottom, it is possible to carry a considerably larger quantity of lime in the slag and purification, so far as the elimination of sulphur and phosphorus is concerned, can be carried out to any degree required.

“ A prejudice concerning Basic Open Hearth Steel exists in the minds of some people (especially the old school of Engineers who practised when Acid Steel only was made) because of the uncertainty which attends the operation of the Basic Bessemer process. In the Bessemer process, this uncertainty arose from the danger of getting the steel overbrowned in what is known as the ‘afterblow,’ but the chemical reason for this uncertainty does not exist at all in the Basic Open Hearth process. The Basic Open Hearth process is as simple, certain, and safe, as the Acid process, with the additional advantage that it is possible, as mentioned before, to obtain any degree of purity required.

“ With regard to its characteristics, Basic Open Hearth Steel is not distinguishable from Acid Open Hearth Steel in the matter of mechanical tests, with the exception that it is on the whole rather tougher, that is to say, greater extensions are obtained and it stands somewhat severer bending tests than Acid Open Hearth Steel.

“ For its welding properties, Basic Open Hearth Steel is superior to Acid Open Hearth Steel and is more easily worked.

“ Another very important point in favour of Basic Open Hearth Steel is that it is not so subject to corrosion as Acid Open Hearth Steel, owing to the fact that less manganese and silicon are present in the Basic Steel than in the Acid Steel. Both these elements are easily oxidisable.

“ Basic Open Hearth Steel is accepted for the manufacture of Marine Boilers by the English Lloyds Committee, the British Corporation and the Bureau Veritas, and the German Lloyds Committee accept it for both Marine and Land Boilers. It is chiefly used in America and Germany in the manufacture of Boilers, and where steel fire-boxes are used, it is found to be advantageous on account of its toughness and easy welding properties.

“ We have now had 26 years’ practical experience in the manufacture of Open Hearth Steel by both Acid and Basic process, and you may therefore accept our

“views on this question with every confidence. During this period we have supplied hundreds of thousands of tons of Basic Open Hearth Steel for use in the manufacture of Boilers, and with great satisfaction to our Customers.

“At our own works, we have fifty Lancashire Boilers all of which are made of this steel, and we have never had the slightest trouble with them. We have also Customers who ask for it to be supplied in preference to Acid Steel, owing to the excellent quality of it.

“Some years ago, we supplied one of our friends with the steel for a battery of eight Lancashire Boilers, four of which, were of Acid Open Hearth Steel, and four of Basic Open Hearth Steel and we heard not long ago, that the Acid Steel Boilers were worn out through corrosion, but those made of Basic Open Hearth Steel, were still working quite satisfactorily.”

14. Rule 23, Sections 20—22 calls for test certificates for plates, angles, rivets, tubes, steam pipes, &c. This would, of course, entail considerable trouble and expense, as angles, &c., would have to be ordered especially. My Committee read this section also to call for all steam pipes to be made of solid drawn Steel tubes. This is not the common practice in England, and would add very materially to the cost of these pipes besides delaying deliveries.

15. Rule 39.—*Fittings and Accessories, Fusible Plugs.*—My Committee are informed some makers object to Fusible Plugs, as they consider them to be a source of danger instead of safety, they give a false sense of security to the attendant and they are recommended only by Insurance Companies who manufacture them. My Committee consider that where a Boiler has a high steam and low water safety valve, these plugs should not be insisted on.

16. Rule 42, Section 5.—Cast steel for valves for all pressures seems to be called for. At present these valves are made of cast iron for pressures below 160 lbs. for 160 lbs. and upwards they are made of steel. This, of course, will add very considerably to the cost of the Boiler.

17. Rule 44, Section 1.—Same remarks apply to blow off pipes which are to be of steel for all pressures.

18. Rule 43, section 2, Weldless Manholes.—This item alone adds quite £ 6-0-0 to the cost and in the opinion of my Committee is not at all necessary. My Committee have never known a failure from a Welded manhole and it is not usual in England.

19. Rule 23, Sections 4 and 5 and Rule 43, Section 7.—*Re Compensation Rings or holes in Shell.* My Committee cannot reconcile these two rules.

20. With regard to flanged furnaces, there is evidently a mistake in the formula given on page 16 for arriving at the working pressure. The second part of the formula gives $\frac{L \times 12}{60 T}$. This should be $\frac{L + 12}{60 T}$.

21. My Committee further notice that there is evidently a paragraph missing in Section 43, page 18, the heading of which is “Steam and Water Stop Valves.” No reference is made to water stop valves apart from feed check valves which are evidently not intended to be referred to under the above heading.

22. My Committee admit that these rules on the whole are a decided improvement on the Rules of 1903. The latter in many instances have been amplified and are now much clearer.

23. The views of my Committee on the draft Act and Part II of the Rules thereunder were communicated to Government in this Association’s letter No. 259 of the 18th November 1912.

24. My Committee have no further remarks to offer.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

Appendix H.

Boiler Inspection Fees.

No. 5985.

GENERAL DEPARTMENT,
BOMBAY CASTLE, 29th July 1914.THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I am directed to state that in the year 1901, in consequence of the large surplus balance which had accumulated to the credit of the Bombay Boiler Inspection Fund, the scale of Boiler Inspection fees was reduced as shown below :—

Class of Boiler.	Fees reduced.	
	From Rs.	To Rs.
J. Up to 10 horse power	15	10
II. 11-20 " " 	20	15
III. 21-30 " " 	30	20
IV. 31-50 " " 	40	35
V. Over 50 " " 	50	40

A large portion of the surplus has since been absorbed in meeting the annual excess expenditure over receipts. As the balance now available is not sufficient to meet future demands it has been proposed, pending the amendment of the Act, that the fees for the inspection of Boilers of 1 to 30 horse power should be raised as shown below :—

Horse Power.	Fees to be increased.	
	From	To
1-10 horse power	10	15
11-20 " 	15	20
21-30 " 	20	25

In support of this proposal it is contended that the inspection of the smaller boilers involves as much travelling and takes almost as much of the Inspectors' time as the inspection of the larger ones.

2. In these circumstances I am to request that Government may be favoured with the opinion of the Association on the proposal.—I have, etc.,

J. L. RIEU,
Secretary to Government.

No. 327 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 14th September 1914.THE SECRETARY TO GOVERNMENT,
GENERAL DEPARTMENT,
Bombay.

SIR,

I am directed to acknowledge receipt of your letter No. 5985, dated 29th July 1914, regarding the scale of fees for inspection of boilers, and to state in reply that my Committee

have no objection to the fees being raised for inspection of small boilers because they quite agree that the services rendered in these cases involve as much travelling and take almost as much of the Inspectors' time as is the case when large boilers are inspected.

2. I am to add, however, that my Committee trust that inspection fees for large boilers will not be raised merely because of an increase in the establishment of the Boiler Inspection Department.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

Appendix I.

Bombay Smoke-Nuisances Commission.

EXAMINATION OF STOKERS.

No. 2869.

GENERAL DEPARTMENT,
BOMBAY CASTLE, 15th April 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I am directed to forward for the information of the Association a copy of the regulations relating to the examination of stokers for certificates of competency framed by the Bombay Smoke-Nuisances Commission.—I have, etc.,

J. L. RIEU,
Secretary to Government.

GENERAL DEPARTMENT.

Bombay Castle, 15th April 1914.

No. 2868.—The following regulations relating to the examination of stokers for certificates of competency framed by the Bombay Smoke-Nuisances Commission are published for general information :—

REGULATIONS RELATING TO THE EXAMINATION OF STOKERS FOR CERTIFICATES OF COMPETENCY.

1. Whereas arrangements have been made for the Smoke-Nuisances Commission to assist in the training of stokers, and to grant certificates of competency as stokers to those persons who pass the requisite examination and otherwise comply with the requisite conditions, examinations for this purpose will be held as may be required.

Introduction.
2. The certificates will be in two grades—the one, that of ordinary-stoker, and the other, or higher grade, that of Tindal-stoker.

Certificates.
3. The examinations will be held in the office of the Bombay Smoke-Nuisances Commission on the third Wednesday of every month, and will be continued from day to day until all the candidates, who have then presented themselves and whose names appear on the list on the day of the examination, have been examined.

Time and place of examinations.
4. Candidates for examination must make their application on Form I in the Appendix. This form, regularly filled in, together with the candidate's testimonials, and the required fee, must be lodged with the Chief Inspector of the Commission not later than three days before the day of the examination.

Application for examination.

5. Applicants will be required to produce satisfactory testimonials as to sobriety and good conduct for at least the last twelve months' service preceding the date of application to be examined.

Should references of doubtful authenticity be submitted by a candidate, proof of their genuineness may be required on his affidavit.

No candidate will be eligible for examination who cannot show satisfactory service as a stoker within the six months immediately preceding the date of his application to be examined.

6. Should any doubt exist as to the age of a candidate, he will be required to produce a satisfactory certificate as to the date of his birth.

7. Testimonials of service must ordinarily be based on the employee's records, and any break of service must be satisfactorily explained.

8. A candidate suffering from any physical defect likely to interfere with the duties of a stoker will not be eligible for examination.

Qualifications for Certificates of Competency as Ordinary-stokers.

9. A candidate for a certificate of competency as ordinary-stoker must have attained the age of 18 years and must have served at least for six months as stoker or assistant stoker.

10. He must pass a satisfactory *visà voce* examination before the Inspectors, regarding—

- (1) uses and working of steam-boilers and their fittings;
- (2) management of the different types of furnaces;
- (3) use of the various stoking tools;
- (4) effect of opening and closing dampers;
- (5) effect of too much or too little air-supply;
- (6) description of the various arrangements of flues and chimneys;
- (7) classification of the various kinds of coal and coke used, and their distinctive peculiarities as to steam-raising and general heating efficiency; and
- (8) smoke prevention.

11. He must also show by practical test, to the satisfaction of the Inspectors, his ability in stoking and applying the other tests to which he has been subjected.

Qualifications for Certificates of Competency as Tindal-stoker.

12. A candidate for a certificate of competency as a tindal-stoker must have attained 20 years of age and must have served for at least twelve months as a stoker with an ordinary-stoker's certificate.

13. He must pass an advanced *visà voce* examination in the subjects specified for the examination of an ordinary-stoker and in addition be able to explain the working of steam-engines and boiler feed apparatus.

14. He must also show by practical test, as may be required to the satisfaction of the Inspectors, his ability to be in charge of a range of boilers.

Fees.

15. Candidates in making their application for examination on Form I will be required to pay the examination fees noted below, before any step is taken, whether by enquiry into their service or testing their qualifications, etc. No part of the fees will under any circumstances be returned to them : but should it be found that their service is not sufficient to entitle them to be examined, or that their testimonials are unsatisfactory, they will be allowed to present themselves again for the examination without payment of any further fee, when they have fulfilled the requisite service or are able to produce satisfactory testimonials, as the case may be.

The examination fees are as follows :—

					Rs.
Ordinary-stoker...	...	...	...	...	5
Tindal-stoker ...	...	...	...	...	8

16. If a candidate fails in his examination, no part of the fee he has paid will be returned to him, and should he again apply for examination, the full fee will again have to be paid as if he had not previously paid any fee.

Failure.

17. If the candidate fails in his examination he may not present himself for re-examination until he can produce proof of at least three months' further satisfactory service as a stoker.

General.

18. Certificates of competency of ordinary-stoker and tindal-stoker will be made out and issued in Forms II and III in the Appendix.

19. The certificates will be made in duplicate, and one copy will be delivered to the person entitled to the certificate, and the other will be kept and recorded in the office of the Bombay Smoke-Nuisances Commission.

20. A certificate of competency as ordinary-stoker or tindal-stoker, granted by the Bombay Smoke-Nuisances Commission, may be suspended or cancelled by the Commission if it is proved on enquiry that the person holding the certificate has become careless in his duties as a stoker or is otherwise considered undeserving of the certificate.

THE BOMBAY SMOKE-NUISANCES COMMISSION.

FORM I.

APPLICATION TO BE EXAMINED

FOR A

CERTIFICATE OF COMPETENCY

AS

ORDINARY-STOKER.
TINDAL-STOKER.

NOTE.—This form can be obtained at the office of the Smoke-Nuisances Commission free of charge. Divisions (A), (B), (C) and (D) of this Paper are to be filled up by the applicant at the office of the Commission, and handed to the Chief Inspector, with the applicant's testimonials and former certificate, if any, together with the examination fee mentioned in the Regulations. No remuneration or gratuity whatever is to be offered to an official or servant of the Commission beyond the examination fee specified.

Before filling in the required particulars, the applicant should read all the regulations carefully.

(A)—Name, etc., of applicant.

Name in full.	Caste.	Permanent Address.

Date of birth and age.		Where born.	
Approximate date of birth.	Age at time of application (years).	Town, village and thans.	District.

(B)—Particulars of service.

Number of testimonials submitted—			
Showing	_____	years' service as	_____
Ditto	_____	do. do. as	_____
Ditto	_____	do. do. as	_____

(C)—Particulars of previous certificate, if any.

Number.	Grade.	When issued.	If at any time suspended, give particulars.

(D)—If applicant has failed in a previous examination for the certificate now required, he must here state when, and if he has not failed, he must state so across this division.

Day.	Month.	Year.	Viva voce or Practical.

(E)—Declaration to be made by the applicant.

I do hereby DECLARE that the particulars contained in Divisions (A), (B), (C) and (D) of this Form are correct and true to the best of my knowledge and belief; and that the PAPERS enumerated in Divisions (B) and (C), and sent with this Form, are true and genuine.

Dated at Bombay, this _____ day of _____ 191 _____.

_____ Signature of Applicant.

_____ Present address.

F.

THE required Examination fee of Rs. _____ has been received by me to-day with the above application.

Dated Bombay, this _____ day of _____ 191_____.

Chief Inspector,
Bombay Smoke-Nuisances Commission.

FORM II. THE BOMBAY SMOKE-NUISANCES COMMISSION.



CERTIFICATE OF COMPETENCY

AS

Ordinary-Stoker.

To _____

WHEREAS you have been found, after examination, duly qualified to fulfil the duties of Ordinary-Stoker, this CERTIFICATE OF COMPETENCY, as such, is granted to you in pursuance of the orders of the Bombay Smoke-Nuisances Commission.

President.

Chief Inspector.

This _____ day of _____ 191_____.

NO. OF CERTIFICATE _____.

BRABER _____ son of _____ by caste _____

Date* and place of birth, showing village, thàna and district _____

Residence, showing village, thàna and district _____

Height _____

Personal description, stating particularly any permanent marks or scars _____

Signature and left-hand thumb impression _____

N.B.—Any person other than the owner thereof becoming possessed of this Certificate is required to transmit it forthwith to the Office of the Bombay Smoke-Nuisances Commission.

Issued at Bombay on the _____ day of _____ 191_____.

REGISTERED.

Chief Inspector,

Bombay Smoke-Nuisances Commission.

FORM III. THE BOMBAY SMOKE-NUISANCES COMMISSION.



CERTIFICATE OF COMPETENCY

AS

Tindal-Stoker.

To _____

WHEREAS you have been found, after examination, duly qualified to fulfil the duties of Tindal-Stoker, this CERTIFICATE OF COMPETENCY, as such, is granted to you in pursuance of the orders of the Bombay Smoke-Nuisances Commission.

President.

Chief Inspector.

This _____ day of _____ 191_____.

* If not known exactly, must be added on the best information available.

No. of Certificate _____.

BEAREE _____ son of _____ by caste _____
Date* and place of birth, showing village, thana and district _____

Residence, showing village, thana and district _____

Height _____

Personal description, stating particularly any permanent marks or scars _____

Signature and left-hand thumb impression _____

N.B.—Any person other than the owner thereof becoming possessed of this Certificate is required to transmit it forthwith to the office of the Bombay Smoke-Nuisances Commission.

Issued at Bombay on the _____ day of _____ 191 .

• REGISTERED.

Chief Inspector,
*Bombay Smoke-Nuisances Commission.**By order of His Excellency the Right Honourable the Governor in Council,*J. L. RIEU,
Secretary to Government.Appendix J.**Bombay Smoke Nuisances Act.**EXTENSION TO KURLA.No. 8816.GENERAL DEPARTMENT,
BOMBAY CASTLE, 3rd November 1914.THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I am directed to forward for the information of the Association, a copy of Government Notification No. 8814, dated the 3rd November 1914, declaring the intention of Government to extend the Bombay Smoke Nuisances Act to the Municipal area of Kurla in the Thana District and to request that Government may be favoured with any suggestions which the Association may have to make.—I have, etc.,

J. L. RIEU,
Secretary to Government.NOTIFICATION.GENERAL DEPARTMENT,
BOMBAY CASTLE, 3rd November 1914.

No. 8814.—In exercise of the powers conferred by Sub-Section (1) of Section 2 of the Bombay Smoke Nuisances Act, 1912 (VII of 1912), the Governor in Council is pleased to declare his intention to extend the said Act to the Municipal area of Kurla in the Thana District.

* If not known exactly, must be added on the best information available.

2. Any objection or suggestion as to the proposed extension which may be sent to the Secretary to Government, General Department, by any person likely to be affected thereby within a period of three months from the publication of this Notification will be considered by the Governor in Council.—By order, etc.,

J. L. RIEU,
Secretary to Government.

No. 454 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 8th, December 1914.

THE SECRETARY TO GOVERNMENT,
GENERAL DEPARTMENT,
Bombay.

SIR,

I have the honour to acknowledge receipt of your letter No. 8816 of the 3rd ultimo, forwarding a copy of Government Notification No. 8814 of the same date, declaring the intention of Government to extend the Bombay Smoke Nuisances Act to the Municipal area of Kurla in the Thana District.

2. In reply I am to state that my Committee have no suggestion to offer in regard to the proposal.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

Appendix K.

Tariff Values under the Cotton Duties Act.

No. 89 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 10th March 1914.

THE SECRETARY TO GOVERNMENT,
REVENUE DEPARTMENT,
Bombay.

SIR,

In connection with the Meetings held in these rooms in November each year for the purpose of fixing the Tariff Valuations under the Cotton Duties Act, I am directed to represent that a special Committee of this Association was appointed to consider the system which is followed at present by the Excise Authorities in Bombay and the Director General of Commercial Intelligence. The result of these deliberations I am to submit hereunder for the consideration of Government.

2. It is contended that the present method of fixing the valuations is open to objection as not being quite fair and that it is wrong in principle. It would seem that the top prices secured by a few favoured concerns are taken as a standard for the determination of the new tariff, and this it is submitted is unreasonable and distinctly unfair to the majority of Millowners who can only realize moderate prices. The only equitable arrangement would be to strike an average of the highest and lowest.

3. My Committee further submit that to fix the tariff values for a coming year on the basis of the average prices realized during the preceding year is wrong in principle and prejudicial to the interests of the mill industry. A coming year may fairly be forecast to be in no way prosperous to the cloth trade by reason of scarcity, of famine or other economic or political factors. Under such conditions, to apply the average rate obtained for the previous year would be wholly indefensible. In the opinion of my Committee the correct procedure would be to take first a fairly reasonable forecast of what the coming year is likely to be and then to determine, in the light of such forecast, what valuations might be recommended as being fair to Government and unoppressive to Millowners. The average price, suggested in the previous paragraph to be taken as a guide only.

4. My Committee are also of opinion that November is not perhaps the best month in which to fix these rates and they respectfully suggest February as an alternative. During this latter month the Indian market is from all points of view in a better position to test prices, as the value of cloth is governed by the rates ruling for American Cotton and these are not ascertainable with any accuracy until February, the commencement of the busy season.

5. I am to add that since the present tariff was fixed prices have gone down considerably and there is every indication of a further fall. My Committee, therefore, venture to recommend that when violent fluctuations take place, tariffs might be revised during the year.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

No. 4806 of 1914.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 23rd May 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I am directed to acknowledge the receipt of your letter No. 89, dated 10th March 1914, in which your Association represents—

- (1) that the present method of adopting the top prices secured by a few favoured concerns as a standard for the determination of the new tariff is unfair to the majority of the millowners, and that the equitable arrangement would be to strike an average of the highest and lowest prices;
- (2) that the practice of fixing the tariff values for a coming year on the basis of the average prices realized during the preceding year is wrong in principle, and that the correct procedure should be to take first a fairly reasonable forecast of what the coming year is likely to be and then to determine, in the light of such forecast, what valuations might be recommended as being fair to Government and unoppressive to millowners;
- (3) that November is not the best month for fixing the tariff rates, and that February should be substituted for it; and
- (4) that when violent fluctuations in prices take place the tariff might be revised during the course of the year.

2. I am to observe that the first contention is not based on a correct presumption. When the revision of the tariff schedule is under consideration, the prevailing prices are collected from mills of all kinds; but the tariff value adopted is usually rather above than below the average prices prevailing in each of these mills. Many of the smaller mills, especially up-country mills, turn out at a lower price small quantities of inferior grades of certain descriptions of

cloth which are turned out by some of the better mills in Bombay in considerable quantities of a better grade at a higher price. In such instances it is obvious that, if the average to be struck for the purposes of tariff valuation is based on the average prices obtained for each item in mills of all classes, irrespective of the quantities produced in each mill, the result will not be a correct representation of the average market value. In practice the market value adopted for the tariff schedule is usually below the value obtained by the best mills, but above that obtained by the lower grade mills. If the tariff schedule is lowered to correspond with the prices realized for the lowest grades of each cloth, not only will the revenue suffer largely, but a decided stimulus will be given to the production of inferior kinds of cloth—a result which is not desirable.

3. As regards the second contention I am to state that the system at present followed is to consider the prices realized on the Diwali sales, when much forward-selling is done, in conjunction with the prices prevailing in the past year. If any circumstances exist which render likely a drop in prices in the next year, due consideration is paid to this fact.

4. The suggestion referred to in No. 3 above has been referred to the Government of India for consideration and orders.

5. As regards the last point I am to observe that it is always open to the Government of India to revise the schedule of tariff duties under the Cotton Duties Act. If the Millowners' Association could establish to the satisfaction of Government that the market values prevailing for certain items in the schedule were below those fixed in it, it might be possible to effect some alteration in the schedule for the rest of the year; but the Association must also be ready to agree to the enhancement of the tariff value, when it should fall below the average market value in the case of any item. I am to observe that fluctuations of prices do not injure the producer, when the tariff duty is fixed for one year; on the other hand, amendment of the schedule to meet fluctuations during the year would entail a good deal of extra trouble.—I have, etc.,

SHAMRAO D. MANKAR,

for Under Secretary to Government.

No. 1119
Ex. of 1914.

BOMBAY COLLECTOR'S OFFICE,
FACTORY EXCISE DEPARTMENT,
BOMBAY, 15th September 1914.

THE SECRETARY,

MILLOWNERS' ASSOCIATION,

Bombay.

SIR,

I have the honour to invite your attention to para. 4 of letter No. 4806, dated 23rd May 1914, addressed to you by the Government of Bombay and with regard to the suggestion made by your Association that the tariff valuations of goods under the Cotton Duties Act should be fixed in the month of February instead of in November as at present, to inform you, by direction, that the Government of India observe that the existing arrangement was sanctioned at the instance of the Bombay Millowners' Association after consultation with the Chambers of Commerce and the Local Governments concerned. They also think that the Association have not given any instances of the actual failure of the existing system. Government of India further observe that under the orders of 1906 the tariff valuations of cotton goods can be revised at any period in the event of a material fluctuation occurring in their prices, but there has been no demand on the part of the trade for intermediate revisions since the existing arrangement was sanctioned. In these circumstances the Government of India are not inclined

to disturb the present arrangement until it is more clearly shown that the proposed change is desirable in the interest of the trade. I have the honour, therefore, to enquire for the information of the Government of India whether your Association have any further reasons to adduce in support of the proposal.—I have, etc.,

A. H. A. SIMCOX,
Collector of Bombay.

No. 1994.

COMMERCIAL INTELLIGENCE DEPARTMENT, INDIA,
CALCUTTA, 22nd September 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

With reference to the next revision of the tariff valuations of cotton goods taxed under the Indian Cotton Duties Act II of 1896, I have the honour to enquire whether the 26th November next, Thursday, will suit the representatives of the Association to meet me at Bombay for discussion on the subject and, if so, to request that the hour convenient to them may be named.—I have, etc.,

A. H. LEY,
Offg. Director-General of Commercial Intelligence.

No. 362 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 6th October 1914.

THE OFFG. DIRECTOR-GENERAL OF
COMMERCIAL INTELLIGENCE,
Calcutta.

SIR,

In reply to your letter No. 1994 of the 22nd ultimo I have the honour to inform you that Thursday, 26th November at 3-0 p. m. will suit the representatives of this Association to meet you for a discussion of the tariff valuations under the Cotton Duties Act.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary,

No. 370 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 13th October 1914.

A. H. A. SIMCOX, Esq., I.C.S.,
COLLECTOR OF BOMBAY,
Bombay.

SIR,

In the interests of manufacturers of cotton piece-goods in this country, I am directed by the Committee of this Association to draw your attention to the unprecedented drop in the value of piece-goods since 1st August last, and to request that the matter may be brought to the notice of the Bombay Government with a view to securing a revision of the tariffs for the current year, ending 31st December next, with effect as from 1st August. In the alternative my Committee suggest that the valuations which will be brought forward for revision next month, might operate as from 1st August 1914, instead of 1st January 1915.

2. The value of cotton goods produced in the local mills has fallen very considerably since the outbreak of war and it is respectfully contended that it would be distinct hardship to the industry generally, if nothing be done in the direction indicated to assist Millowners to meet the difficulties of the present situation.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

No. 1263/Ex. of 1914.

BOMBAY COLLECTOR'S OFFICE,
FACTORY EXCISE DEPARTMENT,
BOMBAY, 15th October 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I have the honour to acknowledge the receipt of your letter No. 370, dated 13th October 1914, on the subject of the revision of tariff valuations of cotton goods to have retrospective effect from 1st August 1914, and in reply to state that the question has been referred to Government for their orders.—I have, etc.,

A. H. A. SIMCOX,
Collector of Bombay.

No. 405 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 2nd November 1914.

A. H. A. SIMCOX, ESQ., B.A., I.C.S.,
COLLECTOR OF BOMBAY,
Bombay.

SIR,

I am directed to acknowledge receipt of your letter No. 1119, dated 15th September 1914, regarding tariff valuation, of goods under the Cotton Duties Act and to state in reply that my Committee have no further reasons to adduce in support of their proposal that these valuations should be fixed in February instead of in November as is done at present, than those contained in the 4th paragraph of their letter to the Bombay Government, dated 10th March 1914.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

No. 1—T.

COMMERCIAL INTELLIGENCE DEPARTMENT, INDIA,
CALCUTTA, the 20th November 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

With reference to the correspondence ending with your letter No. 362, dated the 6th October 1914, I have the honour to say that a proposal made by the Collector of Bombay,

that there should be a temporary revision of the valuations for Cotton piece-goods under the Cotton Duties Act in the shape of an all-round reduction, with effect from the 1st October 1914 of 2 annas on grey goods and 2½ annas on coloured goods, the question being reviewed again in January next, has been recommended to, and I understand accepted by, the Government of India. In these circumstances it seems unnecessary now to hold the meeting arranged for Thursday, November 26th, unless there is any other subject which your Association wishes to discuss with me. I should be glad to know therefore whether you agree that the meeting may be cancelled.—I have, etc.,

A. H. LEY,

Director-General of Commercial Intelligence.

No. 1477/Ex. of 1914.

BOMBAY COLLECTOR'S OFFICE,
FACTORY EXCISE DEPARTMENT,
BOMBAY, 25th November 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

With reference to the question of the revision of the existing tariff valuations, the proposals discussed at the meeting held at your rooms on the 29th October 1914, *viz.*, a reduction of 2 annas per lb. on the present values for grey goods and 2½ annas per lb. for coloured goods under the Cotton Duties Act, have been accepted by Government and will take effect from 1st October 1914, until the question is again reviewed in January next.—I have, etc.,

A. H. A. SIMCOX,
Collector of Bombay.

No. 442 of 1914.

CHAMBER OF COMMERCE,
BOMBAY, 2nd December 1914.

THE COLLECTOR OF BOMBAY,
Bombay.

SIR,

I have the honour to acknowledge receipt of your letter No. 1477/Ex. of the 25th ultimo, intimating that Government had agreed to a reduction of 2 annas per pound on the present values for grey goods and 2½ annas per pound for coloured goods under the Cotton Duties Act, and further that these reductions would take effect from 1st October 1914 until the question was again reviewed in January next. I observe however from Government of India Notification No. 12929-7, dated 21st November 1914, that no date is mentioned from which the revised tariff comes into force and it would appear to imply that the new duties took effect from that date, *i.e.*, 21st November. I shall be glad to know therefore whether the Government of India have definitely agreed to introduce the revised tariff as from 1st October 1914.—I have, etc.,

R. E. GREGOR-FEARSE,
Secretary.

No. 11872 of 1914.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 1st December 1914.THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

With reference to the letter from this Department, No. 221, dated 9th January 1914, I am directed to forward, for the information of the Association and for distribution amongst the members, seventy-five copies of the notification by the Government of India, No. 12929-7, dated 21st November 1914, revising the tariff values of certain descriptions of cotton goods taxable under the *Cotton Duties Act, II of 1896*. I am to add that, in view of the present depressed condition of the cotton goods market, the Government of India have decided that the reduced tariff values for such goods fixed by the notification should take effect from the 1st October 1914, and that duty should be charged on cotton goods produced in Indian Mills on or after that date on these reduced valuations.—I have, etc.,

C. W. A. TURNER, I.C.S.,
Under Secretary to Government.REVENUE DEPARTMENT,
BOMBAY CASTLE, 24th November 1914.

No. 11548.—The following notification by the Government of India, Commerce and Industry Department, is republished :—

" COTTON DUTIES.

No. 12929-7, dated Delhi, the 21st November 1914.

In exercise of the power conferred by section 7 (I) of the *Cotton Duties Act, 1896*, (II of 1896), and in supersession of the notification in this Department, No. 10794-5,* dated the 20th December 1913, the Governor General in Council is pleased to fix, for the descriptions of cotton goods hereunder specified, tariff values as follows :—

	Tariff value
	per lb.
<i>Grey goods, plain or bordered.</i>	
1. Chadars and bedsheets, plain, or having only borders not over $\frac{1}{4}$ "	7 0
2. Dangari and Khadi cloth	5 9
3. Dhuties, cholas, dupattas, lungis and gumchas, plain, or having only borders not over $\frac{1}{4}$ "	7 3
4. Dhuties, cholas, dupattas, lungis and gumchas, having only borders over $\frac{1}{4}$ " but not over $\frac{3}{4}$ "	7 6
5. Dhuties, cholas, dupattas, lungis and gumchas, having only borders over $\frac{3}{4}$ " but not over 2"	8 3
6. Patals and saris with headings over $\frac{1}{4}$ " wide and only coloured borders not over $\frac{3}{4}$ "	8 0
7. Domestics, T cloths, shirtings, longcloth, sheetings having borders not over $\frac{1}{2}$ "	7 0
8. Drills and jeans, plain... ..	6 9
9. Fents	5 3
10. Printers and sadlapat	7 0
11. Printers (bhagavad)	7 0
12. Shirtings, twilled, unbleached	9 0
13. " " bleached	10 6

* Republished at pages 2186—2187 of the *Bombay Government Gazette*, Part I, dated 26th December 1913.

	Tariff value per lb. A. P.
14. Tent, sail, commissariat, and double threaded cloth (dosuti).	6 6
15. Zanzibar cloth... ..	6 9

Provided that for calendered grey goods 3 pies shall be added to the above values.

Figured or coloured goods.

16. Bedcovers, twilled sheets, quilts, and table-cloths, with borders not over $\frac{1}{2}$ "	6 9
17. Bedcovers, quilts, table-cloths, twilled or plain wove sheets and chadars, coloured warp or weft	8 0
18. Bedcovers, quilts, table-cloths, twilled or plain wove sheets and chadars, coloured warp and weft	9 0
19. Bed ticking, plain or drilled	6 9
20. Check gunchas and check cholas	9 0
21. Cholis and saris (coloured)	9 9
22. Cotton tweed, commonly called hunting cloth, plain or striped, including leheria, Thana susi, Thana drill, Thana twill and Thana check	8 6
23. English patterned checks, trouserings and coatings	9 6
24. Drills, striped	6 9
25. ,, checked... ..	6 9
26. ,, dyed	8 6
27. Fancy dobby pattern checks, coloured warp and weft	9 0
28. Fents	6 0
29. Flannel pattern susi and dobby susi, grey weft	8 0
30. ,, ,, ,, ,, ,, ,, coloured weft	9 0
31. Lungis, coloured	9 0
32. Lungis, grey, with coloured stripes and borders	6 6
33. Napkins, grey... ..	6 9
34. ,, bleached	8 0
35. Susi check, English, grey ground	8 9
36. ,, checks, ordinary, grey ground	8 6
37. ,, ,, ,, coloured warp or weft	8 9
38. ,, checksheets, ordinary, grey ground	8 3
39. ,, ordinary, coloured stripes, grey ground	7 6
40. ,, ,, ,, weft... ..	8 9
41. Tent cloth, blue and red	8 6
42. ,, ,, khaki	5 9
43. Towels, Turkish, grey... ..	9 0
44. ,, ,, bleached	10 6
45. ,, honeycomb and other sorts, grey	6 9
46. ,, ,, bleached	8 9
47. Zephyr cloth	7 3
48. ,, striped and checked	9 3

Provided that any goods specified in the foregoing lists shall, when woven with borders of silk, be assessed to duty *ad valorem*.

(Sd.) R. E. ENTHOVEN,

Secretary to the Government of India."

By order of His Excellency the Right Honourable the Governor in Council,

G. CARMICHAEL,

Chief Secretary to Government.

Appendix L.**List of Cotton Piece-Goods.**

No. 2273/6.

COMMERCIAL INTELLIGENCE DEPARTMENT, INDIA,
*Calcutta, the 26th October 1914.*THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

In continuation of the correspondence ending with your letter, dated the 5th November 1913, I have the honour to state that the revision of the List of Cotton Piece-goods appended to the Resolution of the Government of India in the Commerce and Industry Department, No. 9321-9327-139, dated the 22nd December 1910, as amended by their Resolution No. 9413-9418-102, dated the 23rd December 1912, is now under consideration. If you should have any suggestions to offer with a view to revise the List, I should be obliged if you would favour me with your proposals by the middle of next month so as to enable me to send up my recommendations to the Government of India in due time.

Should your Committee consider that there is any truly distinctive description of goods not provided for, samples of such goods should accompany any recommendation for their inclusion.—I have, etc.,

A. H. LEY,
Director-General of Commercial Intelligence.

No. 404 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 2nd November 1914.THE DIRECTOR-GENERAL OF COMMERCIAL INTELLIGENCE,
COMMERCIAL INTELLIGENCE DEPARTMENT, INDIA,
Calcutta.

SIR,

I have the honour to acknowledge receipt of your letter No. 2273/6 of the 26th ultimo, regarding the revision of the list of Cotton Piece-goods, and to state in reply that my Committee have no suggestions to put forward in this connection.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.**Appendix M.****Customs Duty on Imported Leather Laces.**

No. 145 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 20th April 1914.THE COLLECTOR OF CUSTOMS,
Bombay.

SIR,

The attention of my Committee has been drawn to certain correspondence which has passed between your Department and the Bombay Dyeing and Manufacturing Company,

Limited, in connection with a 5 per cent. duty recently charged on a consignment of leather laces destined for use in the Spring Mills.

2. My Committee understand that this is the first time duty has been charged on these laces and that the authority for departing from a custom that has been in force for a great many years is a recently issued Government of India Notification. Before addressing the Government of India in this matter my Committee will be pleased if you will kindly inform them whether the Notification referred to is quite clear on the point.

3. Since the introduction of the Tariff and the Cotton Duties Acts in 1896, leather laces for joining belting and leather strapping have been classed under Article 13 of the Tariff Schedule and could therefore be imported free of duty by Weaving Mills on production of a certificate to the effect that the laces were for the sole use of the mill importing them and for the purpose specified. So far as my Committee are aware no abuses of this concession to the weaving industry have come to light and it is therefore difficult to understand why a system that has been in force for 18 years should be dropped without notice.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

R. S. R. No. 810 of 1914.

BOMBAY CUSTOM HOUSE,
22nd April 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

In reply to your letter No. 145, dated 20th instant regarding the assessment to duty of leather laces for use in Cotton Mills, I have the honour to state that leather laces for sewing leather belting imported by a Cotton Manufacturing Company were by misapprehension passed free of duty at this Custom House as "laces" mentioned in Customs Circular No. III of 1896 and in Article 13 (IV) of Tariff Schedule IV. In September last the question whether this practice was correct was referred to the Government of India who pointed out that the laces mentioned in Item 13 (IV) of Tariff Schedule IV and Customs Circular No. III of 1896 refer only to laces used in the weaving and spinning sections of Cotton Mills. Laces for sewing leather belting imported by Cotton Manufacturing Companies are not exempt under that item, and should be assessed under Article 45 of the Tariff Schedule IV. The instructions of the Government of India on the point are explicit.—I have, etc.,

R. F. L. WHITTY,
Collector of Customs.

Appendix N.

Import Duty on Tallow.

R. S. R. No. 2402 of 1914.

BOMBAY CUSTOM HOUSE,
30th July 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

In continuation of this office R. S. R. No. 70, dated the 12th February 1913, I have the honour to inform you that Government have been pleased to extend to one year the period of

six months hitherto allowed for applications for refunds of customs duty paid on tallow imported for use in cotton mills. I forward for the information of the Association a copy of Customs Circular No. 1 of 1914 on the subject.—I have, etc.,

R. F. L. WHITTY,
Collector of Customs.

GOVERNMENT OF INDIA.

DEPARTMENT OF COMMERCE AND INDUSTRY.

CUSTOMS CIRCULAR No. I of 1914.

The following revised procedure regarding the grant of refund of customs duty in the case of tallow imported by weaving mills for manufacturing purposes has been substituted for that laid down in paragraph 2 of Customs Circular No. VIII of 1912 and the concession which was originally sanctioned as a tentative measure has now been made permanent :—

“On importation the duty should be paid and the importer if he desires to avail himself of the concession, should notify the Customs Department that refund will subsequently be claimed in respect of the consignment. The Customs Department will then furnish the Cotton Excise Department with details of the importation. At the mill an account of the receipts and consumption of tallow should be regularly kept; stocks will be checked by the Excise Department and, on receipt of an application for refund and on production of a certificate from the Inspector as to the quantity consumed, a refund of the duty involved will be made by the Customs Department. No refund will be made if applied for more than one year after importation.”

R. S. R. No. 2402 of 1914.

BOMBAY CUSTOM HOUSE,
4th August 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

In continuation of this office R. S. R. No. 2402, dated 30th July 1914, I have the honour to forward herewith a copy of Standing Order No. 2832, dated 29th July 1914, issued by me in pursuance of Customs Circular No. I of 1914 regarding the amended procedure in respect of refund of duty paid on importations of tallow for consumption in mills.—I have, etc.,

R. F. L. WHITTY,
Collector of Customs.

No. 2832.

BOMBAY CUSTOM HOUSE,
29th July 1914.

STANDING ORDER.

The procedure laid down in Standing Order No. 2787, dated 23rd December 1912, as modified by Standing Order No. 2800, dated the 18th February 1913, in respect of importations

of tallow for consumption in mills under the concessionary conditions prescribed in Customs Circular No. VIII of 1912 which was originally sanctioned as a tentative measure has now been made permanent (*vide* Customs Circular No. I of 1914). In pursuance of this Circular it is hereby directed that the importer if he desires to avail himself of the concession should at the time of importation notify the Assistant Collector of Customs in charge Prince's Dock Custom House that refund of duty will subsequently be claimed in respect of the consignment. Government have extended the period allowed for applications for refund from six months to one year. No refund will therefore be made by the Customs Department if applied for more than one year after importation of the goods.

R. F. L. WHITTY,
Collector of Customs.

Appendix O.

Local Wholesale Cash Market Value.

R. S. R. No. 266 of 1914.

BOMBAY CUSTOM HOUSE,
29th July 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I have the honour to forward extracts from letter No. 3565--3568-131, of the Government of India, Department of Commerce and Industry, on the subject of the interpretation of the term "local wholesale cash market value" for the purpose of assessing import duty and to enquire whether you have any suggestions to offer in the matter.

2. I enclose for your information a list A of the articles assessed at this Custom House under clause (a) of Section 30 of the Sea Customs Act and a list B of tariff-valued articles. In each list the wholesale units adopted for the purpose of calculating the real value are shown, except in the case of articles falling under class II in list A.

3. For the articles mentioned in class I of list A a wholesale market rate is ordinarily ascertainable. The articles included in class II are miscellaneous goods imported from China, Japan, the Persian Gulf, &c., regarding which the documentary evidence of value produced by importers is frequently unreliable. These articles are assessed on the actual selling price realised by the first importer so far as it can be ascertained. The rate adopted as the wholesale market value of articles mentioned in class I is in most instances the price at which the goods are sold wholesale by the importer, as such goods are seldom passed wholesale through the hands of more than one dealer. But Cotton Piece-goods frequently pass through two or perhaps three hands before they are placed on the market in the lots which for the purposes of assessment under clause (a), Section 30, Sea Customs Act, are regarded as wholesale units, and it is to this class of articles that the present enquiry more particularly relates.

4. The wholesale cash market price per bale or case of piece-goods on a particular day is ordinarily ascertainable without difficulty in the open market, especially in the case of the more important and best known lines of goods. The wholesale rates at present adopted by this Custom House are definite quotations and, so far as this Department is concerned, form a satisfactory basis of assessment. The proposal to assess goods on the price at which the importer of a large consignment sells the goods is open to objection on the following grounds :—

(1) Quotations for large consignments are not readily ascertainable, and the Appraiser in making his assessment would be obliged to rely principally on documentary evidence produced by the importer which might be unreliable and incapable of verification. Moreover such a method of assessment would break down in the case of goods for which at the time of import a purchaser had not been found, or in regard to which the importer either possessed, or stated that he possessed, no documents showing the selling price. The Sea Customs Act makes no provision for assessing goods on the price at which they may be sold at a date subsequent to importation, and such a system of assessment would be cumbrous and difficult to apply.

(2) According to the provisions of Section 30 of the Sea Customs Act goods are assessable on their real value at the time and place of importation. But the price at which an importer sells his goods may be, and frequently is, a price fixed months prior to the date of importation, and that price may differ widely from the wholesale market rate for similar goods prevailing at the time of actual import. If the importer's selling price were deemed to be the real value, cases might not infrequently occur in which (a) similar goods imported in one consignment by one importer for different purchasers might have different selling prices, (b) similar goods imported by different importers on one day might have different selling prices, (c) goods might be assessed at values much below the ruling market rates for similar goods because the importer for special reasons was obliged to sell his consignment immediately and at a sacrifice.

5. The suggestion that the term "wholesale" should be interpreted in its broadest sense of quantity appears to be open to the following objections :—(a) The term "wholesale" must bear the same meaning in Section 30 as it does in Section 32, Sea Customs Act, as applied to wholesale lots, and if the Customs Department must regard a consignment of say 1,000 cases of piece-goods (the illustration quoted in the letter of the Karachi Chamber of Commerce, No. 101, dated the 14th of February 1914) as being a wholesale unit for the purposes of assessment under Section 30, it must also regard 1,000 cases as a wholesale lot for the purpose of Section 32, Sea Customs Act, and must put up the consignment to auction in one lot. This would be a serious handicap to the Customs Department and would render it hazardous in the extreme to take over a large consignment on behalf of Government under Section 32, Sea Customs Act. The larger the consignment, the greater the impunity with which an unscrupulous importer might undervalue his goods alike to the detriment of the Revenue and to the prejudice of his competitors. If, on the other hand, the term "wholesale" bore one meaning for the purposes of assessment under Section 30 and a different meaning (*i.e.*, its meaning as at present defined by the Government of India) under Section 32, Sea Customs Act, the Customs Department might frequently be in a position to compel the importer to declare a value in excess of his stated selling price by offering to take over the goods under Section 32, as the margin of difference between the importer's declared selling price for a large consignment and the price at which the goods could be sold in wholesale lots, as the term is at present understood, might suffice to enable the Customs Department to apply the provisions of Section 32, Sea Customs Act, especially in a rising market.

6. On the whole, therefore, it appears that the most satisfactory course, both for Government and the public, would be to retain the existing basis of assessment and, if it is deemed necessary to afford any relief to the importer, to grant it by deducting a small fixed percentage

from the real value as at present assessed. I am informed that the average difference between the *c.i.f.* invoice price per bale or case of cotton piece-goods imported in large consignments and the price per bale or case as sold by bazaar dealers in small lots may be taken to be roughly 5 per cent. Of this the importer's profit would be about 2 per cent. to 3 per cent. and the profit of subsequent dealers about 1 per cent. each. If this is correct the real value of goods as at present assessed less about 2 per cent. might be fairly taken as representing the importer's selling price under normal conditions when the goods pass through the hands of several dealers.— I have, etc.,

R. F. L. WHITTY,
Collector of Customs.

*Extracts from the Government of India, Department of Commerce and Industry,
letter No. 3565—3568-131, dated 11th May 1914.*

I am directed to forward a copy of the letters from the Bombay, Karachi and Bengal Chambers of Commerce cited in the margin, regarding the interpretation of the term "local wholesale cash market value," for the purposes of import duty. The Bombay Chamber of Commerce suggest that the true and correct meaning of market value, so far as the importer is concerned, should be clearly and definitely stated by Government for the guidance of the Customs authorities. They submit that, if import duty is to be levied on market value, that value must be "the highest price at which a first seller immediately after importation is disposing of his goods wholesale," and that "when the term wholesale is used it is meant in its broadest sense of quantity." The Karachi and Bengal Chambers of Commerce support the representation of the Bombay Chamber.

to the endorsements from this Department No. 6977 6779-58 dated the 22nd July 1908, and No. 1020-1023-45, dated the 14th February 1911. To Bombay and Burma.

2. In this connection I am to refer to the correspondence ending with the letter from this Department, No. 1019-45, dated the 14th February 1911. To Madras only.

to the correspondence ending with the letter from this Department, No. 6976-58, dated the 32nd July 1908, and to the endorsement from this Department, No. 1020-1023-45, dated the 14th February 1911. To Bengal only.

It will be seen therefrom that, in July 1908, the Government of India ruled that the term "wholesale cash price" should be defined as the "local wholesale market value" irrespective of the price at which transactions are conducted between importers and dealers; and that subsequently, in February 1911, they held that the word "wholesale" bears the same meaning in Section 30 (a) of the Sea Customs Act, 1878, as it does in the expression "wholesale lots" in clause 3 of Section 32 of the Act, namely, "such lots as wholesale dealers would be willing, in the ordinary course of business, to sell at wholesale rates." In view of these rulings, which were given after most careful consideration, the Government of India are not disposed to re-open the question of the definition of the term "wholesale cash price." There appears, however, to be some doubt whether the interpretation is correctly applied at all Custom Houses; and for this reason they desire, if

His Excellency the Governor in Council
His Honour the Lieutenant Governor
Bombay
Madras
Bengal
Burma
has no objection, to receive full information as to the methods adopted in the port in carrying out the existing orders on the subject, together with any suggestions for their improvement which the commercial community and the local Customs authorities may have to make.

No. 138, dated Bombay, the 27th January 1914.

From—The HON'BLE SIR CHARLES ARMSTRONG, Chairman of the Bombay Chamber of Commerce.

To—The Secretary to the Government of India, Department of Commerce and Industry.

I have the honour to address you, at the request of the Committee of this Chamber, in connection with a difficulty which has arisen with the Director-General of Commercial Intelligence and the Customs authorities regarding the meaning of the term "local wholesale cash market value" for the purposes of import duty.

2. I would explain in the first instance that tariff valuations for each year are discussed beforehand by a special committee of this Chamber with the Director-General and the Collector of Customs; and at several previous meetings, and particularly at the last one held in December, the question arose as to what is the true and correct meaning, from the point of view of an importer who has to pay duty immediately the goods are landed, of the term "local wholesale cash market value." If the market value must be taken for the purposes of import duty, my Committee respectfully submit that that value must be the highest price at which a first seller, immediately after importation, is disposing of his goods wholesale; and when the word "wholesale" is used it is naturally meant in its broadest sense of quantity. It is understood, however, from what was stated at the meeting held in December that the Customs contend that the correct method of arriving at the valuations is to take the highest wholesale price at which anyone in the bazaar, who may even be a third or fourth seller, is disposing of any wholesale quantity even if it be only a keg or package. It appears to my Committee that this contention is obviously incorrect for, if acted upon, it means in effect, in many instances, that the importer must frequently be called upon to pay import duty on the profit of one, two, three or even four sellers, and if this be so, he is really paying a much higher rate of duty than is actually fixed by the Tariff Act which is surely based upon the market value by a first seller immediately after importation. So long as importers and the Customs authorities are at variance as to the true, correct and business-like basis on which market value, for the purpose of import duty, should be fixed, the meetings held each year in connection with tariff values can never be satisfactory; and, in venturing to address the Government of India on this question, my Committee do so in the hope that they will state clearly and definitely for the future guidance of the Customs authorities what is the true and correct meaning of market value so far as the importer is concerned. If there be any ambiguity in the Sea Customs or any other Act on this point, my Committee are confident that Government will take immediate steps to remedy it, for it appears to this Chamber that it is not only necessary but very advisable that the meetings held to discuss tariff valuations should be free from misunderstandings between importers and the Customs authorities as to the basis on which these rates are fixed.

No. 101, dated Karachi, the 14th February 1914.

From—E. L. ROGERS, Esq., Secretary, Karachi Chamber of Commerce.

To—The Secretary to the Government of India, Department of Commerce and Industry.

A communication has been received from the Chamber of Commerce, Bombay, enclosing a copy of their letter to you (No. 138, dated 27th January 1914) regarding the system under which values are assessed for the purpose of duty.

2. This Chamber has not been invited to take part in any discussion, similar to that which appears to have been usual at Bombay, for arriving at the tariff valuation of various articles. Any such system, however, of arriving at the so-called "wholesale market value" for duty purposes applies equally to this port. It appears to my Committee that the "local

wholesale cash market value" is distinctly the actual cost to the first importer (be he a large or a small buyer) immediately such goods have passed the Customs, and are therefore available to be made over to a buyer at a small margin of profit *plus* such duty as may have been paid. A large consignment of, for example, a thousand cases, may be split up between ten different buyers and these again may each sell to ten smaller merchants who would even then sell a single case as "wholesale" as against the retail of single articles from such case. My Committee submit that it is obviously inequitable to take this single case transaction as being "the wholesale cash market value."

3. This Chamber desire, therefore, to support the representation made by the Bombay Chamber that steps should be taken to remedy the misunderstanding as to the basis on which values are fixed for the purpose of Customs duty.

No. 794, dated Calcutta, the 28th April 1914.

From—H. M. HAYWOOD, Esq., Secretary, Bengal Chamber of Commerce.

To—the Secretary to the Government of India, Department of Commerce and Industry.

I am directed by the Committee of the Bengal Chamber of Commerce to refer to the letter from the Bombay Chamber of Commerce to your Department, No. 138, dated 27th January 1914, with reference to the meaning of the term "local wholesale cash market value" in regard to the assessment of goods to import duty.

2. In my letter to your Department, No. 2048, dated 31st December 1910, with reference to goods assessed to duty on an *ad valorem* basis, it was pointed out that the Customs authorities take the "local wholesale cash market value" to be the value at which one entire package can be purchased in the local bazaar, no allowance being made for any enhancement of price owing to the goods having probably passed through the hands of two or more dealers. It was contended, on behalf of importers, that the added value was not dutiable, and it was suggested that, as regards piece-goods, duty should be payable on 90 per cent. of the value as at present ascertained. As regards sundry articles, it was suggested that Government might rule that all goods that are usually sold in less than one whole package at a time, should be assessed under Section 30 (b), with perhaps a few exceptions, which should be officially notified. The Committee regret that Government have not seen their way to accede to these proposals.

3. They observe that the Bombay Chamber hold precisely similar views with regard to the assessment of goods on *tariff valuations*. In Calcutta the difficulties regarding the assessment of tariff valuation goods, to which the Bombay Chamber refer, have not been so far experienced. Nevertheless the Committee fully endorse the views expressed by that Chamber in the letter of 27th January 1914, as they feel that the assessments, whether for *ad valorem* or for *tariff valuation* goods, should be made on a more equitable basis than is at present in force.

4. Under existing arrangements, the Director-General of Commercial Intelligence forwards to each Chamber of Commerce, at the end of November or the beginning of December, a schedule of the changes which it is proposed to make in the tariff valuations for the following year. About a week afterwards the Director-General meets a specially appointed Committee of importers to consider these proposals. As I have indicated, this system has worked satisfactorily in Calcutta, and the Committee have no complaint to make against it. In view, however, of the difficulties which have arisen in Bombay, they suggest that a longer interval should be allowed to elapse between the despatch, by the Director-General, of the schedule of proposed changes and the meetings. This would enable the various Chambers to discuss with each other the contemplated changes in the tariff valuations, and to decide upon a common course of action with respect to them.

LIST A.

List of Goods assessed on Wholesale Cash Market Price in the Bombay Custom House.

Article.	Wholesale unit adopted for purposes of assessment.
CLASS I.	
Cotton Piece-goods, all description	Per bale or case.
Woolen Piece-goods	2 to 5 pieces.
Silk Piece-goods from China, Japan and the Continent	Do.
Artificial Silk Yarn	Per bundle of 10/20 lbs.
Silk Yarn	Per 10 warps or per bundle of 10 to 11 lbs. (weight).
Matches	Per case.
Crackers	Do.
Motor Tyres	} Generally per doz., but in some cases even one.
Cycle Tyres	
Sewing Machines... ..	Per machine.
Metal and Silver Watches	Per dozen.
Timber and Wood of all descriptions... ..	Per ton.
Safety Fuse	Per case.
Blasting Powder	Per barrel.
Exercise and Copy Books	Per gross.
Maccaroni (10 lb. boxes)	Per bundle of 6 boxes.
Mellins' Food	Per case.
Milk (Condensed), 2 kinds, Nestle's and Milkmaid Brands	Do.
Old Newspaper	Per bale.
Slate Pencils and Slates... ..	Per case.
Soap (5 kinds, Pears', Sunlight, 12 oz., Bimmel's, Hand-print and Gosage's)	Do.
Candles	Do.
Chalk	Per cwt.
Whiting (for stowing acid)	Do.
Chunam and Chunam Stones	Per ton.
Fish (unsalted)	Per cwt.
Acid (3 kinds), Sulphuric, Hydrochloric and Nitric	Per case.
Hardware :-	
Iron Buckets, Pickaxes	Per doz.
Copper and Brass Wire... ..	Per bundle.
Iron and Steel :-	
Chequered Plates, Continental Joists, Galvanised Plain Iron Sheets	Per ton.
Tin Plates... ..	Per box of 50, 75 or 100 sheets as the case may be.
Dried Figs, other than Persian	Per cwt.
Sugarcandy	Do.
Building Materials—	
Portland Cement... ..	Per 50 casks.
Marble Tiles	Per 300 dozen.
Ivory, manufactured	Per Indian maund.
Coal Tar and Pitch	Per cask.
Stockholm Tar	Do.
Gibraltar Carpets	Per lot of 25 or above.
Bangles (China)	Per case.
Dammer Batu, Singapore	Per bag 1½ to 2 cwts.
Hitchcock Lamps (American)	Per case of 12.
Matting, China and Japan	Per roll or bundle.
Rattans and Rattan Furniture	Per ½ cwt.
Scales (China)	Per case of 20 or 30.
Strawboards	Per bale of 5 cwts.
Talking Machines	Per piece like Sewing Machines.
Talking Machine Records	Per doz.
German Silver	Per case of 500 lbs., generally.
Sheets	Sheets Nos. 5 and above; 1½ to 20 lbs. each sheet.
German Silver—	
Wire	Per coil of 5 lbs.
Plates and Circles	10 lbs.
Nanatozen... ..	Per dozen bottles.
CLASS II.	
Dry Fruit, O. S., # g., Leeches, Conaf, Dates in cartons, etc.	
Provision, O. S., # g., tinned Pine Apples, Persian Halva, etc.	
Stones, O. S.	
Chemicals, O. S.	
Drugs, O. S.	

LIST A—contd.

Articles.	Wholesale unit adopted for purposes of assessment.
CLASS II—contd.	
Dyeing and Tanning Materials	...
Brooms, Goa	...
Carrriages (English, second-hand)	...
Earthenware (Goa)	...
Gum and Gum Resins	...
Gibraltar Haberdashery	...
Chinese and Japanese Curio, Toilet Requisites, Furniture, etc.	...
Persian Carpets	...
Seeds, O. S.	...
Silver Filigriware	...
Beeds, China and Japan	...
Earthenware, China and Japan	...
Fans, other than Palm leaf	...
Glassware, China and Japan	...
Lampware, China and Japan	...
Stationery, s.g., Japanese Copying Paper, Reeds for Pens, etc.	...
Petroleum, flashing above 150°F. intended for use exclusively as Liquid Fuel or for Sanitary or Hygienic purposes	...
Lubricating Oil	...

LIST B.

List of Tariff-valued articles.

Article.	Unit of wholesale transaction.
Coffee	Per bag of 5-7 Surti mds.
Fruits and Vegetables—	
Almonds without shell, Persian	Per bag of 1½ cwts.
Do. do. European	Per bag of 1 cwt.
Do. in the shell, Persian	Per bag of 1½ cwt.
Do. do. European	Per bag of 1 cwt.
Do. Kagzi, Persian	Per case of 1½ cwt.
Do. do. European	Per case of 5 cwts.
Cashew or Cajoo Kernels	Per bag of 1½ cwt.
Cocoanuts—Straits	Per thousand of 1250 Nos.
Do. Others	Do.
Do. Kernel (Khopra)	Per ½ cwt.
Currants, European, in cases	Per case of ½ cwt.
Do. Persian, other...	No import.
Dates, dry, in bags, Bhatni	Per bag of 1½ cwt.
Do. do. Galoia	Do.
Do. do. Halavi	Do.
Do. do. Minavi	Do.
Do. do. Sakaria	Do.
Do. do. Sarki	Do.
Do. do. Sabori	Do.
Do. do. Umari	Do.
Dates, wet, in bags, baskets and bundles, Barmi	Per 1½ cwt.
Do. do. do. Fawad	Per bag of 1 to 2 cwts.
Do. do. do. Jaldi	Per bag of 1½ cwt.
Do. do. do. Samaran	Per bag of 1½ cwt.
Dates, wet, in pots, boxes, tins and crates	Per maund of 28 lbs.
Figs, Persian, dried	Per bag of 1½ cwt.
Garlic	Per bag of 1 cwt.
Pistachio Nuts	Per bag of ½ to 1½ cwt.
Raisins, Manika, Persian Gulf...	Per bag of 1½ cwt.
Provisions, Oilman's Stores, Groceries—	
Butter	Per 6 lbs.
Cassava, Tapioca	Per bag of 1½ cwt.
Do. Sagro	Per bag of 3 piculs (266½ lbs).
China Preserves, in Syrup	Per case of 6 jars.
Do. dry, candied...	Per case of 72 lbs.
Gonam	Per bag of 1½ cwt.
Ghi	Per tin of 1½ maunds (Bombay).

LIST B—contd.

Articles.	Unit of wholesale transaction.
<i>Spices—</i>	
Betelnuts, raw, whole, split or sliced from (Goa)	Per bag of 1½ cwts.
Do. do. do. from Straits and Dutch East Indies.	Per bag of 2 cwts.
Do. whole, from Ceylon	Per bag of 1½ cwts.
Do. raw, split (sun-dried) from Ceylon	Per bag of 2 cwts.
Chillies, dry	Per ½ cwt.
Cloves	Per bag of 1½ cwts.
Do. stems and heads... ..	Per bag of 1½ cwts.
Do. in seeds, Narlavang	No import.
Ginger, dry	Per bag of 1½ cwts.
Mace	Per box of 100 lbs.
Nutmegs	Per bag of 2 cwts.
Do. in shell	Per bag of 1½ cwts.
Pepper, Black	Per bag of 1½ cwts.
Do. White	Per bag of 2 cwts.
<i>Sugar—</i>	
Crystallized, Beet	Per bag of 2 cwts.
Do. and soft, refined in China	Per bag of 1½ cwts.
Do. do. from Java, 23 D. St. and above	Per bag of 2 cwts.
Do. do. do. 16 to 22 Dutch St.	Do.
Do. do. do. 15 D. St. and under	Do.
Do. do. from Mauritius No. 1	Per bag of 1½ cwts.
Do. do. do. " 2	Do.
Do. do. do. " 3	Do.
Do. do. do. " 4	Do.
Molasses from Java	Per tin of 1½ maund (B' bay).
Do. from other countries	Per tin of 1½ maund (B' bay).
<i>Tea—</i>	
Black	Per case of 50 to 100 lbs.
Green	Do.
<i>Chemical Products and Preparations—</i>	
Alkali, Indian, (Sajjikhhar)	Per 1½ cwts.
Alum, Europe	Per 1½ cwts.
Arsenic, China Mansil	Per case of 1½ cwts.
Sal-ammoniac	Per case of 1½ cwts.
Soda Ash in 1 cwt. bags... ..	Per bag of 1 cwt.
Do. in kegs... ..	Per keg of 1 cwt.
Soda Bicarbonate... ..	Per cask of 100 lbs.
Sulphate of Copper	Per cask of 1 cwt.
Sulphur (Brimstone) flour	Per 20 lbs.
Do. do. roll	Per 20 lbs.
<i>Drugs, Medicines and Narcotics—</i>	
Asafoetida (Hing)	Per ½ cwt.
Do. coarse, (Hingra)	Per 1½ cwts.
Banslochan (Bamboo camphor)	Per tin of 3 lbs.
Calumba or Colombo Root	Per bag of 1 cwt.
Camphor, refined, other than powder... ..	Per 5 tins of 1 lb. each.
Cassia Lignea	Per case of 80 lbs.
China Root (Chobchini), rough	Per bundle of 1½ cwts.
Do. do. scraped	Do.
Cubels	Per bag of 1½ cwts.
Galangal, China	Per bundle of 1½ cwts.
Salap	Per bag of 1½ cwts.
Storax, liquid (rose melloes or salarna)	Per case of 84 lbs.
<i>Dyeing and Tanning Materials—</i>	
Alizarine Dye, dry, 40 p. c. }	Per one case of 50 lbs. or 100 lbs.
Do. do. 60 p. c. }	
Do. do. 80 p. c. }	
Do. do. 80 p. c. }	
Do. do. 100 p. c. }	
Do. do. moist 10 p. c. }	Per cask of 1 cwt.
Do. do. 16 p. c. }	
Do. do. 20 p. c. }	
Anthine Dye, moist, Indigo Blue	Per cask of 1 maund (Bombay).
Do. do. dry	Per one case of 50 lbs. or 100 lbs.
Anar Bark... ..	Per maund (Bombay).
Cochineal	Per lb.
Galnuts Persian	Per bag of 2 cwts.

LIST B—*contd.*

Articles.	Unit of wholesale transaction.
<i>Metals, Unwrought and Wrought and Articles made of Metals—</i>	
Brass patent or yellow metal sheeting	}
Do. do. do. sheets and plates	
Do. do. do. old	
Copper Braziers and sheets	} Per 5 cwts.
Do. old	
Do. pigs and slabs	} Per 5 lbs. Per book of 100 leaves. Do.
Do. tiles, ingots, cakes and bricks	
Do. plate	
Do. sheathing	
Do. China White Copperware	
Do. Soil or dankpana, white, 10/11 inches X 4/5 inches	
Do. do. do. coloured	
Iron, angle, other than Lowmoor or Swedish	}
Do. T do. do.	
Do. Bar, Swedish or other qualities	} Per 5 cwts.
Do. Nail rod, round rod and square, under 3/4 inch in diameter, Swedish or similar qualities	
Do. Bar, other kinds	
Do. Nail rod, round rod and square, under 1/2 in. in diameter, other kinds	
Do. Plate, other kind, above 1/8" thick	
Do. Strips, other kinds	
Do. Sheet other kinds up to 1/8" thick	
Do. do. corrugated galvanized or black	
Do. Hoop	
Do. Nail, rose, wire and flat-headed		} Per 1 cwt. Do.
Do. old	
Do. cans, tinned, other than petrol tins of 2 gals. capacity	} No regular sale.
Do. do. or drums not tinned of 2 gals. capacity	
Do. drums of 4 gals. capacity—	} Per bottle of 76 lbs. Per 1/2 cwt.
(a) with faucet caps	
(b) ordinary	} Per 5 cwts. Per 1 cwt. No regular sale. Per cwt.
Quicksilver	
Shot, bird	
Steel, Angle	
Do. T	
Do. bar other than cast steel	
Do. Nail rod, round rod and square, under 1/2" in diameter	
Do. Plate above 1/8" thick	
Do. Strips	
Do. Sheet up to 1/8" thick	
Do. do. corrugated galvanized or black	
Do. Hoop	
Do. old	
Do. Cans, tinned, other than Petrol tins of 2-gal. capacity	
Do. do. or drums, not tinned, of 2 gals. capacity	
Do. drums of 4 gals. capacity—	} No regular sale.
(a) with faucet caps	
(b) ordinary	} Per cwt.
Tin block	
Zinc or Spelter, Tiles or slabs, soft	} Per cwt.
Do. do. do. hard	
<i>Oils—</i>	
Cocconut Oil	Per tin of 1 1/2 B'bay, md.
<i>Gums and Gum Resins—</i>	
Cutch and Gambier	Per bag of 52 cwts. or a Karanda of 1 cwt. as the case may be.
Gamboje	Per case of 1 cwt.
Gum Ammoniac	Per bag of 2 cwts.
Do. Arabic	Per bag of 1 1/2 cwts.
Do. Benjamin, ras	Per maund (Bombay).
Do. do. cowris	Per 1 1/2 maund (Bombay).
Do. Bysabol (coarse myrrh)	Per bag of 1 1/2 cwts.
Do. Persian (false)	Per bag of 4 cwts.
Myrrh	Per bag of 1 1/2 cwts.
Rosin	Per cwt.
<i>Ivory, unmanufactured—</i>	
Elephants' grinders	Per maund (Sarat) 37 1/2 lbs.
Do. Tusks, each exceeding 20 lbs. in weight	Do.
Hollows each weighing 10 lbs. and over	Do.
Centres do. do. do.	Do.
Points do. do. do.	Do.
Elephants' tusks not less than 10 lbs. and not exceeding 20 lbs each	Do.
Hollows each weighing less than 10 lbs.	Do.
Centres do. do. do.	Do.
Points do. do. do.	Do.
Elephants' tusks each weighing less than 10 lbs.	Per Maund (Bombay).
Sea-cow or Moya teeth each not less than 4 lbs.	Do.
Do. do. 3 lbs. and under 4 lbs.	Do.
Do. do. each less than 3 lbs.	Do.

LIST B—concl'd.

Articles.	Unit of wholesale transaction.
Jewellery—	
Silverware, plain, other than European embossed or chased, do.	Per 25 tolas.
Do.	Per 25 tolas.
Paints, Colours, Painters' Materials, &c—	
Lead, red, dry	Per keg of ½ cwt.
Do. white, dry	Per 14 lbs.
Ochre, other than European, all colours	Per bag of 1½ cwts.
Turpentine	Per drum of 5 gallons.
Vermillion, Canton	Per ½ box (a box of 90 bundles).
Perfumery—	
Cowlia, husked and unhusked	Per bag of 2 cwts.
Kapur kachree (Zedoary, China)	Per bundle of 1½ cwts.
Patch Leaves (patchouli)	Per ½ cwt.
Rose flowers, dried	Per ½ cwt.
Rose Water	Per carboy of 8 gallons.
Do. in flasks	Per case contg. 21 or 27 flasks as the case may be.
Shells and Cowries—	
Cowries, bazar common	Per bag of 1½ cwts.
Do. yellow, superior quality	Do.
Do. Maldine	Do.
Do. Sankhli	Per bag of 2 cwts.
Nakhla, Aden	Per bundle of 2 cwts.
Do. do. small	Do.
Do. Zanzibar	Per case of 1 cwt.
Tortoise shell	Per case of 60 lbs.
Do. Nakh	Per case of 60 lbs.
Silk and Articles made of Silk :—	
Bohara	No import.
Raw Silk :—	
Yellow Shanghai, including re-reeled	} Per bale of 133 to 200 lbs.
Hong	
Kobin	
Manchow	
Do. re-reeled	
Meang	
Santan or Shantung	
Do. do. re-reeled	
Sichoon	
Yellow from Ind.-China and places in China other than Shanghai, including re-reeled :—	
Honai	} Do.
Kath (re-reeled)	
Limchow	
Manchow	
Mathw :—	
Daukhvala	} Do.
Lari	
Panjam :—	
First Chhap	} Do.
Can Pass	
So-so No. 1	
Do. " 2	
Perian :—	
Khorasani	} No import.
Hadi	
Stam	
White Shanghai, Thonkoon or Duppen	} Per 3 bags of 175 to 200 lbs.
White Shanghai other kinds including re-reeled :—	
Laying	} Per bale of 106 to 170 lbs.
Lie Laying or Kakaria	
Tasalle	
Tycham Kabang	
Woon	
White, other kinds of China including re-reeled :—	
Kath	} Per bale of 106 to 170 lbs.
Locklow	
Mahang or Salsee	
Siem	
Shiviam	
Steam	
Tattie Curi No. 1	
Do. do. " 2	

No. 1198 of 1914.

CHAMBER OF COMMERCE,
BOMBAY, 2nd October 1914.R. F. L. WHITTY, Esq., I.C.S.,
COLLECTOR OF CUSTOMS,
Bombay.

SIR,

I am directed to acknowledge receipt of your letter R. S. R. No. 266, dated 29th July 1914, on the subject of the interpretation of the term "local wholesale cash market value" for the purpose of assessing import duty and enquiring whether this Chamber has any further suggestions to put forward in this matter.

2. In reply I am to state that this question has again been carefully considered and that my Committee adhere to their contention that the real value for Customs duty purposes, should be the nett wholesale cash price at the place of import, *i.e.*, duty should not be levied on discounts or interest or landing, removing and warehouse charges.

3. My Committee support the proposal of the Bengal Chamber of Commerce, contained in the 4th paragraph of their letter to the Government of India, Department of Commerce and Industry, dated 31st December 1910, which reads as follows:—

"The Committee do not desire that any change should be made in the procedure which is followed for the ascertainment of the "wholesale cash price." They suggest that the "wholesale cash price" as at present ascertained, should be reduced by 10 per cent. made up as follows:—(1) import duty $3\frac{1}{2}$ per cent.; (2) trade discount $1\frac{1}{2}$ per cent.; (3) interest $1\frac{1}{2}$ per cent.; (4) landing, removal and warehouse charges $1\frac{1}{2}$ per cent.; (5) dealers' profits 2 per cent., this being, in their opinion, the added value of the goods in the bazar, upon which it is inequitable that importers should have to pay duty. In other words, they suggest that it would be fair to levy duty on nine-tenths of the "wholesale cash price" as at present ascertained."

4. My Committee further contend that if the *market* value must be taken for purposes of Import Duty, that market value should be the selling price of the first bazar seller and not that of a subsequent bazar seller. It is observed, however, from paragraph 6 of your letter under reply that a reduction of 2 per cent. from the value as at present assessed, is contemplated, and if this be finally decided upon my Committee would regard it as a fair compromise. But in approving this concession under the existing practice, I am to point out that my Committee do not consider the present basis either correct or satisfactory, and they confirm their previous letters on this subject.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

No. 406 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 2nd November 1914.R. F. L. WHITTY, Esq., I.C.S.,
COLLECTOR OF CUSTOMS,
Bombay.

SIR,

I am directed to acknowledge receipt of your letter R. S. R. No. 266, dated 29th July last, regarding the interpretation of the term "local wholesale cash market value" for the

purpose of assessing import duty and to state, in reply, that my Committee have been favoured with a copy of the letter from the Bombay Chamber of Commerce on this subject, dated 2nd October 1914, and that they support the contentions therein put forward. I am to add that my Committee regard the proposed reduction of 2 per cent. from the value as at present assessed as a fair compromise, but not as a satisfactory settlement of the points at issue.— I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

Appendix P.

Fire Insurance of Mills.

SPRINKLER DISCOUNT.

No. 119 of 1914.

MILLOWNERS' ASSOCIATION,
Bombay, 3rd April 1914

THE SECRETARIES,
BOMBAY FIRE INSURANCE ASSOCIATION,
Bombay.

DEAR SIRS,

My Committee have again had under consideration the question of sprinkler discount for cotton godowns in Mills, and as a consequence I am to submit that the present rate of 15 per cent. is much too low, and might, reasonably be increased to 30 per cent. A similar request was preferred by my Committee when the sprinkler discount on main blocks was increased from 30 per cent. to 50 per cent., and as they understand the mills in Calcutta are now receiving 30 per cent. discount for their Cotton godowns, it is felt that the members of this Association are well within their rights in again seeking to secure a similar concession for Bombay.

I am to express a hope that your Committee will favourably consider this matter.— I am, etc.,

R. E. GREGOR-PEARSE,
Secretary.

No. 120 of 1914.

MILLOWNERS' ASSOCIATION,
Bombay, 6th April 1914.

THE SECRETARIES,
BOMBAY FIRE INSURANCE ASSOCIATION,
Bombay.

DEAR SIRS,

With reference to my letter No. 119 of the 3rd instant, I shall be obliged if you will kindly substitute the word "jute" for the word "cotton" in the 8th line of the letter.— Yours faithfully,

R. E. GREGOR-PEARSE,
Secretary.

THE BOMBAY FIRE INSURANCE ASSOCIATION,
BOMBAY, 8th April 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

DEAR SIR,

We are directed to acknowledge the receipt of your letters Nos. 119 and 120 of the 3rd and 6th instant, respectively, and to state that the same are receiving the Committee's consideration.—We are, etc.,

A. F. FERGUSON & Co.,
Secretaries.

Appendix Q.

Electrically Driven Fire Pumps in Mills.

THE BOMBAY FIRE INSURANCE ASSOCIATION,
BOMBAY, 22nd July 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

DEAR SIR,

As our Committee understand that many of the mills in Bombay are being or will be driven electrically from power supplied by the Tata Hydro Electric Power Supply Company, or other sources, the question of the suitability of installing electrically driven fire service pumps requires in their opinion consideration.

To make the point clear it will be of interest to quote the rule adopted by the Fire Offices' Committee (Foreign), London, which reads as follows:—

“An electrically driven pump cannot be accepted unless it has current always available from two distinct and independent plants (so that a breakdown of either from any cause, could not prevent the pump being worked) the current being conveyed to a point on the premises by separate mains.”

“If the generating plants do not constitute separate fire risks, the case must be specially submitted.”

Our Committee are given to understand that the Tata Company intend to cut off their supply during the night and we are therefore directed by them to say that electrically driven pumps from this source for fire extinguishing purposes will not be permitted.

In the case of any mill authorities contemplating installing electrically driven fire pumps, a complete plan of the proposed arrangement must be submitted to the Bombay Fire Insurance Association through their Insurance Company for approval and sanction.

Our Committee are of opinion that electrically driven fire pumps are not suitable for Bombay at present, but they are prepared to consider any scheme which may be submitted for their approval.

We are to request that you will kindly draw the attention of members of your Association to the above rules and the remarks contained herein.—We are, etc.,

A. F. FERGUSON & Co.,
Secretaries.

Appendix R.Country Piece-Goods Contracts.

BOMBAY COUNTRY PIECE-GOODS MERCHANTS' ASSOCIATION,
BOMBAY, 24th September 1913.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

DEAR SIR,

We beg to inform you that this Association has been established since last 6 years, and has on its roll 171 members who deal in country-made piece-goods.

The chief object of the Association is to protect so far as practicable the interests of the members, and, to bring the trade in line according to present requirements.

Recently the Committee have been considering the question as to whether the various terms on which the Local Mills have been selling goods to members can be modified so as to facilitate the trade in general, and, to be able to face against competition.

With this end in view the Committee have appointed a small sub-committee to discuss the question with your Committee.

We are therefore to request you to appoint time for the meeting, and, communicate it to us about 3 days previously.

Awaiting your reply.—Yours faithfully,

VAMAN SHRIDHAR APTE,
MADHAWJI JESHING,
Hon. Joint Secretaries.

No. 251 of 1913.

MILLOWNERS' ASSOCIATION,
BOMBAY, 13th October 1913.

THE HON. JOINT SECRETARIES,
BOMBAY COUNTRY PIECE-GOODS MERCHANTS' ASSOCIATION,
Bombay.

DEAR SIR,

With reference to your letter, dated 24th ultimo, I am directed to request that you will kindly furnish my Committee with a copy of the By-laws, Annual Report and list of members of your Association.—I am, etc.,

R. E. GREGOR-PEARSE,
Secretary.

BOMBAY COUNTRY PIECE-GOODS MERCHANTS' ASSOCIATION,
BOMBAY, 22nd October 1913.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

DEAR SIR,

As desired in your letter No. 251 of 1913, dated the 13th instant, we beg to send you herewith a copy of the latest bye-laws, and, list of the members of this Association for the information of your Committee.—Yours faithfully,

MADHAWJI JESHING,
Hon. Joint Secretary.

No. 271 of 1913.

MILLOWNERS' ASSOCIATION,
BOMBAY, 4th November 1913.THE HONORARY JOINT SECRETARIES,
BOMBAY COUNTRY PIECE-GOODS MERCHANTS' ASSOCIATION,
Bombay.

GENTLEMEN,

I am directed to acknowledge with thanks the receipt of your letter of the 22nd ultimo, together with copies of the bye-laws of your Association which have been placed before my Committee at their Meeting to-day. I am to state that a small Sub-Committee of this Association will be pleased to meet a Sub-Committee of your Association at 5 p. m. (Standard Time) on Thursday, 6th instant.

Kindly let me know early whether the date and time suits your Sub-Committee.—I am, etc.,

R. E. GREGOR-PEARSE,
Secretary.BOMBAY COUNTRY PIECE-GOODS MERCHANTS' ASSOCIATION,
BOMBAY, 5th November 1913.THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

DEAR SIR,

We beg to acknowledge the receipt of your letter of the 4th inst., bearing No. 271 and note contents thereof.

In reply, we are directed to say that the following representatives will be pleased to meet the members of your Sub-Committee to-morrow at 5 p. m. (S.T.) in the rooms of your Association.

Names.

- | | |
|---------------------------------|---------------------------|
| 1. Ranchhordass Thakersey, Esq. | 4. Goculdas Damoder, Esq. |
| 2. Devidas Madhavji, Esq., J.P. | 5. Jagannath Gigrāj, Esq. |
| 3. Madhavji Jeshing, Esq. | 6. Amersey Kanji, Esq. |
| 7. Naranji Dayal, Esq. | |

Kindly therefore arrange for a meeting.—Yours faithfully,

VAMAN SHRIDHAR APTE,
MADHAVJI JESHING,
Hon. Joint Secretaries.

No. 113 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 1st April 1914.

ALL MEMBERS OF THE ASSOCIATION.

GENTLEMEN,

I am directed to forward herewith for your information and guidance a copy of the form of Country Piece-goods Contract which was adopted at the Special General Meeting of the Members of the Association held on Tuesday, 31st March 1914, and to state that the revised form came into force from that date.—I am, etc.,

R. E. GREGOR-PEARSE,
Secretary.

BOMBAY MILLOWNERS' ASSOCIATION.

FORM OF COUNTRY PIECE-GOODS CONTRACT AS ADOPTED AT A SPECIAL GENERAL
MEETING OF THE MEMBERS OF THE ASSOCIATION HELD ON
TUESDAY, 31ST MARCH 1914.

1. We have agreed to purchase from _____ the undermentioned goods upon the terms stated below.
2. The said goods are purchased for ready/forward delivery.
3. The said goods shall be taken delivery of by us and shall be given by you according to the undermentioned terms.
4. The said goods if not taken delivery of by us as per terms of delivery agreed upon in this contract to be debited by you to our account on submitting to us an account of such balance of bales on the last day of each month with interest at the rate of nine per cent. per annum.
5. We agree to take delivery of such debited goods on full payment.
6. We agree to take delivery of the bales so debited as per Clause 4 on full payment with interest within one month of the date on which such goods have been debited. If we do not take delivery within one month, then we agree to pay you godown rent as well as insurance and we will be responsible for damage done to such goods from any cause whatever so lying in your godown for more than one month.
 - 6 (a). If the goods are not taken delivery of within 3 months of their being debited as aforesaid, you are at liberty to dispose of the goods by private or public sale and we agree to make good to you any loss you may sustain by such sale.
7. Any dispute for new cloths other than standard cloths of the Mill as to quality, finish, colour, design or heading should be lodged in writing by us within 8 days of samples of goods being received by us from the Mill. Any dispute as to the goods being light weight or moth eaten, badly woven or damaged, or if the goods are found of different quality than those mentioned in the contract or samples approved shall be lodged by us within one month after delivery is taken by us as per terms of this contract or within one month of the goods being debited to our account as per Clause 4.
8. The said goods are bought by us according to description and quality number mentioned below.
9. We agree to take bales as per this agreement if they come light to the extent of 5 lbs. If the bales are light more than 5 lbs. then we agree to take such bales with an allowance for such extra light weight over 5 lbs. This clause applies to goods sold by weight only.
- N. B.—For goods sold per piece we understand no weight is guaranteed and we will not make any claim for light weight.
10. If we export out of India any goods mentioned in this contract, you must refund to us drawback of the excise duty recovered by you.
11. You agree to allow us $\frac{3}{4}$ per cent. discount and $\frac{1}{2}$ per cent. brokerage on fancy goods. On grey goods if sold on rate per lb. discount $\frac{1}{2}$ per cent. and $\frac{1}{4}$ per cent. brokerage; if sold per pair of dhooties $\frac{3}{4}$ per cent. discount and $\frac{1}{2}$ per cent. brokerage; if sold per piece $2\frac{1}{4}$ per cent. discount and $\frac{1}{2}$ per cent. brokerage. In addition you agree to allow us one Rupee per bale sahi both in fancy and grey goods.
12. In case when delivery is specified should the goods or any portion of them not be ready by the specified time, the contract for the remaining quantity not ready at the time of

delivery specified, shall at our option either be cancelled without any allowance or such extension of time as you may ask for shall be granted by us with allowances as under :—

If the goods are one month and under later than the time specified, the total allowance to be one per cent.

If the delay exceeds one month but is not more than two months, the total allowance to be two per cent.

If the delay exceeds two months, the total allowance to be three per cent.

13. If however before the goods are manufactured the Mill be stopped either owing to an accident to the Engines, Machinery, etc., or to fire, or to strike among labourers, or to lock-out, and if the Mill be unable owing to any of the causes aforesaid to commence work within one month after each stoppage, then we are bound to take delivery of as many bales only as are ready on our account and to cancel, if we so wish to do, the agreement for the purchase of the bales, or any part thereof, that may remain to be manufactured on our account or to give you extension of such time as you may require without allowance.

14. If any dispute shall arise in respect of the goods or in reference to any of these conditions, such disputes shall be referred to the arbitration of two persons (European and/or Indian), one arbitrator must be appointed by you (who must be a member of the Millowners' Association) and the other shall be appointed by us from among merchants dealing in locally made goods. Such arbitrators to be appointed within 15 days of receipt of the notice of survey being given by either party to the other. In the event of the arbitrators being unable to agree the matter shall be referred to an Umpire mutually agreed upon by the arbitrators before proceeding with the arbitration, who must be a member of the Millowners' Association and whose decision shall be final and binding on both parties. The arbitrators must give their decision within 8 days, and if reference is made to an Umpire, in case the arbitrators disagree, the Umpire must give his decision within 8 days. The fee of the arbitrators or Umpire must be paid by the parties against whom the decision of the arbitration is given. If either party within 15 days of such notice in writing being given to the other fails to appoint an arbitrator, then the other party shall be at liberty to hold an *ex-parte* survey and the decision of such an *ex-parte* survey shall be binding on both parties.

15. We agree to take of each sort of bales to the extent of 10 per cent. more or less than the contract, but such limit never to exceed 5 bales either way of each sort, including any loose pieces, at the contract price, if the Mill has no other contract of the same kind of goods to follow on. We further agree not to make any claim if the goods are short in width by an inch in case of all calendered goods.

16. This agreement is to be deemed and construed as a separate contract in respect of each instalment of goods, and the rights and liabilities of the sellers and the buyers respectively, shall be the same as though a separate contract had been made out and signed in respect of each instalment.

BOMBAY COUNTRY PIECE-GOODS MERCHANTS' ASSOCIATION,
BOMBAY, 13th April 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

Our committee have been informed that a regular contract form has lately been published by your Association.

We are therefore to request you to send us a few copies of it, as the members of our committee are desirous to know its terms.—Yours faithfully,

NARAYENJI DAYAL,
HURGOVANDAS VIJVALABHDAS,
Hon. Joint Secretaries.

No. 144 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 18th April 1914.

THE HON. JOINT SECRETARIES,
BOMBAY COUNTRY PIECE-GOODS MERCHANTS' ASSOCIATION,
Bombay.

DEAR SIR,

As requested in your letter of the 13th instant, I have pleasure in forwarding herewith 2 copies of the form of Country Piece-Goods Contract as adopted at a Special General Meeting of the Members of this Association held on Tuesday, the 31st ultimo.—Yours faithfully,

R. E. GREGOR-PEARSE,
Secretary.

BOMBAY COUNTRY PIECE-GOODS MERCHANTS' ASSOCIATION,
BOMBAY, 22nd April 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

DEAR SIR,

We beg to acknowledge the receipt of your letter No. 144, dated the 18th instant, with 3 copies of contract forms annexed thereto for which we beg to thank you.

Our committee have very carefully considered the terms embodied in the said form, and, regret to say that some of the clauses are very objectionable, and calculated to cause great inconvenience to the buyers, and, so they consider it expedient to modify them.

Our committee therefore urge that such provisions may be so altered as to meet the present requirements of the trade. If your committee will see their way to have an interview with the members of the committee they will be glad to see them, and explain the difficulties of the buyers.—Yours faithfully,

HURGOVANDAS VIJVALABHDAS,
NARAYENJI DAYAL,
Hon. Joint Secretaries.

No. 182 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 8th May 1914.

THE SECRETARY,
BOMBAY COUNTRY PIECE-GOODS MERCHANTS' ASSOCIATION,
Bombay.

DEAR SIR,

With reference to your letter dated 22nd ultimo, I am directed to inform you that my Committee will be pleased to meet a small Sub-Committee (say four members) of your

Association in these rooms on Tuesday next, the 12th instant, at 5-15 p.m., for the purpose of discussing the terms of the new contract form.

2. In the meantime I am to request that you will kindly inform me what particular clauses your Association objects to.—Yours faithfully,

R. E. GREGOR-PEARSE,
Secretary

BOMBAY COUNTRY PIECE-GOODS MERCHANTS' ASSOCIATION,
BOMBAY, 11th May 1914.

To
THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

DEAR SIR,

In reply to your letter No. 182 of the 8th instant, I am directed to inform you that a small Sub-Committee consisting of the following six gentlemen interested in various lines will be glad to meet your Committee in the rooms of your Association on Tuesday, the 12th instant, at 5-15 p. m. (S. T.).

- | | |
|---------------------------------|-------------------------------------|
| (1) Runchoddas Thakersey, Esqr. | (2) Madhawji Jeshing, Esqr. |
| (3) Chhaganlal Gopalji, Esqr. | (4) Devidas Madhawji, Esqr. |
| (5) Jagannath Gigrāj, Esqr. | (6) Hargovandas Vijvalabhdas, Esqr. |

In the meantime I am to inform you that clauses, 4, 6, 6a, 7, 9, 9NB, 11, 12, 14 and 15 are objectionable.—Yours faithfully,

HURGOVANDAS VIJVALABHDAS,
Honorary Joint Secretary.

No. 267 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 30th July 1914.

ALL MEMBERS OF THE ASSOCIATION.

GENTLEMEN,

I am directed to convene a Special General Meeting of the Members of the Association for Friday, 7th August 1914, at 5 p. m. (S. T.), for the purpose of reconsidering the form of Country Piece-goods Contract which was adopted at the Special General Meeting of Members held on Tuesday, 31st March 1914.—I am, etc.,

R. E. GREGOR-PEARSE,
Secretary.

MILLOWNERS' ASSOCIATION,
BOMBAY, 8th August 1914.

THE HONORARY JOINT SECRETARIES,
BOMBAY COUNTRY PIECE-GOODS MERCHANTS' ASSOCIATION,
Bombay.

DEAR SIRS,

I am directed to send herewith for your information a copy of a resolution passed unanimously at a Special General Meeting of the Members of this Association held yesterday,

the 7th instant, when the form of Country Piece-Goods Contract which was adopted at a Special General Meeting of Members held on 31st March 1914, was reconsidered.—
Yours faithfully,

R. E. GREGOR-PEARSE,
Secretary.

RESOLUTION.

“That in view of the action which the Bombay Millowners’ Association propose to take in future in reference to forms of Contract, the resolution adopted at the Special General Meeting of the Members of the Association held on Tuesday, 31st March 1914, be and hereby is rescinded.”

Appendix S.

Improvement of Cotton Cultivation.

No. 142 of 1914.

MILLOWNERS’ ASSOCIATION,
BOMBAY, 18th April 1914.

THE SECRETARY TO GOVERNMENT,
GENERAL DEPARTMENT,
Bombay.

SIR,

I am directed to send you herewith a report of a recent tour in this country which was undertaken by Mr. Arno Schmidt on behalf of the International Federation of Master Cotton Spinners’ and Manufacturers’ Associations of Manchester, and to inform you that my Committee unanimously passed the following resolution in connection therewith :—

“While acknowledging the increased activity shown by the Department of Agriculture in the extension and improvement of cotton cultivation in India, this meeting of Bombay Millowners respectfully urges the Government of India to increase the staff of the Agricultural Experts, to devote greater attention to the wider distribution of improved and selected seed and suggests that cotton seed should be supplied by the Directors of Agriculture of each Province to the ryots as far as possible on credit, *i.e.*, the value of the seed to be encashed by the Revenue Department along with the assessment, after the picking of the crop. This meeting again urges the Government to make the watering of ginned cotton a penal offence.”—
I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

No. 9724 of 1914.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 19th October 1914.

THE SECRETARY,
MILLOWNERS’ ASSOCIATION,
Bombay.

SIR,

With reference to your letter No. 142, dated 18th April 1914, to the address of the Secretary to Government, General Department, forwarding copy of a Resolution passed by the

Committee of the Bombay Millowners' Association in connection with the report of a recent tour in this country undertaken by Mr. Arno Schmidt, I am directed to state that the suggestions made by the Committee were referred to the Government of India for consideration and to communicate the following remarks for the information of the Committee as desired by the Supreme Government.

2. As regards the Committee's request for an increase in the staff of agricultural experts, I am to intimate that the superior staff of the Bombay Agricultural Department has been recently strengthened by the addition of two new appointments. The Secretary of State sanctioned the employment of a third Deputy Director of Agriculture in the Bombay Presidency in November 1913, and has also approved the proposal made by the Government of Bombay for the creation of an appointment of a second Economic Botanist for this Presidency.

3. With reference to the Committee's suggestion that Government should devote greater attention to the wider distribution of improved and selected seed, I am to observe that the Bombay Agricultural Department has now narrowed down the distribution of cotton seed to a few varieties that show distinct advantages in the Surat District, Khandesh and the Southern Maratha Country. The advantage at which the Agricultural Department chiefly aims is quantity rather than quality, because it has been found that local markets hardly respond to improved quality. Even in the case of quantity, with which cotton often depends on ginning percentage, it is not always easy to ensure that improvement shall be duly recognised in an enhanced price, but progress is being made in this matter.

4. I am to state that the Committee's proposal for the supply by the Director of Agriculture of cotton seed on credit, to cultivators is impracticable. No stereotyped system of seed farms and seed distribution can be adopted generally, and the arrangements made must be adapted to the nature of the seed and to local conditions. Efforts are now being made on these lines to extend the distribution of seed as rapidly as is practicable.

5. The question of amending the law so as to make the watering of ginned cotton a penal offence was carefully considered by the Government of India in connection with the representations made in 1912 to the Secretary of State by the International Federation of Master Cotton Spinners' and Manufacturers' Associations. I am to observe that the Supreme Government regret that they are unable to take any action in the direction suggested by the Committee of the Association.—I have, etc.,

C. W. A. TURNER,
Under Secretary to Government.

Appendix T.

Development of Bombay.

No. 4479.

GENERAL DEPARTMENT,
BOMBAY CASTLE, 5th June 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I am directed to forward herewith a copy of the report of the Bombay Development Committee, 1914, with a summary of the recommendations made by it, and to request that you

will be so good as to place the report before the Association for consideration of the recommendations contained therein so far as they concern the Association, and in due course inform Government what action the Association proposes to take in order to give effect to those recommendations.—I have, etc.,

PALANJI N. DAVER,

For Secretary to Government.

SUMMARY OF RECOMMENDATIONS.

Chapter IV, paragraph 10.—(i). All offensive trades, and all factories and large industries employing more than a certain number of employes, should be restricted to the north-eastern corner of the Island, the maximum number of employes for this purpose to be determined after special enquiry. Salsette should provide for future expansion.

Chapter IV, paragraph 13.—(ii). An Improvement Scheme for Fort North, including a communication from east to west, is desirable and important.

Chapter V, paragraph 16.—(iii). The improvements at Love Grove now in process of construction should be pushed on as rapidly as possible to completion. The results should be watched for a period covering one monsoon and if the nuisance is not mitigated sufficiently to make the foreshore attractive for residences, the matter should be forthwith referred to an expert Committee for consideration as to the measures then to be taken.

Chapter VI, paragraphs 22, 24.—(iv). As regards the problem of the slums of Bombay, migration should be encouraged by developing open land for residential purposes. In particular, Mahim could be usefully developed by a process of town-planning. Railway Companies should be required to house their work people outside Bombay and other large employers of labour should be required by legislation to provide housing accommodation for their employes.

Chapter VI, paragraph 25.—(v). The Improvement Trust should continue to devote special attention to the provision of sanitary chawl accommodation for the poor evicted from tenements demolished in process of Improvement Schemes.

Chapter VI, paragraphs 22, 25.—(vi). The Municipality should treat as a matter of the greatest urgency the work of revising the building bye-laws, in such a way as to strengthen them as much as possible. Power should be given to the Municipality to require that there should be no alteration or additions to buildings which would not have been allowed if the whole building had been reconstructed afresh, and the 63½° rule should be applied in the case of all future additions to or alterations of buildings. Power should also be given to prohibit such subsequent partitioning of rooms as would not be allowed in the first instance when building plans were approved. Building Bye-laws more stringent than at present should be framed for the outlying portions of the City, and Mr. Orr's proposal to lay down a 63½° rule is approved.

Chapter VI, paragraph 22.—(vii). The Municipality should be authorized to declare single rooms unfit for human habitation.

Chapter VI, paragraph 21.—(viii). Care should be taken that the application of these measures does not fall too oppressively on owners who depend for their livelihood upon the rent from a single house.

Chapter VI, paragraph 23.—(ix). It should be considered whether, side by side with the gradual completion of the extension schemes at present in hand, the Improvement Trust should not also devote itself to undertaking small improvement schemes within the City. In addition to the alteration of the Bye-laws with a view to emphasize the individual responsibility of house-owners for the habitable condition of their dwellings, there should proceed general schemes for the betterment of congested areas through the agency of the Improvement Trust.

Chapter VI, paragraph 22.—(x). Every scheme of development should make provision for the reservation of land to remain permanently open for recreative purposes.

Chapter VII, paragraphs 31, 33 and Chapter IX, paragraph 50.—(xi). Government should effect a reclamation of about 100 acres, the bulk of which should face the Oval, in order to provide sites for Government buildings and public institutions, with primary regard to the needs of education. The whole space available to the west of the Secretariat should be then planned out on a comprehensive scheme. A marine drive at least 80 feet wide should be constructed along the sea face.

Chapter VIII, paragraph 37.—(xii). The G. I. P. and B. B. & C. I. Railways should be required to arrange for additional communication between each other in Bombay.

Chapter VIII, paragraph 38.—(xiii). The B. B. & C. I. Railway should be required to sink its line below the surface from the south of Grant Road to Wodehouse Bridge and to cover it in.

Chapter VIII, paragraph 42.—(xiv). The attention of the Municipality should be directed to Mahim as an area which it is important to develop early and on sound lines with the help of a Town Planning Act.

Chapter VIII, paragraph 43.—(xv). There should be a loop railway line from Mahim Station through Mahim Woods to Grant Road Station.

Chapter VIII, paragraph 44.—(xvi). Certain extensions of the tramway system are desirable.

Chapter IX, paragraph 47.—(xvii). The attention of Government is drawn to the question whether the future area of Dock extension should not form the subject of special investigation.

Chapter IX, paragraph 48.—(xviii). A strong and representative Committee should go into the question of providing a new site for the European General Hospital.

Chapter IX, paragraph 49.—(xix). It would be well if the area occupied by the Military Hospital and barracks near Marine Lines Station, or at least the western half of that area, were surrendered to the civil authority.

Chapter IX, paragraph 50.—(xx). A 40-foot road should be constructed immediately along the Kennedy Sea Face.

Chapter IX, paragraph 51.—(xxi). The Saluting Battery site should be improved and planted out as a garden.

Chapter X, paragraph 59.—(xxii). The consideration of the removal of the Slaughter House from Bandra to the west of the Island should be taken up afresh.

Chapter XI, paragraph 62.—(xxiii). For securing co-ordination among the various works undertaken in the course of development, Government, the Corporation, the two Railways, the Improvement Trust, and the Port Trust should each depute an executive officer to a periodical conference, of which the Special Officer, Salsette Building Sites, should be a member.

No. 297 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 13th August 1914.

THE SECRETARY TO GOVERNMENT,
GENERAL DEPARTMENT,
Bombay.

SIR,

I have the honour to acknowledge receipt of your letter No. 4479, dated the 5th June 1914, forwarding a copy of the Report of the Bombay Development Committee, 1914, and

requesting my Committee's opinion on the recommendations contained therein so far as they concern this Association.

In reply I am directed to state that my Committee have carefully considered the Report of the Development Committee and I am to put forward the following remarks with regard to those passages of the Report which have particular reference to the Mill Industry :—

Chapter 4, para. 10. My Committee have no objection to the North-East corner of the Island being set apart for the Textile Industry. They are of opinion that from 40 to 50 thousand square yards should be allowed for a Mill and that the price of the ground should not exceed Rs. 2-8-0 per square yard. They would suggest that the plots be arranged so that Railway Sidings could be provided if required, and that proper facilities for the transport of work people to and from this area should be provided.

Chapter 6, paras. 22 & 24. My Committee are of opinion that it is desirable that Millowners' should house their work people, but they are not in-favour of legislation making it compulsory to do so.

Chapter 6, para. 25. My Committee support the recommendation that the Improvement Trust should continue to devote special attention to the provision of Sanitary Chawl accommodation for the poor who are evicted from tenements demolished in the process on improvement schemes.—I have, etc.,

R. E. GREGOR-PEARSE,

Secretary.

Appendix U.

Registration of Quality Numbers on Cloth.

No. 44 of 1914.

MILLOWNERS' ASSOCIATION,

BOMBAY, 21st February 1914.

To

ALL MEMBERS OF THE ASSOCIATION.

GENTLEMEN,

I am directed to convene a Special General Meeting of the Members of the Association for Monday, 2nd March 1914, at 4-30 p.m. (S. T.), for the purpose of adopting the attached draft rules for the registration of Quality Numbers on Cloth.—I am, etc.,

R. E. GREGOR-PEARSE,

Secretary.

RULES FOR THE REGISTRATION OF QUALITY NUMBERS:

1. Throughout these Rules the following words shall bear and include the following meanings :—

- (a) " The Association " means the Bombay Millowners' Association.
- (b) " Member " means a Member of the Bombay Millowners' Association engaged in weaving.
- (c) " The Secretary " means the Secretary of the Bombay Millowners' Association.

- (d) "The Managing Committee" means the Managing Committee of the Bombay Millowners' Association.
- (e) "Series of Numbers" means a series of any one thousand consecutive numbers from 12,000 and upwards, the first number whereof is a multiple of one thousand.
- (f) "The Register" means the Register of Quality Numbers to be kept by the Association as hereinafter mentioned.

2. These Rules shall apply to all kinds of bleached and fancy cotton piece-goods only unless and until the same shall be extended and made to apply to any other cotton piece-goods by a Resolution of a General Meeting of the Members of the Association duly convened, in which case these rules shall apply also to the goods to which the same shall be so extended.

3. The Association shall keep a Register, which shall be called "The Register of Quality Numbers" and shall be open to the inspection of Members at all reasonable times.

4. Any Member may apply to the Association for the allotment to him by the Association of a series of numbers. Any such application shall be in writing addressed to the Secretary and signed by the applicant or by some person duly authorised to sign the same on behalf of the applicant.

5. Any Member who shall apply in manner aforesaid for an allotment to him of a series of numbers shall be entitled to have a series of numbers allotted to him.

6. The Managing Committee whose decision shall be final shall select the series of numbers to be allotted to each Member and shall allot the same to him accordingly.

7. The Secretary shall give notice in writing to each Member of the series of number allotted to him and shall enter in the Register the name of each Member to whom an allotment shall have been made and the series of numbers allotted to him.

8. No Member shall be entitled to an allotment of more than one series of numbers.

9. The Managing Committee shall not allot to any Member, except in the case hereinafter mentioned, a series of numbers which shall have already been allotted to any other Member.

10. The allotment to a Member of a series of numbers under these Rules shall be held to secure to that Member an exclusive right as against all other Members to use all or any of the numbers comprised in that series of numbers on goods of the class or classes to which these Rules shall for the time being be applicable.

11. If any Member to whom an allotment shall have been made shall cease to be a Member, the allotment to him shall be cancelled and his name shall be removed from the Register in respect of the series of numbers allotted to him. Any series of numbers the allotment of which shall have been so cancelled may be re-allotted subject to Rule 8 by the Managing Committee to any other Member.

12. If the Managing Committee shall be satisfied that any Member to whom an allotment shall have been made of a series of numbers has never manufactured goods of the class or classes to which these Rules are applicable or has ceased to manufacture such goods, the Managing Committee may cancel the allotment and remove the name of such Member from the Register in respect of that series of numbers.

13. If any Member being the owner of a Mill shall cease to be a Member, and shall subsequently again become a Member by virtue of the ownership of the same Mill, or, if any Mill, being the property of a Member shall have passed to a new owner and such new owner shall become a Member by virtue of the ownership of the said Mill, such original Member or such new Member as the case may be shall, upon making an application for an allotment in the prescribed form, have a prior right to an allotment to him

of the series of numbers which in the case of the original Member shall have been previously allotted to him or in the case of the new Member shall have been previously allotted to the original Member if that series of numbers shall not have been allotted in the meantime to any other Member.

14. These Rules shall come into force on the _____ day of _____ 191 .

Appendix V.

Banking Legislation.

No. 8794 of 1914.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 18th September 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

I am directed to forward for perusal a copy of the papers specified in the margin*

* Letter from the Government of India, Department of Commerce and Industry, No. 6905-6918-11, dated 22nd August 1913.

Opinions of the officers and Associations consulted by this Government on the letter from the Government of India, together with certain other correspondence

next cold weather in a conference with a representative of your Association, the Hon. the Advocate General, the Registrar of Companies, and the representatives of certain local Chambers, Associations and Firms. The intimation of the date of the proposed conference will be given to you in due course.—I have, etc.,

on the subject of the proposed legislation regulating the use of the term "bank" or "bankers" or its equivalents, and to intimate that the Hon. Sir Richard Lamb, K.C.S.I., C.I.E. I.C.S., will be glad to discuss the subject

C. W. A. TURNER,
Under Secretary to Government.

Acts and Regulations.

Proposed legislation regulating the use of the term 'bank', or 'bankers', or its equivalents.

No. 8770.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 26th September 1913.

Letter from the Government of India, Department of Commerce and Industry (Companies), No. 6965-6918-11, dated 22nd August 1913 :—

" I am directed to address you as to the desirability of legislation in connection with the use of the term ' bank ' in this country. I am at the outset to explain that it is not at present the intention of the Government of India to attempt to control all the numerous forms of banking operations known under various names which are carried on in this country in business centres either by foreign or indigenous agency. Similarly, the Government of India do not

propose to include in the scope of such legislation the regulation of a form of banking undertaken by industrial companies which receive deposits from certain persons during their busy season in order to finance the business of the firm. The Government of India wish only to examine, for the present, the desirability of attempting to impose restrictions on the use of the term 'bank' or 'bankers' or its equivalent such as 'Banking Agents,' 'Banking Societies,' etc., by individuals, partnerships or companies who conduct banking business on lines which are unsound and likely to imperil the security of credit. I am particularly to invite attention to the fact that deposits in banks for which statistics are available are increasing very rapidly. Between the years 1906 and 1911, the increase was from 12 to 25 crores of rupees, and the movement continues to progress. According to the latest statistics available, there are 451 banking and loan companies registered under the Indian Companies Act. The Government of India have no information regarding the number of individuals or partnerships engaged in the business of banking under the name of 'bankers' in the Bombay Presidency. They desire therefore to be furnished with such information on this point as can be readily procured. They are under the impression that a considerable number of banks exist which have not been registered under the Indian Companies Act. Such institutions, I am to observe, cannot be affected by the improved regulations of the conduct of public companies which may be expected to result from the recently enacted Indian Companies Act of 1913 taking effect in 1914.

" 2. I am to offer certain general remarks regarding the points in which many existing banks appear to require reform, if they are to continue to receive large deposits from the public. In the first place, it is for consideration whether the term 'bank,' 'bankers,' etc., should not in future be restricted to companies registered under the Indian Companies Act. In the absence of any legislation regulating the use of the term 'bank,' it is open to individuals and firms to take advantage of the undoubted prestige which the term conveys, and to receive very large sums of money from the public without even coming under the restrictions which regulate the conduct of public and private companies. They are not required to publish accounts, or to notify their capital or the dividends paid, or to take any precautions for the proper control of the bank's business such as are enforced on the company conducting banking business by the Indian Companies Law. There is a special danger in this state of affairs. The Indian public are, it is believed, slowly learning to substitute bank deposits bearing interest for the time-honoured practice of hoarding. The movement properly regulated is a normal and healthy one which adds very greatly to the resources of the country by utilising the credit of which capital, when not hoarded, forms the basis. It is of the utmost importance to the country that this process should continue unchecked by any serious set-back such as the failure of any considerable number of banking institutions would undoubtedly entail. The use of the term 'bank' indiscriminately by individuals and firms prejudices the stability of the whole system of banking including banking by public companies, and discredit would fall on all alike in the event of serious failure of banks controlled by individuals or by partnerships. For this reason it would appear desirable that, at least for the future, the term 'bank,' 'bankers,' etc., should not be allowed to be used except by registered companies. With reference to banks already in existence, it would appear *prima facie* undesirable that any exemption of existing banks should be made from this restriction. The recent history of private banks in India has not indeed been so devoid of failure as to establish a strong case for such an exemption. But the Government of India would be prepared to consider whether the case might not be met by permitting such existing banks to continue business on their undertaking the regular publication at six monthly intervals of balance sheets audited by a person competent to audit under the provisions of section 144 of the Indian Companies Act. I am particularly to lay stress on the fact that the withdrawal of the right to use the term 'bankers' or 'banking agents' from such persons or partnerships as so describe themselves does not inflict any real hardship on these existing institutions. For it is to be observed that this restriction does not involve any discontinuance of the business in question, but only a substitution of the term 'bank,' or 'bankers,' by some other less imposing titles, as for instance, 'financial agents,' 'loan companies,' etc.

"3. It would follow from these suggestions, if they prove capable of adoption that institutions which will hereafter possess the name and prestige of 'banks' should be subject to certain restrictions. Such restrictions would appear to be specially desirable in regard to the following matters:—

- (1) The prescription of a minimum amount of subscribed capital.
- (2) A stipulation that an adequate portion of such capital should be duly paid up within a reasonable period from the starting of the business.
- (3) A restriction on the full allocation of profits to dividends pending the building up of an adequate reserve.
- (4) A restriction as to taking up by a 'bank' of business outside that of banking, in which the banking profits might be lost.

"4. Before, however, proceeding further in the consideration of such a policy as that outlined above, the Government of India would be glad of the opinions and suggestions of Local Governments, Chambers of Commerce, etc. I am, therefore, to request that, after consulting Chambers of Commerce and such other persons or local bodies as you may think advisable, you will favour the Government of India, at an early date, with the views of the Government of Bombay, on the subject, and especially as regards the scope and direction in which such general restrictions as those mentioned above, should they be thought necessary, can best be specifically applied.

"5. The Government of India, of course, recognise the desirability of not interfering with really legitimate banking business, and the matter is consequently in a very special degree one in which they would be materially assisted by learning the views of the commercial community."

RESOLUTION.—Copies of the letter from the Government of India should be forwarded to the Commissioner in Sind, the Commissioners of Divisions, the Registrar of Joint Stock Companies, the Honourable the Advocate General, the Remembrancer of Legal Affairs, the Chairman, Associated Exchange Banks, Bombay, the Chambers of Commerce, Bombay and Karachi, the Bombay Millowners' Association, the Indian Merchants' Chamber and Bureau, the Bombay Presidency Trades Association, the Bombay Underwriters' Association, the Bombay Merchants' Association and the Bombay Native Piece-goods Merchants' Association, with request that they will favour Government at an early date with their opinions on the proposals contained in paragraphs 2 @ 4 of the Government of India's letter.

2. The Commissioner in Sind, the Commissioners of Divisions and the Commissioner of Income Tax, Bombay, should be requested to furnish the information required by the Government of India in paragraph 1 of their letter regarding the number of individuals or partnerships engaged in the business of banking under the name of "bankers" in their respective charges.

C. W. A. TURNER,
Under Secretary to Government.

Acts and Regulations.

Proposed legislation regulating the use of the term "bank" or "bankers" or its equivalents.

Dated 2nd October 1913.

To—The Under Secretary to Government, Revenue Department.

SIR,—I have the honour to acknowledge receipt of your favour No. 8771 of the 26th ultimo, enclosing a copy of the letter from the Government of India, Department of Commerce

and Industry (Companies), No. 6905—6918-11, dated 22nd August 1913, on the subject of the desirability of legislation in connection with the use of the term "bank" in this country.

In reply I am to inform you that the Associated Exchange Banks think that legislation on the lines suggested would be very desirable, but, unless Government is prepared to define what is "banking business," they do not think it advisable or possible to bring into force a section to the effect of paragraph 3, clause (4), reading—

"A restriction as to taking up by a "bank" of business outside that of banking in which the banking profits might be lost"—I have, etc.,

J. GREIG,

Chairman, Associated Exchange Banks.

No. 1078, dated 22nd October 1913.

To—The Chief Secretary to Government, Revenue Department.

SIR,—With reference to Government Resolution, Revenue Department, No. 8770, dated 26th ultimo, I have the honour to report as under.

Apart from some of the European firms who are doing business as bankers in Bombay there is a very large number of concerns in the native town which receive deposits and which are known under the name of *pedhis*. This term may include other kinds of business offices but may specially be taken to mean such concerns as advance loans to the public on securities such as jewellery, bullion gold and silver ornaments or merchandise and also receive deposits from persons, and their proprietors and managers are generally known as shroffs which is the equivalent of bankers. They do not, however, advertise their firms as bankers or canvass for deposits, nor do they issue receipts for the deposits, but the amounts deposited and withdrawn are entered into a ledger called "khata." Withdrawals are allowed only when the depositors present themselves at the *pedhi*. A large number of these *pedhis* are known as Marwari and Gujarati concerns, and in many cases these *pedhis* are managed by the *munims* or managers, while the owners or proprietors are in their native country.

2. Apparently these firms do not canvass for deposits and the people choose for deposits a *pedhi* according to its standing and bazar reputation, though it does not appear unlikely that in cases when they are really in need of money they do employ brokers for canvassing deposits. As for the European firms, I think they mostly hold deposits from Civil, Naval and Military officers, and had it not been for the fact that in addition to banking they do other businesses for their constituents such as shipping and forwarding agents, remittance of money wherever desired, securing passages and doing any other business which their constituents require (on commission of course) they would not have drawn or held such large amounts in deposit and current account as they do at present and which would naturally find their way to some of the regular respectable banks. Government are aware that the history of the private banks in India has not been devoid of failure and this in the case of European firms, it is known, has entailed a heavy loss on depositors, whilst on the other hand in the case of *pedhis* of which I have said above there is a large number, failures are exceptionally few and this may be ascribed to the fact that the deposits are not so large and that the investments are very carefully made.

3. Apart from what is stated above there is no reason whatsoever to dissent from the proposal of Government to impose special restrictions by legislation on Companies carrying on the work of bankers and which are not registered under the Indian Companies Act, for in the case of these banking concerns there is no account of any sort shown to their constituents or exhibited in their office. There is therefore nothing to show to any intending depositor as to what is the stability of the firm in which he intends to deposit or what is the capital the firm has brought out of its own into the business in addition to the moneys of the depositors.

4. I therefore fully approve of the proposal of Government that if these firms are to continue receiving deposits from the public, they should do so only on their undertaking the regular publication at intervals of at least once a year of balance sheets audited by persons competent to audit under section 144 of the Indian Companies Act, 1913, and that the following restrictions should be imposed :—

(a) The prescription of the minimum capital would depend upon the amount intended to be received from the public, or in other words such concerns should not receive as deposits more than five times the capital brought in by the proprietors.

(b) The whole of such capital should be invested before starting the business of receiving deposits.

(c) One-third of the gross profits should be invested in authorised securities to building up of an adequate reserve fund, equal to the amount of capital.

(d) It does not appear as to what restrictions should be placed upon a bank taking business other than that of banking in which banking profits might be lost. It will therefore be sufficient to lay down that these banks should not do any speculative business.

5. Of course these proposals will not be approved of, say rather contested, if not by the English firms, at least by the native firms, but in view of the fact that the Government of India have in view the desirability of protecting people desirous of investing their money, the proposals should be enforced in some form or other.—I have, etc.,

J. C. D'ALMEIDA,
Registrar of Joint Stock Companies.

No. 2872, dated 24th October 1913.

To—The Chief Secretary to Government, Revenue Department.

SIR,—With reference to Government Resolution No. 8770, dated the 26th September 1913, regarding the use of the term "bank" and "bankers," I have the honour to state that I agree generally with the proposals contained in the letter of the Government of India under consideration.

2. I would suggest that, on a question of this nature, special weight should be attached to the opinions of gentlemen who have knowledge of commercial matters, and who at the same time can look at them from an entirely impartial point of view. For this reason I requested Mr. Gubbay, I.C.S., Collector of Customs, Bombay, to favour me with some remarks on the subject; and I have the honour to attach herewith a copy of his notes thereon.

3. Other gentlemen whose opinions on subjects of this nature might be useful are Messrs. A. F. Ferguson & Co., the leading Accountants in Bombay.—I have, etc.,

P. E. PERCIVAL,
Remembrancer of Legal Affairs.

Opinion of Mr. M. M. S. Gubbay, I.C.S., Collector of Customs, Bombay.

Unfortunately the time at my disposal has prevented me from discussing as fully as I should like to have done the proposals which the Government of India have in view. I have frequently discussed this question with prominent members of the Chamber of Commerce, and I will briefly outline my views on the question.

In the first place I am entirely in agreement with the proposal that the term "bank" or "bankers" should be restricted to Companies registered under the Indian Companies Act. I also agree that no exemption should be allowed in the case of existing banks.

At the same time it is to be borne in mind that the banks, which recently failed, have in many cases been registered under the Companies Act so that registration is not necessarily an effective remedy against such abuses as have come to light in the recent failures.

It appears to me that the proper method of dealing with these institutions is to require that the Articles of Association should contain definite information as to the minimum amount of subscribed and paid up capital on which the bank proposes to proceed to allotment of shares. They should also specify the amount which in the opinion of the promoters should be reserved from profits towards the building up of an adequate reserve. I do not consider that on these points Government can prescribe any minimum limit since such limit must necessarily vary with the transactions contemplated or undertaken by the institution, but it is correct that shareholders and depositors should be in a position to know the precise intention of the management and promoters on these vital points, and I would therefore make this further stipulation that the balance sheets to be published at regular intervals should contain a definite statement as to how far the original intentions of the promoters have been carried out.

I also consider it essential that there should be regular publication of accounts. I do not think that the publication of these accounts at intervals of six months is sufficient, as bankers are always able to do some window-dressing just before the issue of these accounts. It appears to me therefore that more frequent publication, say at intervals of a fortnight, should be required of all these institutions in the *Government Gazette* and in one leading paper of the town in which the head-quarters of the bank are situated. There is no hardship in making this stipulation since at least one bank has from its inception regularly of its own accord put into practical application the procedure which I should like to see introduced.

No. 771, dated 27th October 1913.

To—The Under Secretary to Government, Revenue Department.

SIR,—I have the honour to submit the report called for in paragraph 2 of Government Resolution No. 87 70, Revenue Department, dated 26th September 1913.

2. So far as I have been able to ascertain, only four private English firms and one private Indian firm carry on a banking business in Bombay under the style of "bankers."

There are of course a large number of Indian firms in Bombay who loan money and receive money on deposit: these usually are known in business as "shroffs" and I have only been able to ascertain one case in which a firm of this kind advertises its business as a "banker's" business.—I have, etc.,

E. L. SALE,

Commissioner of Income Tax, Bombay.

THE CHAMBER OF COMMERCE, BOMBAY.

Dated 13th November 1913.

To—The Under Secretary to Government, Revenue Department.

SIR,—I am desired to acknowledge receipt of your letter No. 8771, dated 26th September 1913, forwarding a copy of a letter from the Government of India, Department of Commerce and Industry, No. 6905—6918-11, dated 22nd August 1913, on the subject of banking legislation, and requesting the opinion of this Chamber on the proposals contained in paragraphs 2 to 4 thereof.

2. In the first place my Committee desire to state that as regards banking legislation generally they only favour the introduction of a Bill of a simple character, which in some

measure will give protection to shareholders and depositors, for in their opinion successful banking is really a question of experience and good management in matters pertaining to banking and the safe custody of other people's money, and if this is assured and if the Directors are competent and thoroughly understand their business, there is really no necessity for legislation of a stringent character which might retard development and in some degree hamper the success of sound and well managed banking institutions.

3. For this and other reasons my Committee are glad to note that the Government of India only wish at present to examine the question of the desirability of attempting to impose restrictions on the use of the term "bank" and similar words and that their other suggestions regarding the constitution and management of banks are also on moderate lines. In the second paragraph of the letter now under consideration, the point is raised as to whether the term "bank," "bankers," etc., should not in future be restricted to Companies registered under the India Companies Act. As regards this my Committee are of opinion that all institutions calling themselves Banks, Banking Companies, Banking Corporations and so forth should be brought under the provisions of this Act, but they would exclude from these provisions firms and individual trading as "bankers" or giving the word its Indian equivalent "shroffs," for neither word in their opinion has any special attraction for the investing public in the same way as the word "bank" undoubtedly has, and, if so, there is no necessity nor does it seem advisable that the use of either word should be controlled by a legislative enactment. Both words are frequently used in Western and Northern India by well-known firms and individuals and no such significance attaches to their use as to the word "bank," which undoubtedly does attract deposits on a large scale.

4. My Committee are further of opinion that the words "Saving Bank" should also be brought under control, and if it cannot be enacted that these words should be confined to the Post Office and Presidency Banks, which in their opinion is very desirable, the accounts of all such Banks (whether separate or as departments of any ordinary Bank) should be under strict control. It should be compulsory for a large percentage of their deposits to be invested in trust securities, and the remainder held in a more or less liquid condition.

5. With reference to paragraph 3, my Committee do not favour the first suggestion that the prescription of a minimum amount of subscribed capital is desirable, but as regards the second proposal that an adequate portion of the subscribed capital should be paid up within a reasonable period from the starting of the business, their suggestion is that at least 50 per cent. of the subscribed capital should be paid up within one year or before the first statutory meeting. They are also of opinion that there should be some limitation as regards the authorized capital and suggest that this might be brought about either by charging an enhanced registration fee on the authorized or nominal capital or by fixing a reasonable proportion between the amount authorized, subscribed and paid up, the basis to be, say 50 per cent. of subscribed to authorized and 50 per cent. of paid up to subscribed capital.

6. In this connection it is also very necessary that the capital advertisements of banks should be controlled and my Committee suggest a clause to the effect that when any advertisement, etc., of a bank or banking company contains a statement of the amount of any capital, such advertisement, etc., must show the amount of capital authorized, subscribed and paid up.

7. As regards the third proposal that there should be a restriction on the full allocation of profits to dividends pending the building up of an adequate reserve, my Committee are at variance, some members being of opinion that this is a matter which should be within the discretion of the Board of Directors, and that as there is no such limitation in other countries, where banks have not the right of a note issue, it is inadvisable for Government to legislate on this point.

8. Other members, however, are of opinion that dividends might well be limited to 5 per cent. per annum until a reasonable reserve has been accumulated, and that thereafter, on a sliding scale, they might be raised until a sum in reserve has been reached commensurate with

the paid up capital of the bank. One of the reasons for this suggestion is that a well managed bank which restricts its dividends pending the building up of an adequate reserve might be handicapped in its operations, and the value of its shares kept down, by a badly managed bank which was paying away the whole of its profits in dividends. A clause to the effect now suggested would not really hamper the operations of a well managed bank, but would control the excessive dividends of banks whose methods of business might be open to criticism.

9. In this connection my Committee are, however, of opinion that there should be no restrictions confining the investment of reserve funds to trust securities, nor should there be any limitation of capital and reserves to total commitments. What, however, is necessary, is a thoroughly efficient audit and this, it is hoped, can be secured under the provisions of the new Indian Companies Act. In this connection my Committee would remark that, if possible, the audit of banks and banking institutions should be done by Chartered and/or Incorporated Accountants only.

10. The fourth proposal is that there should be a restriction as to the taking up by a bank of business outside that of banking, in which the banking profits might be lost, and my Committee would suggest in this connection that powers should be given to the Registrar to refuse a certificate to a Company whose Memorandum and/or Articles of Association show clearly that it intends to engage in other business such as ordinary trading, insurance, shipping and so forth, in addition to the business of banking. It will be necessary, however, to provide that the applicant shall have a right of appeal against the Registrar's decision, on the facts as disclosed in the Memorandum and/or Articles of Association. My Committee do not favour a suggestion that the term "banking" should be defined, as a clear definition is probably impossible and anything indefinite or open to question is inadvisable. Their view is that if the Registrar has certain powers in the matter it will be sufficient, or at any rate it will be going as far as it is advisable to legislate in this direction. Excepting therefore as mentioned above, my Committee are of opinion that there should be no restrictions as to the business a bank or banking company may engage in.

11. My Committee are further of opinion that a bank should not be allowed to advance money on its own shares, nor should it be allowed to advance money to its own officers or staff either with or without security. As regards advances to Directors, my Committee are not quite in agreement as to whether this should be allowed at the discretion of the Board, either with or without security, but the question is one that might, they think, very well be considered before the Bill reaches its final stage.

12. As regards the form of balance sheet my Committee have no additions to propose to Form F of the Indian Companies Act, 1913, and the only other point they now desire to bring forward is that the Bill should contain a clause similar to clause 277 of the Indian Companies Act, 1913, exempting under certain conditions banks registered and controlled outside British India.

13. Briefly stated my Committee's suggestions are as follows:—

1. That all institutions calling themselves banks, banking companies, banking corporations and so forth should be brought under the provisions of the Indian Companies Act, but that these restrictions should not be applied to firms and individuals trading as shroffs or bankers.

2. That the words "Savings Bank" should, if possible, be reserved for Post Office and Presidency Banks Savings Banks, but if this is not possible, Savings Banks should be brought under strict control.

3. That a minimum subscribed capital should not be fixed.

4. That at least 50 per cent. of the subscribed capital should be paid up within one year, or before the first statutory meeting.

5. That there should be some limitation or check on authorized capital and that there should be some fixed reasonable proportion between the authorized, subscribed and paid up capital.
6. That a clause be inserted in the Bill to the effect that when any advertisement, etc., of a bank or banking company contains a statement of the amount of any capital, such advertisement, etc., must show the amount of capital authorized, subscribed, and paid up.
7. That there should be no restrictions confining investments of reserve funds to trust securities.
8. That there should be no restrictions of capital and reserves to total commitments.
9. That if possible the auditing of banks' accounts should be done by Chartered and/or Incorporated Accountants.
10. That the Registrar, but subject to a right of appeal, should refuse a certificate to a Company whose Memorandum and/or Articles of Association show clearly that it intends to engage in business such as ordinary trading, insurance, shipping and so forth, in addition to the business of banking.
11. That excepting as mentioned in (10) there should be no restrictions as to the business a bank or banking company may engage in.
12. That banks should not be allowed to advance money on their own shares.
13. That banks or banking companies should not be allowed to advance money to their own officers or staff.
14. That so far as items in balance sheets are concerned, Form F in the Indian Companies Act, 1913, is sufficient.
15. That the Banking Bill should contain a clause similar to clause 277 of the Indian Companies Act, 1913.—I have, etc.,

C. H. ARMSTRONG,
Chairman.

R. E. GREGOR-PEARSE,
Secretary,
Chamber of Commerce, Bombay.

No. 1883—13, dated 24th November 1913.

To—The Under Secretary to Government, Revenue Department.

SIR,

With reference to your No. 8771 of 1913, I am directed to forward you the accompanying representation in which are embodied the views of my Association in regard to the matter under reference.—I have, etc.,

R. D. HUGHES,
Secretary, Bombay Presidency Trades
Association, Limited.

My Committee concur entirely with the suggestion that the terms "bank" and "bankers," etc., shall not be allowed to be used except by Companies registered under the Indian Companies Act. In regard to Banks already in existence, my Committee observe that "the Government of India would be prepared to consider whether the case might not be met by permitting such existing banks to continue business on their undertaking the regular publication at six-monthly intervals of balance sheets audited by a person competent to audit under

the provisions of Section 144 of the Indian Companies Act"; but in view of the fact, on which you lay particular stress, namely, that the withdrawal of the right to use the term "bankers" or "banking agents" from concerns controlled by individuals or by partnerships, does not inflict any real hardship that they, too, should be compelled to register under the Indian Companies Act: in short that every person, or firm or partnership using the terms "banks" or "bankers" or "banking agents," and purporting to do any business appertaining to banking, should be so registered.

With regard to paragraph 3 of your letter, I am instructed to express generally the concurrence of my Committee with the restrictions suggested therein, subject, however, to the following reservations:—

Indent 4—"A restriction as to taking up by a 'bank' of business outside that of banking, in which the banking profits might be lost."

I am directed by my Committee to say in this connection that no "bank," so registered under the Indian Companies Act, should be permitted to take up any business outside that of banking in which banking profit may be lost; and further that in every case Articles of Association must specify clearly and without ambiguity the character of the business which the "bank" may undertake.

I am also instructed to offer the following observations for the consideration of the Government of India:—

(1) *Audit*.—The efficiency and character of Auditors of Registered Companies is as important to the public as that of legal practitioners, and it is an anomaly that, while no person can practice as a lawyer who has not been subjected to the most drastic tests by examination, etc., persons whose "qualifications" are frequently enough self-granted are permitted to pose as auditors. No person should be allowed to act as the auditor of a registered company who is not—

(a) a Chartered Accountant qualified under the Incorporated Society of Accountants of England; or

(b) an Accountant who has been passed as such by a Board of Examiners in India which my Committee suggest should be established; and

(c) an Auditor of a registered Company shall be an Accountant (as defined in paragraphs a and b) of at least ten years' standing.

(2) *Securities for loans*.—The question of bankers' securities should be under strict control, and it should be laid down clearly what class of "securities" may not be advanced on.

My Committee note with satisfaction that the Government of India recognise the desirability of not interfering with really legitimate banking business and trust that the draft of any proposed Bill will be circulated among commercial and trading interests in this country before the same is introduced into the Council.

No. 4442, dated 24th November 1913.

To—The Chief Secretary to Government, Revenue Department.

SIR,

With reference to Government Resolution No. 8770, dated the 26th September 1913, I have the honour to forward copies of the reports of the Collectors, of this Division in which will be found the information required under paragraph 1 of the letter from the Government of India. Personally I have no remarks to make on the subject except that I am of opinion that it is desirable to restrict the use of the term "bank" to concerns run by registered Companies.—I have, etc.,

B. P. BARROW,
Commissioner, N. D.

No. R.—4359, dated 21st October 1913.

To—The Commissioner, N. D.

SIR,

Referring to your No. 3844, dated 1st October 1913, I have the honour to report my opinion as under.

2. *Paragraphs 2 to 4 of Government of India's letter—*

Paragraph 2.—It is desirable that the term 'bank' should not be used except by a registered company.

Paragraph 3.—Publications of accounts should be a sufficient check. Any other restrictions will hamper the development of business.

Paragraph 4.—Reliable banks are likely to displace petty shroffs and it is to the interest of all that the former should be encouraged.

3. I beg to append a list* of persons doing banking business as shroffs with the required information.—I have, etc.,

(Sd.) H. L. PAINTER,
Collector of Ahmedabad.

No. R.—6671, dated 24th October 1913.

To—The Commissioner, N. D.

Sir,

With reference to your No. 3844, dated the 1st instant, I have the honour to state that there are no individuals or partnerships in this district, engaged in the business of banking under the name of bankers. The term "bank" or "banker" should not be allowed to be used except by registered companies. I agree with the other suggestions in paragraph 2 of the Government of India's letter.—I have, etc.,

(Sd.) J. P. BRANDER,
Collector of Kaira.

No. R.—2804, dated 6th November 1913.

To—The Commissioner, N. D.

Sir,

With reference to your No. 3844, dated the 1st October last, I have the honour to state that I agree with the proposal made by the Government of India, that the use of the term "bank" and "banker" should be restricted to companies registered under the Indian Companies Act. The restrictions mentioned in paragraph 3 of their letter also appear to me desirable.

2. As regards the information called for in paragraph 1 of their letter I have to state that in this district there are not any individuals or partnerships engaged in the business of banking under the name of "bankers."—I have, etc.,

(Sd.) C. HUDSON,
Collector of the Panch Mahals.

No. 3283, dated 15th October 1913.

To—The Commissioner, N. D.

Sir,

I have the honour to furnish the required information (paragraph 1 of the letter of the Government of India of 22nd August 1913). There is in Broach a branch of the Bank of

Bombay and one of the Specie Bank, which are registered. The Urban Co-operative Credit Society also does some business of the nature of banking (it has been recommended not to do so.)

Three other firms do banking business; those of—

- (1) Bhakti Bhagwán;
- (2) Desáibháí Dádábháí;
- (3) a partnership of 4 or 5 men.

2. Their accounts are not published or audited, but they are known as shroff (shroff equals banker).

3. With regard to the proposed restrictions they fall into two classes; (1) the restriction of the use of the word bank, etc. (in which I presume the word shroff would be included) to companies registered under the Act; and (ii) the four additional restrictions described in paragraph 3 of the letter of the Government of India.

4. A careful consideration of the principal restrictions involved in compulsory registration under the Indian Companies Act will, so far as I can see, show clearly that no reasonable objection can be taken to the measure of subjecting to these restrictions all firms wishing to call themselves bank. I presume that the real question is whether the proposal goes far enough to be effective.

5. It is noted that the principal restrictions involved in registration under the Act are the necessity of a Memorandum of Association, of stating certain prescribed particulars; and of Articles of Association based on Schedule 1, Table A; the necessity for the confirmation by the Civil Court of any change in the Memorandum; registration of the Memorandum and Articles; the obligation to keep accounts and frame annual balance sheets; audit thereof; communication thereof; liability to inspection by a Government Inspector. All these restrictions are reasonable and satisfactory; so are those special restrictions for banks proposed in paragraph 3 of the letter of the Government of India.

6. With regard to the giving of retrospective effect to the application of the Indian Companies Act to banks, I can see no manner of hardship in this.

7. With regard to the question of real difficulty, *viz.*, is it sufficient to apply these restrictions merely to firms wishing to call themselves banks, I can hardly think that this safeguard of the interest of the investing public is adequate.

8. No doubt there is a point beyond which it is positively injurious to all concerned to attempt to protect people from dangers attendant on their own ignorance or rash inadvertance.

9. But in the present case it appears to be hardly worthwhile to undertake legislation involving, I presume, the passing of an Act for the conduct of banking firms, unless, going a little further, the restrictions are applied to all firms accepting deposit of money for banking purposes or for saving. I venture to hold the opinion that this further step should be taken.—I have, etc.,

W. O. ALCOCK,
Acting Collector of Broach.

No. Misc.—347, dated 15th October 1913.

To—The Commissioner, N. D.

Sir,

I have the honour of reporting that I can see no possible objection to the proposals contained in Government Resolution, Revenue Department, No. 8770, dated 26th September 1913. There are certain banks in Bombay such as Messrs. King King & Co., Grindlay & Co.

and others no doubt, which issue no accounts and are under no control. If these are exempted and allowed to call themselves banks, then any number of much more questionable institutions would have to be allowed. Recent events show that even the control of the Companies Act is not all sufficient for the proper conduct of banking business and I am sure that the public will have nothing but approval for any measure leading to further protection.

2. I have made local enquiries through the Agents of Banks and I find that except those Banks which are registered under the Act as Limited Companies there are no other firms here which call themselves "banks" or "bankers." The native term "shroff" is still generally used.—I have, etc.,

F. G. H. ANDERSON,

Collector of Surat.

No. 6407, dated 10th October 1913.

To—The Commissioner, N. D.

Sir,

With reference to your No. 3844 of the 1st October 1913, I have the honour to state that in my opinion it is very necessary to insist that a firm describing itself as a "bank" should be brought under the control of Government and the use of the term "bank" should be restricted as proposed. Experience in England has shown how ignorant people can be deceived by firms posing as "bankers" and the danger is even greater in India.

2. There are, however, in this district no "banks."—I have, etc.,

(Sd.) J. A. G. WALES,

Collector of Thana.

No. 653, dated 26th November 1913.

To—The Under Secretary to Government, Revenue Department.

Sir,

I have the honour to acknowledge receipt of your letter No. 8771, dated 26th September 1913, enclosing copy of a letter from the Government of India, Department of Commerce and Industry (Companies), No. 6905—6918-11, dated 22nd August 1913, and in reference thereto I am instructed to reply as follows.

My Committee are of opinion that all institutions calling themselves banks, banking corporations, etc., and advertising for deposits should be registered under the Indian Companies Act, but that firms and individuals calling themselves "bankers" or "shroffs" who do not advertise for deposits, but who receive deposits or open current accounts for the convenience of their clients, should be permitted, if they so desire, to continue to conduct their business under the appellation they have hitherto been in the habit of using.

No bank already in existence should be exempt from the provisions of the Indian Companies Act, which will shortly become law.

My Committee are of opinion that it is desirable that a minimum amount of subscribed capital should be insisted upon, and that no bank should be allowed to start business until this minimum has been subscribed. That of this minimum at least 50 per cent. should be paid up within a reasonable period of the starting of the business, say, within one year of the first statutory meeting.

In this connection my Committee are of opinion that any bank or banking corporation, etc., in any capital advertisement or statement of the amount of any capital should show the amount of authorised, subscribed and paid up capital.

A restriction on the full allocation of profits to dividends pending the building up of an adequate reserve seems desirable.

In the opinion of the Committee no restriction should be laid down regarding the investment of the reserve fund, but a thoroughly efficient audit under the provisions of the Indian Companies Act seems necessary, and as at present reliable auditors outside Chartered or Incorporated Accountants do not seem to be available, that it be laid down that the audit shall be done by Chartered or Incorporated Accountants only.

I would here recapitulate my Committee's opinions :—

1. That all institutions calling themselves banks, banking corporations, etc., and advertising for deposits should be registered under the Indian Companies Act.
2. That these restrictions should not apply to individuals or firms trading as bankers and shroffs, who do not advertise for deposits.
3. That it is desirable that a minimum amount of subscribed capital should be insisted upon.
4. That of the fixed minimum of subscribed capital at least 50 per cent. should be paid up within one year of the first statutory meeting.
5. That in all capital advertisements, the amount of the authorised, subscribed and paid up capital should be clearly shown.
6. That a restriction on the full allocation of profits to dividends pending the building up of an adequate reserve should be insisted upon.
7. There should be no restriction laid down regarding the investment of the reserve.
8. That as at present efficient and reliable auditors possessing the confidence of the public do not seem to be available outside the ranks of Chartered or Incorporated Accountants, that the audit should be done by Chartered or Incorporated Accountants.
9. That some restriction should be placed on the descriptive name of a bank so that there should be no possibility of confusing it with the name of an older or better known institution.

My Committee question if it is desirable to attempt to define the business that shall be done by a bank or to lay down restrictions as to the taking up by a bank of business outside that of banking, that they are of opinion that if legislative action can be taken on the other points mentioned, a very desirable step towards the object Government have in view, an object with which this Chamber is in full sympathy, will have been achieved.—I have, etc.,

E. L. ROGERS,

Secretary, Karachi Chamber of Commerce.

No. 6264, dated 29th November 1913.

To—The Chief Secretary to Government, Bombay.

Sir,

I have the honour to state that from a letter addressed to you by the Bombay Presidency Trades Association and published in the *Times of India*, dated November 26th, it appears that Government have proposed that the use of the term "bank" shall be legally restricted to institutions registered under the Indian Companies Act. If it is not too late, I venture in this connection to bring to notice the claims of Societies registered under the Co-operative Societies Act, 1912, to exemption from this prohibition.

2. Many Co-operative Societies, which in urban areas carry on business of a genuinely banking character, have already been registered under the name of banks. The term describe

their business better than any other that is available. As examples I would cite "The Bombay Central Co-operative Bank, Limited," "The Nagar Central Co-operative Bank, Limited," "The Dhulia Taluka Co-operative Bank, Limited," "The Poona District Co-operative Rupee Bank, Limited." In all these cases I submit that it would be a hardship to deprive these concerns of the name under which they have built up their credit. It would also be inconvenient to societies of the same type that may be organised in future if they are debarred from the use of so convenient a designation.

3. The terms "Central Bank" and "District Bank" are in use all over the world to describe certain recognised types of Co-operative Societies. While India continues to present its annual co-operative returns to the International Institute of Agriculture at Rome for inclusion in its general tables, it is necessary to retain this nomenclature. The Government of India have already prescribed the terms "Central Bank" and "Central Banking Union" for our use in paragraph 6 of the memorandum, published as an accompaniment to Government Resolution No. 2722 of March 20th, 1913, Revenue Department.

4. By conceding the use of the term "bank" to registered Co-operative Societies, Government will certainly not cheapen it in any way. These societies are annually audited by a Government staff, and have to publish annual balance sheets. Nearly all important societies are annually visited by the Registrar, and many other Government officers inspect them from time to time. No money has been lost by the public in any Co-operative institution since the first society was registered in 1905.—I have, etc.,

R. B. EW BANK,
Registrar, Co-operative Societies.

No. A.—10608, dated 3rd December 1913.

Forwarded with compliments.

W. W. SMART,
Acting Director of Agriculture.

No. 304, dated 3rd December 1913.

To—The Under Secretary to Government, Revenue Department.

Sir,

I am directed to acknowledge receipt of your letter No. 8771, dated 26th September 1913, forwarding copy of a letter from the Government of India, Department of Commerce and Industry, No. 6905—6918-11, dated 22nd August 1913, regarding the desirability of legislation in connection with the use of the term "bank" in this country and requesting the views of this Association on the proposals contained in paragraphs 2 to 4 thereof.

2. I am to state in reply that the question has received the careful consideration of my Committee, and they submit the following recommendations:—

(a) That legislation which will afford some protection to shareholders and depositors is desirable.

(b) That "banks" should be brought under the provisions of the Indian Companies Act.

(c) That the use of the term "bank" should be restricted to registered companies.

(d) That the Registrar should have power to refuse certificates to companies whose Memorandum or Articles of Association show clearly that they intend to engage in business such as ordinary trading, insurance, shipping and so forth, in addition to the business of banking.

In submitting this recommendation, my Committee desire to call attention to the danger of unequal competition by foreign banks trading in this country, if the latter are not restricted in a like manner.

(e) That a clause should be inserted to the effect that when any advertisement, etc., of a bank or banking company contains a statement of the amount of any capital such advertisement, etc., must show the amount of capital authorised, subscribed and paid up.

(f) That there should be some limitation as regards authorised capital and there should also be fixed reasonable proportion between the authorised, subscribed and paid up capital.

(g) That a minimum subscribed capital should not be fixed.

(h) That 33 per cent. of the subscribed capital should be paid up within one year or before the first statutory meeting.

(i) That there should be no restrictions regarding the full allocation of profits to dividends pending the building up of an adequate reserve fund.

(j) That excepting as above (see clause 4) there should be no restrictions as to the business a bank or banking company may engage in.

(k) That there should be no restrictions confining investments of reserve funds to trust securities.

(l) That there should be no restrictions of capital and reserves to total commitments.

(m) That banks should not be allowed to advance money on their own shares.

(n) That banks should not be allowed to advance money to their own officers without adequate security.

(o) That the accounts of banks should be audited by accountants belonging to any recognised institutions.

(p) That banks should publish once a week in the columns of one English and one vernacular paper a statement of their assets and liabilities, and also place a copy in a prominent place in the bank. The said statement to be signed by the manager or other official duly authorised to sign in his stead.—We have, etc.,

JEHANGIR BOMANJEE PETIT,
Deputy Chairman,

R. E. GREGOR-PEARSE,
Secretary,
The Millowners' Association, Bombay.

Dated 15th December 1913.

To—The Under Secretary to the Government of Bombay, Revenue Department.

SIR,

With reference to your letter No. 8751 of 1913, dated 26th September 1913, enclosing a letter from the Government of India, Commerce and Industry Department, No. 6905—6918-11, dated 22nd August 1913, I have the honour to reply as under.

2. With reference to paragraph 1 of the said letter of the Government of India my Committee note with satisfaction that it is not the intention of the Government to attempt to control all the numerous forms of banking operations carried on in the country, but that they wish only to examine the desirability of imposing restrictions on the use of the terms "bank" or "bankers" or the latter's equivalents such as "banking agents," "banking societies," etc., by individuals, partnerships or companies who conduct banking business on lines which are

unsound and likely to imperil the security of credit. They also note with approval that the Government do not propose to include in the scope of such legislation the regulation of a form of banking undertaken by industrial companies which receive deposits from certain persons during their busy season in order to finance the business of the firm. My Committee beg to say that it is neither necessary nor advisable to try to legislate for the latter form of banking. They note that Government have no information regarding the number of individuals or partnerships engaged in the business of banking under the name of bankers in the Bombay Presidency, and I am to say that in this Presidency banking business is being transacted by either (1) joint stock banks or (2) European firms styling themselves as bankers and doing not only banking business but besides that acting as agents for people in matters other than financial, and (3) by what are known as *shroffs* which is the vernacular equivalent of the word "bankers." These *shroffs*, my Committee think, are a most important, almost indispensable class of bankers who render considerable service to merchants and petty dealers, shopkeepers and traders and who in the course of their business undergo so many risks with their clients, owing to their close knowledge of their clients' affairs that they fully deserve not to be brought under the purview of any legislation. It may be noted that *shroffs* never advertise for or seek deposits in the same manner as joint stock banks or bankers referred to above and therefore the public at large need claim no protection from legislation against this class. The information that Government desire regarding the number of individuals or partnerships engaged in the business of banking under the name of bankers in the Bombay Presidency is therefore hardly necessary, as far as concerns item 3 named above. The figures regarding (1) can be so easily had from the list of joint stock companies published by Government that my Committee do not think it necessary to quote here. With regard to (2) only a few European firms come under it and my Committee have no sources of reliable information for an accurate return of their number. With regard to the Government's impression that a considerable number of banks exist which have not been registered under the Indian Companies Act, my Committee beg to say that as far as their information goes, no Indian concerns using the term "bank" exist in the Bombay Presidency which have not been registered under the said Act. My Committee therefore beg to think that whatever legislation may be undertaken should be only for items 1 and 2 named above.

3. With regard to paragraph 2 of the letter under reference my Committee approve of the suggestion that the term "bank" be restricted to companies under the Indian Companies Act. The term "bank" has a certain prestige in the eyes of the public, literate and illiterate, and my Committee see no objection to the use of it being limited to such concerns as primarily come under the restrictions which regulate the conduct of public companies. My Committee beg to say that this restriction on the term "bank" should be imposed not only on concerns started in future, but should be made applicable to concerns working now too. As said above, there are no cases, to my Committee's knowledge, where private individuals or firms run banks so designated on their own account in this Presidency, but if such should be the case in the other Presidencies, my Committee are strongly of opinion that such concerns must be made either to form themselves into joint stock companies or to give up the use of the term "bank."

4. As to the term "bankers," my Committee think that in the eyes of the Indian investing public the said term has not the same popular prestige as the term "bank." However my Committee see no objection to subject the somewhat imposing term "banker" to the same restriction as the term "bank" especially as such individuals or partnerships, as term themselves as bankers at present and as do not desire to come under the simple restrictions of the Indian Companies Act, can style themselves as financial agents as suggested in the Government's letter. In connection with the term "banker" my Committee beg also to repeat what is said above regarding the strict application of the restriction to all concerns working at present with that name. My Committee are opposed to any exception being made for concerns or individuals because they may have been using the term before the legislation comes into force; the proposed legislation would in fact invest the term with a sanction to which these concerns would have no valid claim and the public would thus be misled.

5. Coming to paragraph 3 of the letter, my Committee have carefully considered the four suggested restrictions. They think that as the term "bank" or "bankers" is to be allowed only for joint stock companies, the restrictions imposed by the Indian Companies Act will require to be supplemented only in the directions named herein.

(1) My Committee think that there should be no minimum fixed for subscribed capital, but if the Government think it at all necessary to fix the same it should not be more than Rs. 50,000 subscribed capital.

(2) My Committee are of opinion that it would be advisable to legislate that one-third of the subscribed capital must be paid up within one year of the registration of a bank or bankers.

(3) To this my Committee are opposed as they think that it should be left at Directors' discretion to recommend dividends and at shareholders', i.e., the proprietors, to sanction the declaration of dividends by Directors. My Committee do not think it advisable for legislation to impose any restrictions in this direction.

(4) My Committee think that it is not possible to put any restrictions by legislation of the nature suggested herein, but they beg to suggest that power should be given to the Registrar of Joint Stock Companies to refuse to register as "bankers" or "bank" such companies whose Memoranda of Association provide for, and warrant, business other than banking business in the broadest sense, as for example, trading, shipping, insurance, commission agency, etc.

My Committee think that it would be necessary to provide for an appeal on the Registrar's decision in this matter.

6. Having dealt till now with the points and suggestions made in the letter of the Government, my Committee beg to suggest that it is imperatively necessary to restrict the use of the term "Savings Bank." This term has, in the opinion of my Committee, an equal, if not a higher, prestige in the eyes of the Indian public, specially the poorer and illiterate class, and my Committee think that a restriction on this term is called for more urgently than on the term "bank." A Savings Bank is resorted to by the poorest depositors as it takes deposits from annas four upwards, which is not allowed in the case of current accounts and fixed deposits in banks. My Committee beg to suggest that none but Presidency Banks and Government Postal Department should be allowed to run Savings Banks.

7. My Committee beg also to suggest that it may, with advantage, be enacted that no advances shall be made by a bank on its own shares, nor shall any advances be made on shares of other companies which may not be fully paid up.

8. The Committee beg to suggest that all concerns registered under the Indian Companies Act as banks or bankers should be required to affix at a prominent place in their premises a statement of their assets and liabilities from month to month, as is being published by the Presidency Banks every week; and that every three months a similar statement shall be published in at least one vernacular and one English paper of the district and in the local *Government Gazette*.

9. It is presumed that the proposed banking legislation will apply to companies registered in India. There are many banks and bankers registered in Great Britain and foreign countries doing a large business in banking in India, and my Committee are strongly of opinion that some check must be exercised on them before they can call themselves, and work as banks or bankers in India. The examples of Arbuthnots of Madras, and William Watson & Co. of Bombay, bringing ruin to thousands by their reckless and negligent ways of banking, are not wanting. If no checks be placed on English and foreign Companies (banks or bankers whether registered or unregistered) the easiest course for people, wishing to start banking business in India, will be to register those Companies outside India. It is a matter for consideration as to what should be enacted to prevent this, and my Committee

beg to suggest that before any English or foreign banks or bankers be allowed to carry on business in India, they should be registered under the proposed new Act. As some Native States in India have their own regulations for joint stock companies, it is suggested that banks and bankers, started in Native States, must also get themselves registered in British India as such.

10. The list of joint stock companies for British India for 1911-12 shows that 454 banking and loan companies were registered till then in British India for banking purposes (with other aims too in some cases).

The column showing the objects of these 454 companies shows that a considerable number of these has been registered with the object of banking and trading, with paid up capitals bearing all sorts of proportions to the subscribed capital of each. It is fully possible some of these banking concerns are working in good faith. But if the suggestions made in the letter of the Government under reference and approved of by my Committee be enacted, a very considerable number of these concerns would have either to

(1) raise their paid-up capital, or

(2) change their Memoranda of Association to come in line with the new Act, for if they do not choose to do this, they would be required to change their names. This may inconvenience the existing concerns unless sufficiently long time is given to these to enable them to adjust themselves to the new Act. My Committee beg to submit that the Government would, after careful consideration, devise measures whereby no serious inconvenience of the nature mentioned above may result to such concerns.

11. The question of efficient auditing of accounts of banking concerns deserves, to my Committee's mind, most careful consideration and they beg to confirm their observation on this score as made in their letter to you, dated 14th December 1911, in reply to your letter No. 8429, dated 8th September 1911. The following is a quotation from the said letter :—

“The qualifications of auditors on the public register should be,

- (a) Every fellow, associate or member of an Incorporated Body of Professional Accountants and Auditors of Great Britain and Ireland or of India, when formed, who may be recognised from time to time by the Government of India.
- (b) The following public bodies may be recognised for the present :—
1. The Institute of Chartered Accountants.
 2. The Scottish Chartered Accountants.
 3. The Institute of Chartered Accountants, Ireland.
 4. The Society of Incorporated Accountants and Auditors.
 5. The Corporation of Accountants.
 6. The Central Association of Accountants.

Members of the first three Societies are designated, as the Government may be aware, Chartered Accountants, those of the fourth as Incorporated Accountants, of the fifth as Corporate Accountants, and of the last as Associated Accountants.

- (c) All the practising auditors at the time of the passing of the Act should be recognised in the first list.
- (d) Persons who have passed examinations instituted either by the Government or by any Indian University or by any public body recognised by the Government for the profession of Accountants and Auditors, and provided that they have served under registered auditors or worked as accountants for a period of at least two years.”

The above observations were arrived at after careful consideration, and my Committee are opposed to any encroachment being made in the field for selection of auditors.

12. These are the views of my Committee on the subject matter of the letter of the Government and other cogent subjects. My Committee are not very sanguine of the results of Government interference in the regulation of trade and commerce. An attempt to define, or limit by legislation, the functions of a bank or bankers is not advisable, and the only salutary checks that can be suggested have been mentioned above. The best remedy of shareholders and depositors is education and experience.

13. It is not possible to devise such legislation as cannot be got beyond by wilful ill-doers, ever so strong and restrictive the legislation may be.

14. My Committee have approved of such restrictions as would be calculated to cause least inconvenience to genuine banking enterprise, whilst giving protection to investors and depositors in banking concerns on broad and general lines.

15. Some of the recent revelations regarding reckless and negligent management of banks necessitate a reference here before this letter is concluded. My Committee are anxious that these should not bias either the Government or any critics of the Government suggestions, whilst proposals for legislation are being considered, for, the proposed Banking Act will apply to all concerns, present and future alike, and there is no reason to suppose that average sound banking concerns do not exist at present, or will not be floated hereafter.—We have, etc.,

PURSHOTAMDAS THAKURDAS,
Chairman,

FAZULBHOY CURRIMBHOY,
Vice-Chairman,

J. K. MEHTA,
Secretary,

Indian Merchants' Chamber and Bureau, Bombay.

No. 1, dated 7th January 1914.

To—The Chief Secretary to Government, Revenue Department.

Sir,

With reference to Government Resolution No. 8770 of the Revenue Department, dated 26th September 1913, forwarding a copy of a letter from the Government of India, Department of Commerce and Industry, relative to the use of the term bank and similar terms, I have the honour to state as follows.

2. I am of opinion that the use of the term bank or bankers should be restricted to companies registered under the Indian Companies Act, power being reserved to the Governor General in Council to allow any firm to make use of the term for such period and on such conditions as to audit or otherwise as he might think fit. The reservation of some such power as this is, I think, necessary to deal with certain exceptional cases, e.g., Messrs. King, King & Co. and Messrs. Grindlay, Groom & Co.

3. As regards paragraph 3 of the Government of India letter, I am strongly of opinion that the following provisions should be made applicable to banks:—

(a) That no bank should commence business until at least one-half of the entire share capital had been subscribed.

(b) That no bank should be allowed to make advances against its own shares or indeed against any shares in any company not fully paid up.

(c) That every bank should have its accounts audited half-yearly by Government auditors.

4. That provisions (a) and (b) are necessary can be seen from the history of the Credit Bank of India. Of the sum of Rs. 10,00,000 shown in the first balance sheet as paid up capital, more than half had been paid out of the moneys of the Bank, the system having been to allot shares to persons of little or no means and to advance to such persons the full value or nearly the full value of the shares taken up by them.

In the case of the Pioneer Bank the figures were still more remarkable, 69 per cent. of the so-called paid up capital having been provided out of the moneys of the Banks. A provision preventing a bank from lending money on any shares which are not fully paid up is necessary to prevent two or more mushroom banks from jointly perpetrating the fraud which can now be perpetrated with success by one alone.

5. That provision (c) is essential in Bombay and if in Bombay presumably elsewhere in India is obvious from the recent disclosures in Bombay.

In the first place there is not a sufficient supply of capable auditors of respectability to do the auditing of all the companies in the city.

In the next place auditors, who are not in the front rank, would, as in effect admitted by N. R. Mistry who audited the accounts of both the Specie Bank and the Credit Bank of India, be unable to secure business unless they were prepared to put their names to balance sheets intended to deceive. A Government audit should not cost the banks any more than a private audit, and so far as Government are concerned, the fees received would no doubt pay for the department.

I would only add that in my opinion this provision as to a Government audit should apply to all companies whether banking or otherwise.

6. I feel doubtful whether there should be any provision as to the building up of any particular reserve before the full allocation of profits to dividends. It appears to me on the whole that if half the entire share capital is paid up before the bank commences business, the depositors should have plenty of security and that the question as to what should in each year be carried to reserve might well be left to the shareholders who, on the assumption that the depositors would be sufficiently secured by the paid up capital, would alone be concerned with a reserve. Prudent management would no doubt result in the building up of an adequate reserve, for the greater the reserve, the greater the confidence on the part of the public, and the greater the confidence, the greater the volume of business.

7. I do not know whether the history of banks in India shows the necessity of a restriction being imposed upon banks from doing business outside that of banking. If it does, such a restriction should be imposed.

A difficulty which strikes me in this connection is to ascertain where to draw the line between what is and what is not legitimate banking business.

If such a restriction is imposed, power should be reserved to the Governor General in Council to allow any bank to do any business in addition to banking upon such conditions as he might think fit.—I have, etc.,

T. J. STRANGMAN,
Advocate-General.

BOMBAY NATIVE PIECE-GOODS MERCHANTS' ASSOCIATION.

No. 84, dated 7th January 1914.

To—The Under Secretary to the Government of Bombay, Revenue Department.

Sir,

With reference to your letter No. 8771 of 1913, dated the 26th September 1913, enclosing a letter from the Government of India, Department of Commerce and Industry, No. 6905-6913-11, dated the 22nd August 1913, I have the honour to reply as under.

2. With reference to paragraph 1 of the said letter of the Government, my Committee think that in the Bombay Presidency there are no individuals or partnerships engaged in the business of banking and using the name of bankers. The business of banking is generally carried on by shroffs whom it is not desirable to bring under the operation of the proposed Act.

3. The Committee are emphatically of opinion that the terms "bank," "bankers," etc., should be restricted to companies registered under the Companies Act. Bankers now-a-days stand for all that is systematic and scientific banking, and the Committee think that these terms should not be left to be used by any companies or partnerships unless they at the same time get themselves registered under the Indian Companies Act and bring themselves under all its legislative restrictions. The Committee beg in this connection to bring to the notice of the Government the existence of several foreign companies, some of which are registered in foreign countries, while some are not registered at all but work as bankers. All these foreign companies doing banking business in this country should be, in the opinion of the Committee, brought under the operation of the proposed Act, as it is feared that, unless this is done, any foreign concerns calling themselves as bankers, but with no *substratum*, may be dumped on this country and may involve the ingenious depositing public in ruin, examples of which are not wanting in the past.

4. Coming to the four suggestions mentioned in paragraph 3 of the letter of the Government, my Committee beg to give their opinion as below:—

(1) They do not think it desirable that a minimum amount should be fixed for subscribed capital. Any such restriction would lead, they fear, to giving a blow to the starting of small banks catering to the needs of small traders and agriculturists. The last few years of Indian indigenous banking have shown that banks with large capitals are generally registered in Presidency towns. These establish their branches in the mofussil primarily for receiving the deposits of the public as hardly a few of these branches have got powers of making advances. The result is that the capital of the mofussil is dragged away to the Presidency towns to be advanced to big industries and capitalists leaving the mofussil traders and agriculturists without any accommodation, specially, as the old shroffs and *sāvkārs* are dying away. The real necessity is, it will be thus seen, for banks with small capital for the local needs of different towns and villages. Any restriction in the nature of a minimum amount of subscribed capital will lead in the natural course of things to placing a curb on these small banks and encouraging only banks with large capital. The list of joint stock companies published by the Commercial Intelligence Department shows how the number of such banks with large capital is but limited and how these too are generally to be found only in Presidency towns. India is still primarily an agricultural country and the Committee beg to draw the attention of the Government to the following pregnant observation occurring in the Bulletin of Economic and Social Intelligence published under the auspices of the International Institute of Agriculture. "Agricultural countries, the industrial conditions of which are in the course of transformation or incomplete, logically require in their period of expansion a large number of banks, while manufacturing countries properly so called the industries of which are fully developed demand a concentration of these banking systems."

(2) The Committee think that at least one-third of the subscribed capital of a banking concern should be paid within one year of the starting of its business.

(3) The Committee cannot approve of the suggestion that there should be a restriction on the full allocation of the profits to dividends pending the building up of an adequate reserve. This matter of declaring the dividend and carrying forward a particular sum to the reserves should be left to the companies themselves. They, however, suggest that it should be laid down that shareholders cannot propose any increase in the dividend declared by the Board of Directors.

(4) In this connection, the Committee beg to suggest that power should be given to the Registrar of Joint Stock Companies to refuse to register as banks or bankers companies whose Memoranda of Association provide for business other than banking business in the broadest sense, but that an appeal should lie on the Registrar's decision in the matter to the Local Government.

5. The Committee beg to suggest that no advances should be allowed to highly-paid officers of banks without adequate and reasonable securities and also that all the banks or bankers should in their advertisements be required to mention the following details :—

- A. Nominal capital.
- B. Subscribed capital.
- C. Paid-up capital.

6. The Committee beg in conclusion to protest against the suggestion made by the Bombay Chamber of Commerce to the effect that "if possible, the auditing of a bank's accounts should be done by Chartered and / or Incorporated Accountants." The suggestion will practically result in giving the monopoly to a few people as a matter of fact indigenous talent will be altogether ignored, as there is only one Indian Chartered Accountant and not more than half a dozen Incorporated Accountants. The Committee beg, therefore, to suggest that the qualification of auditors should be fixed as follows :—

- (a) Every fellow, associate or member of an incorporated body of professional accountants and auditors of Great Britain and Ireland or of India, when formed, who may be recognised from time to time by Government of India.
- (b) The following public bodies may be recognised for the present :—
 - (1) The Institute of Chartered Accountants.
 - (2) The Scottish Chartered Accountants.
 - (3) Institute of Chartered Accountants, Ireland.
 - (4) The Society of Incorporated Accountants and Auditors.
 - (5) The Corporation of Accountants.
 - (6) The Central Association of Accountants.
 - (7) London Association of Accountants.

Members of the first three societies are designated, as the Government may be aware, Chartered Accountants, those of the fourth, as Incorporated Accountants, of the fifth as Corporate Accountants, and of the last as Associated Accountants.

- (c) Persons, who have passed examinations instituted either by the Government or by any Indian University or by any public body recognised by the Government for the profession of Accountants and Auditors.—I have, etc.

MUNMOHUNDASS RAMJI,

Chairman,

(Vernacular signature of)

MADHAWJI THAKERSEY,

Vice-Chairman,

(Vernacular signature of)

PURSHOTAM KANJI,

Hon. Joint Secretary.

No. C.—644, dated 2nd February 1914.

To—The Chief Secretary to Government, Revenue Department.

Sir,

In reply to Government Resolution No. 8770, dated September 26th, 1913, paragraph 2, I have the honour to append herewith information regarding the individuals or partnerships reported by the Collectors of the Division to be engaged in business of banking under the name of "bankers" in their respective charges.

2. As regards the opinion asked for in the first paragraph of the Government Resolution, I regret that in the hurry of preparing to hand over charge I am unable to deal with the subject of length.—I have, etc.,

G. S. CURTIS,
Commissioner, C. D.

List of individuals or partnerships reported to be engaged in the business of banking under the name of bankers.

Serial No.	Individuals or partnerships engaged in the business of banking under the name of bankers.	Name of the Manager or Secretary.	Remarks.
1	2	3	4
	<i>East Khândesh District.</i>		
1	Branch of the Bombay Bank at Jalgaon.	.....	Collector reports that some industrial companies undertake banking business during busy season and the approximate number of individuals and partnerships would be between 25 and 30.
	<i>West Khandesh District.</i>		
2	Nandurbár Co-operative Bank ... ..	.....	This has not yet commenced banking business.
	<i>Násik District.</i>		

The Collector reports:—"In Násik there are at present one branch of a Banking Company and two Co-operative Societies which carry on banking business. There is no person or company unregistered which uses the name of bank or banker except the house of Amolak Kewalchand."

	<i>Ahmednagar District.</i>		
3	The Ahmednagar Bank ... ..	.....	Registered under the Indian Companies Act.
4	The Central Bank ... ..	.....
5	The Poona Bank (Branch) ... ..	.....
6	The Ahmednagar Bank (Branch) ... ..	.....
	<i>Poona District.</i>		
7	Messrs. Jamnádás Khusháldás, Royal Artillery Bankers, Centre Street.		
8	Messrs. Chunilál Nagindás, Royal Artillery Bankers, Centre Street.		
9	Messrs. Hakamchand Bhopatram, Royal Artillery Bankers, Cavalry Lines, Ghorpudi.		

Serial No.	Individuals or partnerships engaged in the business of banking under the name of bankers.	Name of the Manager or Secretary.	Remarks.
1	2	3	4
	<i>Poona District—concl'd.</i>		
10	Messrs. Kering Rupchand & Co., Bankers, Sholapur Bazár.		These use the term "Bankers" on their sign board and letters, but are purely money-lenders.
11	Messrs. M. Khushalchand and Sons, Bankers, Kirkee.		
12	Messrs. Yjámal Veerchand Brothers, Royal Artillery Bankers, Kirkee.		
13	Messrs. Heemutmul Partápmul & Co., Shroffs, Bankers, Exchangers, etc., Sholapur Bazár.	.....
14	Messrs. Amerchand Hazárimal & Co., Bankers, Sholapur Bazár.		
15	Messrs. Idan Sawethmull & Co., Bankers, Sholapur Bazár.		
16	Messrs. Dámodar Govind Ghárpure & Sons, Central Savings Bank, Sadáshiv Peth, Poona City.		
	<i>Sholapur District.</i>		
17	Sholapur Bank, Limited... ..	Mr. Laxman Balwant Kále.	
18	The Co-operative Credit Society Urban Bank, Sholapur.	Mr. Laxman Vináyak Tikekar.	
19	The Poona Bank, Bársi Branch... ..	Mr. S. S. Párnáik.	

Dated 16th February 1914.

To—The Under Secretary to the Government of Bombay, Revenue Department.

Sir,

I beg on behalf of the Committee of this Association to reply as under to your letter No. 8771 of 1913, dated the 26th September 1913, enclosing a letter from the Government of India, Commerce and Industry Department, No. 6905-6918-11, dated the 22nd August 1913.

2. With regard to paragraph 1 of the said letter the Committee note with satisfaction that the shroffs are not to be brought under the purview of the proposed legislation. They have filled and have been filling an important place in the world of commerce and industry, and the Committee do not like that their salutary activities should be restricted in any way.

3. With regard to paragraph 2 of your letter the Committee think that the use of the term "Bank" should be limited to such concerns as are registered under the Indian Companies Act. At the same time, however, they are not in favour of such a restriction being imposed on the term "Banker." The term has not the same prestige as the other term and is used indiscriminately by many shroffs who are Indian bankers, without thereby conveying any misleading impression to the public.

4. With regard to paragraph 3 of the letter the Committee beg to give their opinion as follows:—

- (1) There should be no minimum fixed for subscribed capital.
- (2) One-third of the subscribed capital must be paid up within one year of the registration of a bank.
- (3) The Committee are of opinion that a building up of an adequate reserve is necessary and that at least about 15 per cent. of the net profits should be carried to a reserve until it reaches a point commensurate with the paid up capital of the bank.

(4) It is not possible to put any restrictions of the nature suggested, but they beg to suggest that power should be given to the Registrar of the Joint Stock Companies to refuse to register as "Banks" such companies whose memoranda of association provide for and warrant business other than banking business in the broadest sense of the term, as, for example, trading, shipping, insurance, commission agency, etc.

5. The Committee beg to make the following additional suggestions though the subjects have not been touched upon in your letter :—

(1) None but Presidency Banks and Government Postal Department should be allowed to run Savings Banks. It has been found that many poor people deposit their hard-earned savings in the savings banks of joint stock banks under the false impression that they have got the same position as the Presidency Savings Banks or Government Postal Savings Banks.

(2) No advance shall be made by a bank on its own shares, nor shall any advances be made on shares of other companies which may not be fully paid up.

(3) All concerns registered under the Indian Companies Act as banks should be required to affix in some conspicuous place in their premises a statement of their assets and liabilities from month to month, as is being published by the Presidency Banks every week ; and that every three months a similar statement shall be published in at least one vernacular and one English paper of the district and in the local *Government Gazette*.

(4) All the English and foreign banks and also all the banks started in Native States should be required to be registered in British India before they are allowed to do any banking business.

6. The Committee have noted with alarm an attempt made in some quarters to get the monopoly of bank audit for Chartered and Incorporated Accountants. As there is only one Indian Chartered Accountant and not more than half-a-dozen Indian Incorporated Accountants, the result of such a suggestion would be to give the monopoly to foreign accountants at the expense of Indian indigenous talents. Again, some of the recent failures of banks have shown that the fact of a particular institution having Chartered or Incorporated Accountants as its auditors is not always a guarantee of its good work. Looking to these circumstances the Committee beg to support the reasonable suggestion of the Indian Merchants' Chamber made in this connection as under :—

"The qualifications of auditors on the public register should be :—

(a) Every fellow, associate or member of an Incorporated Body of professional Accountants and Auditors of Great Britain and Ireland or India when formed, who may be recognised from time to time by the Government of India.

(b) The following public bodies may be recognised for the present :—

1. The Institute of Chartered Accountants ;
2. The Scottish Chartered Accountants ;
3. The Institute of Chartered Accountants, Ireland ;
4. The Society of Incorporated Accountants and Auditors ;
5. The Corporation of Accountants ; and
6. The Central Association of Accountants.

Members of the first three societies are designated, as the Government may be aware, Chartered Accountants, those of the fourth as Incorporated Accountants, of the fifth as Corporate Accountants, and of the last as Associated Accountants.

(c) All the practising auditors at the time of the passing of the Act should be recognised in the first list.

- (d) Persons who have passed examinations instituted either by the Government or by any Indian University or by any public body recognised by the Government for the profession of accountants and auditors, and provided that they have served under registered auditors or worked as accountants for a period of at least two years."

I have, etc.,
LALSHANKER HARPRASAD,
Secretary, Grain Merchants' Association.

No. 1568, dated 20th May 1914.

The Commissioner in Sind has the honour to submit the report called for in Government Resolution, Revenue Department, No. 8770, dated the 26th September 1913, on the subject of the proposed legislation to regulate the use of the term "bank" or "bankers" or its equivalents.

2. Some of the officers consulted would prefer to draw a distinction between the terms "bank" and "banker." Mr. Campbell, the Collector of Sukkur, writes—

"There appears no objection to subjecting anything called a 'bank' to strict legislation, but 'bankers' are different: they are a private convenience rather than a public danger. Such bankers are perhaps better recognised under the name 'shroff' though, properly speaking, the latter name should, I gather, apply only to money changers or the like. The Indian banker proper would ordinarily concern himself (as I understand) only with trade deals or paper money."

On the whole the Commissioner is disposed to accept the proposal of the Karachi Chamber of Commerce that a distinction should be drawn between (1) all institutions calling themselves bankers, banking corporations, etc., *advertising* as such for deposits, and (2) individuals or firms trading as bankers and shroffs who *do not advertise* for deposits. The first class of institutions should be compulsorily registrable under the Indian Companies Act.

3. The Commissioner agrees that it is desirable to impose the restrictions proposed in paragraph 3 of the Government of India's letter printed in the preamble of the Government Resolution.

4. The Commissioner does not feel competent without technical knowledge of the subject to make specific suggestions for the application of the restrictions referred to in the last paragraph, but in this connection he would invite attention to the suggestions made in the accompanying copy of letter No. 23, dated the 7th January 1914, from Mr. Monie, the Collector of Nawabshah.

5. The Commissioner regrets he is still unable to furnish accurate information regarding the number of individuals or partnerships engaged in the business of banking under the name of bankers. The Collector of Karachi reports that there is in Karachi only one European firm, Messrs. Cox and Company, who style themselves bankers, and that there are 14 other Indian firms and individuals who carry on banking business and are known as shroffs. The Collector of Sukkur reports that perhaps half-a-dozen 'banks' and a score of 'bankers' would be a fair maximum for his district, but that recent troubles have tended to annihilate the banks, while figures for bankers might fluctuate considerably according to the definition placed on the term. The Collector of Hyderabad has furnished no information on this point, while the figures for the remainder of the districts in Sind are blank. More accurate information has been called for from the Collectors of Sukkur and Hyderabad and the particulars will be submitted as soon as possible.

6. The Commissioner regrets the delay in submitting this report, which is due to the last report of the officers consulted not reaching him till the 7th instant.

W. H. LUCAS,
Commissioner in Sind.

No. 23, dated 7th January 1914.

To—The Commissioner in Sind.

Sir,

I have the honour to reply to your memorandum No. 3577, dated the 22nd October 1913.

2. There are no individuals, partnerships or companies carrying on in this district a banking business under the name of bankers.

3. The history of Indian banking since the Government of India's letter of the 22nd August 1913 was written emphasises the need for special legislation, restricting the use of the term "bank" and controlling the business of those who describe themselves as banks or bankers.

I think it is desirable that for the future the use of the term bank should be restricted to registered companies having a subscribed capital of at least 6 lakhs (£ 40,000) and a paid up capital of at least 3 lakhs (£ 20,000), permission to commence business being withheld until the Registrar of Joint Stock Companies is satisfied that the proposed bank actually holds the prescribed minimum of 3 lakhs in cash or securities readily convertible into cash. I am not in favour of the suggestion of the Government of India that the allocation of profits to dividends should be restricted until an "adequate reserve has been built up." No reserve can be an adequate safeguard against bad banking, and even in thoroughly well established and well managed banks the reserve is not usually more than a fraction of the bank's total liabilities. (I happen to have before me the balance sheet of one of the Scotch joint stock banks, which for many years has paid a dividend of 20 per cent. Its reserve amounts to about 4½ per cent. of its total liabilities and to a little more than 5 per cent. of its liabilities to the public.) A much more effective check is to provide that the liabilities to the proprietors (i.e., paid up capital plus reserve) must not exceed a certain fraction of the liabilities to the public. The minimum percentage ought, I think, to be 10 per cent., and it would be safer to fix it at 15 per cent. (in the bank I have referred to it is 16½ per cent.). If such a proposal were adopted, a bank whose business was expanding would be compelled to call up more capital unless it could increase its reserve fast enough to maintain the prescribed minimum percentage.

4. Whatever else is done, it is absolutely necessary, I think, to insist on the publication of statements of affairs, including a detailed and properly audited balance sheet, every six months.

The statement of affairs should show clearly the capital of the bank, (a) subscribed, (b) callable, (c) reserved, callable only if the bank is wound up, and (d) paid up.

The liabilities side of the balance sheet should show separately the liabilities to the public and to the shareholders, should distinguish between deposits payable on demand and deposits not so payable (this distinction is not usually made in the United Kingdom, but its compulsory adoption has often been advocated), in addition to the other information required by the Companies Act. Recent experience also suggests that in order to show whether the branches of a bank are doing a genuine banking business or are merely deposit-collecting agencies, the deposits at the head office, and the deposits at the branches, and, similarly, on the other side of the account, the loans and advances made at the head office and the loans and advances made at the branches should be shown separately. This is now done by the Bank of France.

On the assets side it is necessary that full details should be given which will enable the public to ascertain what proportion of the assets is immediately realisable. I do not think that anything should be included in immediately realisable assets, save cash in hand, in the Presidency Banks or other specially approved banks, money at call and short notice

(not exceeding ten days), and cheques, etc., payable on demand. Cash (in hand or in banks) and money at call, etc., or at short notice should be shown separately; the total of these items should be shown in the account, and at the bottom of the account the percentage of this total to the total assets or liabilities should be shown prominently; so that the public may have no excuse for overlooking the importance of this figure. (The percentage for 17 Australian banks with offices in London at the end of June was 28·8, for 7 Canadian banks 30·9, for the 6 Indian exchange banks, including the Specie Bank, 17·3.)

Next, investments should be classified, trustee securities, other securities readily marketable in the Presidency towns and Rangoon, and all other securities being shown separately.

Loans and advances should be classified fully, a distinction being made between (a) loans repayable on demand and (b) loans not so payable. They should also be classified according to the nature of the security held for them, *e.g.*, trustee securities, readily marketable securities, other stocks and shares, immovable property, movable property, bills, etc. Loans for which the bank holds no security and loans to directors should continue to be shown separately.

5. The audit of banks' accounts should be restricted to persons with a professional qualification equal—or as nearly as possible equal—to that of a Chartered Accountant, and auditors should be required to give a detailed certificate showing that they have checked the accounts thoroughly, and in particular have verified the amount of assets shown under "cash in hand or in banks," money at call and at short notice and the classification of securities and loans and advances.

6. For the future, I think that companies should not be allowed to transact agency or other miscellaneous business directly. There seems no objection to their undertaking it through a subsidiary company—as is done now by one of the agency banks—the bank's liabilities for the losses on the miscellaneous business being limited to its state (*sic*) in the company, which should be shown separately in its balance sheet.

7. There remains the question whether any legislation which may be undertaken should be applied to the existing banks, *viz.*, the Indian banks, whether under European or Indian management, the banking companies or corporations with head offices in London, Hongkong, Paris, etc., and the banking business done by agency and other private firms. I think, on the whole, that they ought to be exempted, provided that they publish six monthly balance sheets prepared and audited in accordance with the provisions of the Indian Law or the English Company Law and provided that they include in the balance sheets information as to their deposits in India and their cash balances in India.

8. If an Act regulating banking in India is passed, I think that it would be advisable to include in it—as in the Canadian law—a provision that the Act is to be revised at fixed intervals.—I have, etc.,

(Sd.) P. W. MONIE,
Collector of Nāwabshāh.

Bombay, dated 10th October 1913.

To—The Under Secretary to Government, Revenue Department.

Sir,

We are in receipt of your letter No. 8771 of the 26th ultimo, with the enclosure referred to therein, which has been circulated to our Committee. In reply we are directed to inform you that the suggestions and restrictions proposed have the Committee's approval and the Committee would be glad to see them brought into force.—We have, etc.,

A. F. FERGUSON & Co.,
Secretaries, the Bombay Underwriters' Association.

No. 4234, dated 17th December 1913.

To—The Chief Secretary to Government, Revenue Department.

Sir,

With reference to Government Resolution No. 8770 of 20th September 1913, I have the honour to state, after consulting all the Collectors in this Division, that I am entirely in favour of the proposals outlined in paragraphs 2 to 4 of the letter from the Government of India.

2. Recent events in Bombay accentuate the necessity of legislation of the nature suggested.—I have, etc.,

W. D. SHEPPARD,
Commissioner, S. D.

Acts and Regulations.

Proposed legislation regulating the use of the term 'bank,' or 'bankers,' or its equivalents.

Dated 18th November 1913.

To—The Chief Secretary to the Government of Bombay.

Sir,

We have the honour to send you herewith a copy of the letter addressed by us to the Secretary, Bombay Chamber of Commerce, in connection with the suggestion made by their Committee in respect of the banking legislation, for your information.—We have, etc.,

S. B. BILLIMORIA & Co.,
Corporate Accountants.

Dated 18th November 1913.

To—The Secretary, Bombay Chamber of Commerce, Bombay.

Sir,

Our attention has been drawn to the views expressed by your Committee in the matter of banking legislation in India, and while agreeing with you in your various valuable suggestions we beg to point out that your Committee have either been misled or have unintentionally done gross injustice to the claims of independent practising auditors by your suggestion "that if possible the audit of banks and banking institutions should be done by Chartered and/or Incorporated Accountants only." Your Committee, by this suggestion, presume that persons belonging to these two bodies alone are fit for conducting the audit of banks and banking institutions. Your Committee have not stated anything in support of, nor have they given any reason for this suggestion. Your Committee have adduced no facts, have proved nothing to show that the Chartered or Incorporated Accountants can alone do the said audit efficiently. The failure of the Bank of Burmah is still quite fresh in the minds of the Indian public, and the audit of this Bank was done by Chartered Accountants. The Credit Bank of India, a recent failure, had one of its auditors, a Chartered Accountant and the other an Incorporated Accountant. Of course we admit that they are not infallible, but we beg to show that the evils complained of cannot really be remedied by appointment of Chartered and Incorporated Accountants only. To put forward names of these two bodies only in your suggestion to Government, as eligible for the audit of banks, is preposterous and unfair. It is only taking a partial view of the matter which will prove harmful to the claims and interest of other professional accountants who belong to

bodies who are equally well-known in Great Britain and Australia. The question of appointment of auditors is at present under consideration by Government, and if it is laid down in the Act that a license should be granted to qualified professional accountants, a mere competitive form of title of one or other society would die out.

We, as the local representatives in India of the Corporation of Accountants, request the favour of your placing our letter before the Committee for their consideration, and we trust you will please in fairness and justice to all other qualified professional accountants and auditors remove the injustice done to them by the aforesaid suggestion of your Committee.—Yours faithfully,

S. B. BILLIMORIA & Co.

Dated 28th November 1913.

To—The Chief Secretary to the Government of Bombay.

Sir,

In continuation of our letter, dated the 18th instant, we have the honour to send you herewith a copy of the letter addressed by us to the editor of *Commerce*, Calcutta, in reply to an article which appeared in the columns of that paper on Wednesday, the 26th instant, under the heading of "The Duties of an Auditor."

We regret to state that the editor should have taken up this unfair attitude towards the Indian auditors in general and should have made in his articles remarks which lead one to believe that he was making it a racial question.

In submitting our views on the matter to the Government of India we beg to draw the attention of Government to the fact that at the time of the granting of the Royal Charter of Incorporation by Her Most Gracious Majesty Queen Victoria to the various Societies in Great Britain, Ireland and Wales, the petitioners had put in their petition among others the following paragraph:—

"That the petitioners desire and propose that if Incorporation by Charter is granted to them, such conditions should be laid down as would require for the admission to membership of persons now already following the profession either long actual experience in the profession or service for a long time in the capacity of a Public Accountant's clerk or else the passing of appropriate examinations under the supervision of the Corporation."

On the strength of this petition at the time the Royal Charters were granted, all practising accountants and the clerks of public accountants were admitted members of the different Institutions and Societies without examination. Such was also the case in Australia, Canada and the Colonies when first the question of registration of accountants came before their Government.

We further have the honour to inform you that among the members of the Corporation of Accountants are many well-known names in Bombay and Calcutta, among whom are—

- Mr. Reginald Peel, Chief Accountant, Bombay Municipality.
- Mr. Hormasji S. Katrak, Chief Superintendent, Accountant General's Office, Bombay.
- Mr. Gerald B. O'Connor, Accountant, Bank of Bengal, Calcutta.
- Khán Bahádúr Jamsedji A. Dalál, M.A., LL.B. (Retired Minister of Education, Baroda, at present an auditor of the Bank of Bombay).

Hoping to be excused for the trouble.—We have, etc.,

S. B. BILLIMORIA & Co.,
Corporate Accountants.

Dated 28th November 1913.

To—The Editor, *Commerce*, Calcutta.

Sir,

We have read with great interest your articles on banking and duties of auditors in your last Wednesday's issue. We have generally found your articles unbiased and written in a spirit of independence worthy of a journal of such respectability as yours. We are, however, afraid that in your recent article on "The Duties of an Auditor" which appeared in your issue of the 26th instant, you have been misled in making certain statements which amount to nothing short of a sweeping condemnation of the integrity of Indians which we challenge you to prove by facts. Similarly you have cast a slur on a large class of Indian professional auditors who carry on their duties with integrity and independence but without any irrefragable evidence. That there have been a few erring ones we do not deny. But then it would be idle for you or any Europeans to deny that there are not black sheep in every profession including the profession of Accountants. May we question what you have to say about the management of the Glasgow Bank and others and the Arbuthnots and the Bank of Burmah? Subsequent to the failures of these last two big institutions in India, startling revelations of gross mismanagement and fraud came out. Justice was meted out by the Tribunals, so we shall make no comments now beyond pointing out what invidious and mischievous if not reckless distinction you have attempted to make in your articles. Are the Europeans superhuman? Do we not hear of huge frauds in all parts of the world and more so in Europe and America? Why then try to run down all Indians because just a few of them have proved to be frauds? We strongly take exception to your unwarranted and unjust remarks against Indian auditors, and judging from our own standpoint we beg to say that there have been in the past and there must be at the present day a large body of honourable Indian auditors, as conscientious and as experienced as any other European auditor with his training and experience in accountancy. We openly challenge anyone to point out a single instance in which we have either submitted to the wishes of the Directors or failed to discharge our duties as auditors. We can give a number of instances where we have in our capacity as auditors made the management work quite straight, have got wrong or incorrect entries removed from the books of accounts not to speak of any fraudulent entries, and have also made reports to the shareholders whenever occasions called for such a step being taken. No doubt as a result of our honest endeavours in the discharge of our duties we had to suffer—suffer so far as we were not re-elected as auditors. But we have stood firm and done our duty. There are many such straight and honest Indian auditors in our fold who have invariably realised the sense of responsibilities attached to their position as auditors and have firmly and honestly withstood all temptations. We may mention here only two names as an illustration, though there are many more no doubt—the late Mr. Pestonji Sorabji Khareghat and Mr. Hormasji Sorabji Katrak. The former gentleman had an unique reputation of being a thoroughly competent and honest auditor and the frauds of Keshavji Naik and others were all exposed by him. He was absolutely independent, his sons have been high officials of Government, one an I. C. S., and the other an I. M. S., and to his last days his name was cherished with respect and esteem by the public for honesty of purpose. Mr. Katrak is at present holding a very high and responsible position in the Accountant General's Office. He was an auditor to the Bombay Municipality for some years and the independence and zeal displayed by him won for him the approbation not only of the official element in the Corporation, but the whole body was unanimous in placing on record an appreciation of his honest and independent services when he left over charge to take up a higher appointment in the Accountant General's Office. Mr. Katrak is a fellow of the Corporation of Accountants (an Incorporated Body of Accountants and Auditors in existence in Glasgow for over twenty years and the body of which we have the honour to be the local representatives in India). These illustrations, coupled with what we have stated above

concerning ourselves, and which we are prepared to prove any moment, will amply justify your taking an early action to set right what wrong you have inadvertently done to the whole body of Indian professional auditors. The suggestion of the Bombay Chamber of Commerce is based upon no authority. They have proved nothing, adduced no facts to show that the Chartered and Incorporated Accountants alone are fit for audit work. Let us point out to you that more than 50 per cent. of the members of the Incorporated Society of Accountants and Auditors have not passed any tests of examination like members of other Societies of equal repute but because their experience warranted admission to their fold there they have been and are now endeavouring to secure a monopoly quite unheard of in any part of the globe. Let us also point out to you that while the different Societies in England, Scotland, Ireland and Wales petitioned to Her Most Gracious Majesty the Queen Victoria for a Royal Charter to be granted to such Societies the petitioners had among others made the following statement:—

“That the petitioners desire and propose that if Incorporation by Charter is granted to them such conditions shall be laid down as would require for the admission to membership of persons now already following the profession either long actual experience in the profession or service for a long time in the capacity of a public accountant's clerk or else the passing of appropriate examinations under the supervision of the Corporation.”

and accordingly all practising accountants and clerks of public accountants were admitted members of the Institution of Chartered Accountants without examination. Just as membership is available by examination to the Chartered or Incorporated Society, the Corporation of Accountants admit persons as members by examinations, and let it be said to the credit of the Corporation that examinations are instituted in India giving Indian students a facility to qualify themselves for the profession. Attempts to secure monopoly with the Houses of Parliament by introduction of Bills during the last ten years and more have been unsuccessful, and wherever legislature is effected no encroachment is made, be it in Africa, America or Australia, on the rights of practising professional accountants. It would be well for anyone to be acquainted with the facts as to how such enactments were passed by other Governments, such as in Canada, Australia and Africa, and to trifle with or attempt at an action that would seriously hamper all future progress or be a direct encroachment on the rights of the Indians would be inadvisable. Colleges of Commerce have begun work in India and the future generation will have a trained army of auditors within the next few years. What is primarily needed in the profession of auditors is honesty of purpose and a high standard of morality. Without these virtues any number of examination qualifications will not prevent frauds, abuses and scandals.

We shall be obliged if you will insert this letter in the columns of your next issue of *Commerce* with an article from yourself modifying the statements you have made in your present article.—Yours truly,

S. B. BILLIMORIA & Co.

Cutting from the 'Times of India' of 12th December 1913.

The Government of India have under consideration an amendment of the law relating to banking in India, and commercial opinion has been invited upon the broad principles which it is proposed to embody in the amending legislation. Those suggestions were made before the *débauché* of swadeshi banking, but not before some *débauché* was regarded as inevitable. The financial crisis through which we are passing is certain to intensify the demand upon Government for restrictive legislation governing companies or institutions allowed to trade as banks, and we shall be faced with a movement in the direction of expecting Government to take measures to make banks solvent by legislation. We express no opinion for the moment upon the particular proposals which Government have adumbrated, but we wish to repeat the caution we have previously urged against aiming at the guarantee of the solvency of banks or banking institutions by legislation. In various countries enactments have been instituted to this

The Law and the Banks.

end with varying degrees of restrictions, but failures have so far nowhere been avoided thereby, and in some cases such regulations have been the cause of the trouble that they were designed to obviate, for all legal legislation tends to perpetuate a state of things that time is leaving behind. The Trustee Act, for instance, has caused in late years untold loss to beneficiaries by reason of its out-of-date restrictions. London Banks last year wrote off a loss of £1,200,000 on Consols, which is a reason for leaving a free hand to the more fortunate banks which had the foresight to change their Consols for short-date securities. Under legal restrictions such a result could not be obviated and bankers would be compelled to suffer such losses as those occasioned by the restrictions of the Post Office Savings Bank in the investment of their funds. Thus Black Friday was largely caused by the inelasticity of the Bank of England Charter, which had to be hastily suspended by Parliament to prevent further failures. It was only by Parliament loosing the fetters it had forged itself that a worse evil was avoided, and under the stress of another such catastrophe the same course will be inevitable. The United States of America are perhaps the most legislature-ridden of all civilised countries, but there bank failures have been more severe than elsewhere; the panic and suspensions of 1907 are still a vivid reminder of this.

A survey of all the countries of the world over a considerable period of time does not convince us that, given the circumstances and conditions, legislation can do much to avoid banking catastrophes; thus we have the Australian banking crisis, where only some three of the largest banks came through the ordeal, the American failures of 1907 and the present Indian bank failures. Therefore, if legislation is necessary, let it be of the widest scope rather than restrictive, laying down broad requirements which will meet with general acceptance, for, after all is done, the success and stability of each bank rest on the experience and capacity of the managers, principals, or directors, and on them alone. Of the regulations that appear to defeat their own ends and are calculated to restrict and lower a banking standard rather than to enhance it, are such as the limiting of dividends, the fixing of reserves and the amount of capital authorized and subscribed. Those responsible for banking are the experts who can better judge of these things according to the differing circumstances of each bank. The general tendency of such enactments is usually to ensure a low standard rather than a high standard, as the requirements must be put low to suit all cases. The public look to this as the limit of requirement and so make it easier to those who should aspire to a high standard to content themselves with the lowest. Now as to the broad principles on which it is hoped all will be in agreement. That all banks, whether private, joint stock, or native, should publish at stated periods a balance sheet. That such balance sheet should show separately cash money at short notice, investments and securities and loans to customers. That such balance sheet should be certified by a public accountant, who should be required to state in his certificate that in his opinion the value of the securities, etc., at the date of the balance sheet fully represents the value set out thereon. The public accountant should also certify that the total banking accounts and the assets held against the same and their values are as set out.

There is one other point, perhaps the most important of all; the suggestion is made: "that, there should be a restriction as to taking up by a bank of business outside that of banking in which the banking 'profit' might be lost." The sentiment and intention are excellent, but how is it possible to attain it? Who shall define exactly what is banking business, where it begins and ends, and who shall define the sort of business in which banking "profits" might be lost? "Assets" are presumably contemplated. As the idea is so good, though so difficult of attainment, cannot it be reached in another way? Banking, although carrying merely the relationship of debtor and creditor, as in other business, has this difference--that there is the absolute obligation to meet your customers' requirements on demand or at due date, and to ensure thus the assets must be kept available and liquid. It is quite repugnant to good banking to convert them or sink them in non-realizable assets. As the law stands at present a direct hardship on banking creditors is entailed, as however jealously these banking assets are separated and safeguarded from any other business transactions, in the eye of the law all creditors have equal rights, and outside creditors would have an equal right to participate with

bank creditors, to the detriment of the latter. The British Life Assurance Act shows a way that Government would be well advised to adopt. An Insurance Company is not restricted as to the kind of business it may do, but it is under legal obligation to keep its life business and life funds separate and distinct from any other business, and such funds are available for the claims of the life members in priority to all other creditors. In the same way banking assets could and should be protected without interfering with the liberty of any Company, or Banker, or Agent, to do any other business that seems to him good, and a problem is thus solved which otherwise bristles with difficulties—as in the case of a bank having to protect a loss and take over or nurse an asset that may be deemed outside a banking business. After all, India needs the help of all sound banks, honestly conducted, be they joint stock, private, or agency banks, and there is little excuse for any bank continuing to trade unless it can pay 20s. in the £, seeing that its solvency can be constantly and readily ascertained. A customer does not, by passing his cash over the bank counter, do so in the same way as he does in a shop. There is an implied warranty that the bank is solvent and can and will repay the money intact on demand. If by the insolvency of any bank a sovereign by the process can be converted into, say 17s. 6d. or 15s., it is far better that the criminal law should, if necessary, be strengthened and enforced with unbending stringency than that banking should be retarded by restrictions that cannot prevent the insolvency of any bank.

Dated 16th December 1913.

To—The Chief Secretary to Government, Bombay.

Sir,

In continuation of our letter, dated the 18th November, we have the honour to forward herewith a copy of the letter received from the Chamber of Commerce, Bombay, in reply to ours addressed to them on the 18th November. We also enclose herein a copy of our reply to the Chamber for your information and kind consideration.

Hoping to be excused for the trouble.—We remain, etc.,

S. B. BILLIMORIA & Co.

Dated 6th December 1913.

To—Messrs. S. B. Billimoria & Co., Bombay.

Dear Sirs,

I am directed to acknowledge receipt of your letter, dated 18th ultimo, in which you express your views on a certain recommendation regarding auditors that my Committee submitted to the Bombay Government anent the proposed legislation to restrict the use of the term "bank" in this country.

In reply I am to state that the reason underlying my Committee's suggestion that Chartered and/or Incorporated Accountants only should conduct the audit of banks was that they considered it imperative such accounts should be inspected by men who might from their training and education in accountancy be really capable of advising and directing these institutions in their methods and system of book-keeping.

My Committee fully recognise that there are many people in India who are quite capable of conducting a simple audit, which has in view merely the correctness of the accounts under inspection, but while they do not wish to do an injustice to anyone, my Committee also consider that in legislating for Indian banking the highest qualifications should be required from those who may be appointed to audit the books of such institutions.—I am, etc.,

R. E. GREGOR-PEARSE,
Secretary, Chamber of Commerce, Bombay.

Dated 12th December 1913.

To—The Secretary, Chamber of Commerce, Bombay.

Dear Sir,

We beg to acknowledge the receipt of your letter, dated the 6th instant, and in reply beg to state that accountants belonging to the Corporation of Accountants and other well-known bodies of accountancy in England are quite competent enough with the Chartered and the Incorporated Accountants to advise and direct banking institutions in their methods and system of book-keeping. These accountants receive training and education as efficient as the Chartered and the Incorporated Accountants, and to enable you to have an idea of the curriculum of studies we enclose herein a syllabus of the Corporation of Accountants.

You are perhaps aware that the present crisis owed its origin to the failure of the Peoples Bank, Punjab, whose accounts were audited by a firm of Indian Accountants Messrs. Basantram & Sons, and it may be said to their credit that before the Bank was wound up they published their report to the directors and shareholders in which they set forth in detail various allegations against the Banks and thus faithfully fulfilling their duties did great service to the public. When the Bank was finally taken into liquidation, Messrs. A. F. Ferguson & Co., Chartered Accountants, were appointed auditors and they corroborated the allegations made in the report of the said Indian auditors of the Bank. We further beg to mention that the audit of the Credit Bank was done by a Chartered and an Incorporated Accountant, that of the Specie Bank was conducted by two Incorporated Accountants, not to mention other banks which had failed previously—the Arbuthnots, Limited, the Bank of Burmah, etc. In these cases also the audit was not, certainly, done efficiently and the auditors failed to discharge their duties.

Referring to the third paragraph of yours under reply, we thank you for your recognition of many people in India, who are quite capable of conducting a simple audit, etc. If our knowledge be correct we know that there are many practising Indian auditors who at present do the audit of big joint stock companies, banks and banking institutions and have been doing useful work throughout, and by their training and extensive practical experience are capable enough to advise and direct these institutions on all occasions. If it is claimed that the Chartered and the Incorporated Accountants alone are men of the highest qualifications and training, we have only to refer you to the syllabus we are sending you herewith which will show you that the Corporation of Accountants have laid down as strict a test for admission to their body as any other Institute of Accountants. Up till now our examinations were held under the supervision of Messrs. A. F. Ferguson & Co., and they know that the Corporation of Accountants is an important, well-established, well-known Institute of Accountants in Great Britain.

We confidently hope that your Chamber will kindly take into consideration all the facts we have placed before them till now in respect of the Corporation of Accountants, and will recommend to the Government of India this recognised body of professional accountants and auditors as fully qualified for the work of auditing the accounts of banks and banking concerns. As a matter of fact members belonging to this Corporation are at present auditing the accounts of banks and big joint stock companies, are appointed from time to time arbitrators in matters of accounts by the learned Judges, are appointed accountants to help official liquidators in their work of investigation, and on several occasions have appeared before the Judges of the High Court as experts for their evidence in matters of accounts.

We need hardly add here that it is not the incompetency of the auditors in the various banking concerns that led to their failure, as much as the want of a conscientious and faithful discharge of their duties to the numerous shareholders and depositors of such big institutions. What is primarily needed in the profession of auditors is honesty of purpose and high standard

of morality coupled with personal character. Without these virtues any qualifications of being attached to any Institute or Society of Accountants will not prevent frauds, abuses and scandals.—Yours faithfully,

S. B. BILLIMORIA & Co.

Dated 20th December 1913.

To—The Chief Secretary to Government, Bombay.

Sir,

In continuation of our letter, dated the 16th instant, we have the honour to forward to you herewith copy of the letter received from the Secretary, Chamber of Commerce, Bombay, in reply to ours of the 12th instant, copy of which was sent to you with our last. We have noted with pleasure that the Chamber of Commerce have taken an interest in the Corporation of Accountants and have expressed their desire to give a due consideration when the question of auditors comes up before them later on.

Hoping to be excused for the trouble.—We remain, etc.,

S. B. BILLIMORIA & Co.

Dated 19th December 1913.

To—Messrs. S. B. Billimoria & Co., Bombay.

Dear Sirs,

I am directed to acknowledge, with thanks, the receipt of your letter, dated 12th instant, and to state that my Committee have perused it with much interest and that they will bear it in mind when the matter comes up later for detailed discussion.—I am, etc.,

R. E. GREGOR-PEARSE,

Secretary, Chamber of Commerce, Bombay.

THE "BOMBAY GAZETTE," 12th December 1913.

Government and Banking Legislation.

The recent deplorable events in the Swadeshi banking world have stimulated discussion on the question of the legislative measures that might be adopted with a view to prevent similar disasters in the future. The Government of India are taking the matter in hand, but it is not to be assumed that they will act precipitately, for that is not their custom. There is a greater likelihood, indeed, of their adopting a course of excessive caution, and it is, therefore, necessary to emphasize the fact that if legislation of a beneficial character can be devised there should be no unnecessary delay in bringing it into operation. The history of the past few years affords abundant proof of the evils of dilatoriness. As far back as 1907 or 1908, Lord Morley, in a despatch to the Government of India, urged upon them the importance of passing an Act to control life insurance in this country. It had been represented to the India Office that anyone could carry on the business of life insurance in India without restriction or legislative restraint. There was no guarantee that persons or companies collecting premiums from insurers were conducting a legitimate business, or that funds would be forthcoming to meet maturing policies. The danger was by no means an academic one. In some parts of India, notably in Bengal, hundreds of bogus insurance companies were brought into existence and thousands of thrifty persons were victimised through the agency of these concerns. The Government, however, were slow to move, and several years passed before India was given a Life Insurance Act. How far the system of insurance, which is a most valuable one to any community, was prejudiced by the delay, it is impossible to state. But there can be no doubt that much loss would have been obviated if prompt measures had been adopted by the Government of India to grapple with an obvious and far-reaching evil. Similar delay occurred in

the enactment of efficient company legislation. It was notorious several years ago that in more than one province the joint stock system was being gravely abused by unscrupulous persons. The law relating to companies was hopelessly inadequate and the absence of effective legislation afforded innumerable opportunities for fraudulent promoters. The Government of India were repeatedly reminded of the urgency of the question, and if they had acted with greater promptitude a number of undesirable enterprises would probably have been nipped in the bud. In August last the Department of Commerce and Industry took steps to obtain the views of the commercial community as to the desirability of introducing banking legislation. They have now before them the views of the most influential mercantile bodies in India on the subject, and the Government may reasonably be asked to take action in this matter, with the least possible delay. It may be a truism that the proper management of a commercial enterprise cannot be secured by legislation, but it is recognised by men who are able to speak with authority that the Government of India could provide the public with certain safeguards of a valuable character. Any enterprise styling itself a 'bank' might legitimately be required to bring itself within the provisions of the Indian Companies Act. It might also be called upon to show itself in possession of reasonable financial resources before being permitted to commence operations, and no sound banking enterprise would suffer if banks generally were prohibited by law from dissipating the whole of their profits in dividends instead of building up adequate reserves. Steps ought to be taken to prevent banking companies from issuing advertisements in which it is suggested that they are possessed of vast financial resources, while, in fact, the supposed wealth exists only on paper. A legislative measure embodying these restrictions and also providing for an efficient audit by qualified accountants would have a salutary effect. But after all, the success of a bank depends in the main on honest and efficient administration, and this cannot be provided by an Act of the legislature. Men who are ignorant of banking have no right to become associated with the conduct of banks, and to accept without question the figures and statements laid before them by others. A bank director is in the position of a trustee; but this obvious consideration appears to have been overlooked by men who ought to have realised the responsibility resting on their shoulders. There is no doubt that the disclosures which have been made in Bombay, as well as in other parts of India, will have a prejudicial effect on Swadeshi joint stock banking for some time to come. It is to be feared, moreover, that the abuses brought to light may check the healthy tendency on the part of the Indian investors to utilise their money in the development of industrial and commercial enterprises. India possesses enormous economic potentialities, but her resources cannot be properly exploited, unless capital is readily forthcoming for that purpose.

Resolutions passed at the Ninth Indian Industrial Conference held at Karachi on Thursday, the 25th December 1913.

RESOLUTION I.

Indian Banks.

With reference to the questions raised by the Government of India on which opinions are invited as to whether there should be restrictions about the use of the terms "Banks" and "Bankers" and as to whether there should be any legislation in regard to banking, this Conference is of opinion—

(a) that the use of the term "Bank" should be restricted only to companies registered under the Joint Stock Companies' Act;

(b) that all Banks not registered in British India having an office or branch in British India should be registered under the Indian Companies Act, save and except the Banks which are created by a Statute;

(c) that there need be no subscribed minimum capital, but that the paid-up capital should be one-third of the subscribed capital and that it should be paid up within six months of the registration;

(d) that the Registrar of the Joint Stock Companies be authorised to refuse to register as Banks such companies whose Memoranda of Association provide for and warrant business other than banking business in the ordinary sense of the term; and that an appeal against the Registrar's decision should be allowed to the highest judicial authority of the place where the Registrar's office is situated;

(e) that no Bank shall be allowed to use the terms "Savings Bank" for a department or a concern except the Presidency Banks and Government Postal Department, unless the said department or the said concern is made to invest two-thirds of deposits in securities sanctioned by the Indian Trust Act and are ear-marked for that propose;

(f) no Banks shall be allowed to advance monies against their own shares unless they are fully paid up.

Proposed by—Mr. D. E. Wacha.

Seconded by—Rao Bahadur Divan Hiranand Khemsing.

Supported by—Rao Bahadur R. N. Mudholkar, Messrs. P. D. Shamdasani and C. P. Ramswamy Iyer.

No. 10438 of 1914.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 29th October 1914.

To

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

With reference to the last sentence of my letter No. 3794, dated 18th September 1914, I am directed to enquire whether Monday, the 30th November 1914, will suit the representative of your Association for the conference to be held by the Hon. Sir Richard Lamb, K.C.S.I., C.I.E., I.C.S., to discuss the various aspects of the proposed legislation for the control of banks in India.

2. I am at the same time to request that you will communicate the name of the representative whom your Association proposes to depute to the conference.—I have, etc.,

C. W. A. TURNER,
Under Secretary to Government.

No. 411 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 5th November 1914.

THE UNDER SECRETARY TO GOVERNMENT,
REVENUE DEPARTMENT,
Bombay.

SIR,

In reply to your letter No. 10433, dated 29th ultimo, I have the honour to inform you that the Chairman of this Association, Mr. Narottom Morarjee Goolaldas, will be pleased to attend the conference to be held by the Hon'ble Sir Richard Lamb, K.C.S.I., C.I.E., I.C.S., on Monday, the 30th instant, to discuss the various aspects of the proposed legislation for the control of banks in India.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

Appendix W.

Advisory Board to the Collector of Income-Tax.

No. 289 of 1914.

INCOME-TAX COMMISSIONER'S OFFICE,
BOMBAY, 3rd April 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

A Resolution was moved in the Imperial Legislative Council on January 14th, 1914, by the Honourable Mr. Rama Rayanagar, recommending that Advisory Boards composed of non-official gentlemen nominated by the Revenue Heads of the Districts should be formed to assist officials in the work of assessment under the Income-Tax Act.

I shall be obliged if your Association will favour me with their opinion whether it is desirable that any Advisory Board of the nature indicated should be formed to assist the Collector of Income-Tax, Bombay, in the work of assessment. In stating your Association's opinion I shall be obliged if you will add the grounds on which such opinion is based.

E. L. SALE,
Commissioner of Income-Tax.

 No. 188 of 1914.

MILLOWNERS' ASSOCIATIONS,
BOMBAY, 11th May 1914.

THE COMMISSIONER OF INCOME-TAX,
Bombay.

SIR,

I am directed to acknowledge receipt of your letter No. 289, dated 3rd ultimo, in connection with the resolution that was moved in the Imperial Legislative Council on the 14th February 1914, recommending that Advisory Boards be formed to assist officials in the work of assessment under the Income-Tax Act, and requesting the opinion of my Committee thereon.

2. In reply, I am to state that the matter has received the careful consideration of my Committee who support the views put forward by the Bombay Chamber of Commerce in this connection. It is felt that the right of enquiring into the financial standing of an individual, for the purpose of arriving at a correct assessment, should be vested in an official rather than an Advisory Board of non-officials, and my Committee are, therefore, opposed to the recommendation above referred to.—I have, etc.,

R. E. GREGOR-PEARSE,
Secretary.

Appendix X.

Congress of Commerce.

THE INDIAN MERCHANTS' CHAMBER AND BUREAU,
BOMBAY, 15th June 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

DEAR SIR,

I have much pleasure to inform you that the Committee of this Chamber have, after perusing the opinions of different Chambers of Commerce and Commercial Associations, resolved to hold the first session of the Indian Commercial Congress, under the auspices of this Chamber in Bombay in the second week of November 1914. They have appointed a representative from your Association a member of the Reception Committee of the Commercial Congress. You will be kind enough, therefore, to move your Association to nominate such a representative and to inform me of his name and address as soon as possible.—Yours faithfully,

J. K. MEHTA,
Secretary.

No. 239 of 1914.

MILLOWNERS' ASSOCIATION,
BOMBAY, 7th July 1914.

THE SECRETARY,
INDIAN MERCHANTS' CHAMBER AND BUREAU,
Bombay.

DEAR SIR,

With reference to your letter of the 15th ultimo, I am desired to inform you that my Committee have nominated Mr. Narottum M. Goculdas as the Association's representative on the Reception Committee of the forthcoming Indian Commercial Congress.—Yours faithfully,

R. E. GREGOR-PEARSE,
Secretary.

THE INDIAN MERCHANTS' CHAMBER AND BUREAU,
BOMBAY, 26th November 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

DEAR SIR,

In connection with the scheme of the Commercial Congress which was to have been held under the auspices of the Chamber, I am asked to inform you that owing to the present war conditions the holding of the Congress is postponed *sine die*.

In the meanwhile my Committee beg to thank you for your support and sympathy with the cause, and hope that the same support will be forthcoming when it is possible to hold the Congress.—Yours faithfully,

J. K. MEHTA,
Secretary.

Appendix Y.

Opening of Seven Chinese Ports to Foreign Trade.

R. S. R. No. 3518 of 1914:

BOMBAY CUSTOM HOUSE,
14th July 1914.

THE SECRETARY,
MILLOWNERS' ASSOCIATION,
Bombay.

SIR,

Under instructions from Government received through the Commissioner of Customs, Salt, Opium and Abkari, Bombay, I have the honour to forward for the information of your Association a copy of a letter No. 3426-3430-39, dated 5th May 1914, from the Government of India and of its accompaniment on the subject of the opening of certain Chinese Ports to foreign trade.—I have, etc.

R. F. L. WHITTY,
Collector of Customs.

Letter from the Government of India, Department of Commerce and Industry, No. 3426-3430-39, dated 5th May 1914 :—

“ I am directed to forward for the information of His Excellency the Governor in Council and for general publication, a communique regarding the opening of seven Chinese Ports to foreign trade.”

Communique from His Majesty's Minister at Peking,
No. 10 (3632), dated 12th January 1914.

By virtue of a Presidential Order, dated the 9th instant, the Chinese Government have spontaneously opened to foreign trade seven towns in North China. These new “ Ports ” are Kueihuacheng, Kalgan, Dolonor, Chihfeng, Taovanfu, Hulutao and Lungkow and the main result of their “ Opening ” will be to develop international trade and interests in Inner Mongolia.

2. Kueihuacheng is in the extreme north of Shansi, it is a town of approximately 200,000 inhabitants and is an important market for skins, camel hair, ropes and cereals. Kalgan, in the north of Chihli, has a normal population of 430,000 and is the principal outlet from Inner Mongolia. Both places are connected by rail with Peking. Dolonor, east of Kalgan,

contains a mixed population of about 15,000, but it is more in the nature of a military encampment than a commercial city. Chihfeng is about 100 miles east of Dolonor. Both the latter towns lie outside the Great Wall. Taonanfu is an important point on the Mongolian frontier of Fengtien, and will shortly be connected by rail with the South Manchurian Railway.

3. Hulutao was artificially created, under a British Engineer, during the later years of the Manchu rule, with the object of forming an ice-free port on the Gulf of Liaotung under purely Chinese control. It is already connected with the Peking-Mukden Railway by a branch line from Lienshan. The question of improving the water approaches to Newchwang by the conservancy of the Liao River is at present under consideration; and if, as is to be hoped, the scheme materializes, there may be a better prospect of retaining for Newchwang and Hulutao the trade which is now to some extent being diverted to Dairen.

4. Lungkow, in Shantung, is situated about 100 miles west of Chefoo, and is already one of the principal centres of the junk-borne coolie traffic into Manchuria. Some of this traffic might possibly now find its way to Hulutao.

5. Of the above seven towns, three only are likely to have much interest for British commerce, namely, Kueihuacheng, Kalgan and possibly Hulutao. Taonanfu might also become a distributing centre for trade with eastern section of Inner Mongolia. The advantages of Kueihuacheng and Kalgan are that British goods will, as is the case with the inland open marts of Manchuria, now reach those places on payment of a single import duty of 5 per cent., instead of the additional $2\frac{1}{2}$ per cent. levied on transit trade.

* * * * *

The opening of both these places will enable foreigners to watch at close quarters the working of the transit pass trade and will facilitate the immense export business of Tientsin as well as develop foreign commercial intercourse with both Inner and Outer Mongolia.

* * * * *

STATISTICS.

STATEMENT of Imports of Piece-Goods of British Manufacture (Grey, Bleached, Coloured and Printed) and of Yarns (Grey and Dyed) from Great Britain into Bombay, Calcutta and Madras, from the years 1855 to 1914, both inclusive.

YEAR.	PIECE-GOODS.			YARNS.		
	Bombay.	Calcutta.	Madras.	Bombay.	Calcutta.	Madras.
	Yards.	Yards.	Yards.	Lbs.	Lbs.	Lbs.
1855.....	128,193,027	256,069,194	6,542,924	7,447,529	16,901,310	2,107,969
1856.....	180,459,858	275,016,345	4,517,561	4,589,670	15,224,557	1,923,909
1857.....	187,761,636	235,190,273	9,375,847	2,888,644	16,691,863	2,370,741
1858.....	281,836,364	416,362,074	15,431,647	8,744,517	18,369,490	4,036,325
1859.....	307,086,509	520,899,016	20,425,632	12,899,875	20,043,485	5,741,441
1860.....	267,443,986	403,351,123	20,648,072	4,571,134	16,641,847	5,656,930
1861.....	272,573,717	418,671,687	14,628,188	5,578,828	18,933,256	3,694,985
1862.....	178,803,604	295,508,637	9,743,215	4,811,384	9,594,896	1,675,239
1863.....	232,321,038	234,645,916	16,352,677	5,592,995	10,394,931	3,702,562
1864.....	189,812,984	223,036,538	14,787,062	4,268,662	8,742,699	3,447,635
1865.....	175,486,677	319,047,954	17,291,103	4,078,811	6,981,809	2,232,948
1866.....	243,476,368	351,572,331	22,081,805	6,877,968	10,795,517	4,629,986
1867.....	316,784,100	523,434,956	23,258,498	6,568,619	13,006,019	4,684,638
1868.....	555,337,050	619,101,683	31,793,397	7,780,033	13,236,453	6,873,398
1869.....	296,158,439	518,741,346	29,683,469	7,981,949	11,858,210	7,773,636
1870.....	272,893,226	687,639,911	45,750,099	9,946,299	16,816,936	6,649,598
1871.....	305,416,233	684,926,367	47,560,133	6,097,531	12,041,848	8,876,814
1872.....	262,849,273	657,123,291	48,177,871	6,163,813	11,490,638	8,616,040
1873.....	349,631,830	664,987,114	57,666,809	8,667,090	11,192,246	8,918,341
1874.....	292,843,697	665,762,164	49,878,834	8,867,978	14,041,520	10,510,639
1875.....	305,917,934	744,439,224	44,683,288	8,863,763	12,945,102	10,104,020
1876.....	356,940,508	733,913,330	54,875,423	8,246,211	12,090,167	9,664,609
1877.....	354,779,192	885,688,850	39,106,318	10,624,710	14,364,841	8,683,595
1878.....	344,068,807	749,233,431	47,038,579	7,754,005	13,967,396	8,373,916
1879.....	343,811,233	788,759,250	61,375,691	7,469,113	10,580,436	9,581,363
1880.....	531,050,559	1,007,531,497	77,010,037	13,024,923	16,446,089	12,108,002
1881.....	544,890,697	947,329,460	82,451,852	12,326,706	13,597,371	11,099,762
1882.....	500,248,293	883,611,784	106,615,818	12,019,123	14,780,667	13,069,871
1883.....	572,738,196	878,949,353	107,868,579	16,220,463	13,478,764	11,033,824
1884.....	568,220,318	908,294,475	120,841,003	14,299,380	15,313,840	13,114,875
1885.....	547,773,459	911,987,148	93,757,204	14,132,372	13,473,067	99,597,197
1886.....	700,061,881	1,159,407,968	143,318,736	17,087,709	14,177,149	13,937,810
1887.....	585,502,258	988,370,500	117,502,619	14,990,151	14,040,137	13,432,638
1888.....	652,344,548	1,045,951,384	138,271,060	16,595,176	14,778,545	14,570,258
1889.....	634,608,171	1,031,000,980	144,140,943	13,011,348	11,836,681	13,393,348
1890.....	665,550,786	1,037,911,379	115,224,797	15,805,515	12,455,601	13,284,690
1891.....	572,065,309	961,686,226	108,083,576	15,526,869	12,484,617	14,666,189
1892.....	548,944,867	1,013,742,658	93,892,712	12,427,053	10,108,327	10,390,439
1893.....	604,439,138	1,009,441,511	106,086,291	10,466,235	13,124,097	11,387,889
1894.....	719,324,449	1,161,138,343	140,749,235	11,723,808	10,529,734	12,547,763
1895.....	484,780,087	925,203,136	99,427,366	10,857,586	10,689,066	10,188,466
1896.....	574,410,316	1,163,967,702	86,265,292	11,649,977	13,403,663	15,402,931
1897.....	472,597,133	932,328,974	121,396,515	11,788,246	13,299,211	13,650,922
1898.....	557,557,951	1,202,254,978	91,950,978	10,238,969	11,412,068	11,673,878
1899.....	611,556,220	1,266,926,546	93,492,746	10,441,484	10,729,842	11,532,812
1900.....	461,933,302	1,086,463,274	120,383,837	5,892,081	9,435,371	9,496,085
1901.....	629,576,200	1,127,753,500	129,392,500	7,911,750	11,050,890	9,564,200
1902.....	475,541,800	1,176,051,500	119,878,000	6,299,820	7,411,640	9,438,560
1903.....	520,373,400	1,119,542,300	129,898,800	5,300,460	6,442,050	6,699,580
1904.....	593,521,100	1,193,265,900	145,618,800	6,221,400	6,613,460	8,056,710
1905.....	637,039,600	1,292,516,900	119,829,700	11,368,420	11,443,550	10,175,810
1906.....	611,705,100	1,189,552,900	142,636,200	10,548,720	10,300,210	10,260,270
1907.....	646,598,400	1,298,662,500	131,107,800	10,419,750	9,321,670	7,601,280
1908.....	470,956,400	1,005,027,600	200,636,400	10,894,540	9,019,320	10,432,380
1909.....	481,389,100	1,180,586,000	108,497,400	16,251,580	8,448,010	6,169,190
1910.....	624,859,600	1,129,898,600	109,976,800	8,410,140	6,384,430	6,891,410
1911.....	622,516,400	1,226,065,400	138,414,300	12,842,440	9,179,460	8,364,340
1912.....	658,026,700	1,451,819,200	173,698,700	13,298,110	11,913,170	10,745,130
1913.....	804,323,100	1,547,872,400	210,797,700	13,628,700	7,519,860	9,497,740
1914.....	617,498,700	1,378,930,300	160,552,000	13,538,110	9,985,330	8,280,700

IMPORTS INTO BOMBAY OF PIECE-GOODS AND YARNS, &C., FROM EUROPE DURING THE YEARS 1905 TO 1914.

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1905.	From 1st Jan. to 31st Dec. 1906.	From 1st Jan. to 31st Dec. 1907.	From 1st Jan. to 31st Dec. 1909.	From 1st Jan. to 31st Dec. 1909.	From 1st Jan. to 31st Dec. 1910.	From 1st Jan. to 31st Dec. 1911.	From 1st Jan. to 31st Dec. 1912.	From 1st Jan. to 31st Dec. 1913.	From 1st Jan. to 31st Dec. 1914.
GREY GOODS.										
36 in & under x 37/8 yds. Shirts...	Pcs. 6,65,993	Pcs. 9,67,528	Pcs. 5,80,896	Pcs. 2,44,988	Pcs. 3,22,951	Pcs. 5,47,298	Pcs. 4,01,855	Pcs. 5,69,243	Pcs. 5,86,118	Pcs. 5,97,526
37/8 " do. " 5 1/2 lbs. & under	" 640	" 640	" 665	" 292	" 292	" 243	" 1,166	" 6,516	" 3,956	" 623
" do. " 6 1/2 lbs. do.	" 27,874	" 20,818	" 26,135	" 7,055	" 8,507	" 53,578	" 14,318	" 14,318	" 58,406	" 43,860
" do. " 7 lbs. do.	" 8,959	" 25,571	" 64,621	" 24,439	" 40,788	" 1,89,246	" 95,268	" 1,46,135	" 1,94,774	" 1,58,118
" do. " 7 1/2 lbs. do.	" 81,779	" 77,763	" 1,18,882	" 76,062	" 94,849	" 1,88,864	" 75,680	" 94,371	" 1,01,725	" 93,900
" do. " 8 1/2 lbs. do.	" 4,29,876	" 6,00,850	" 5,43,025	" 5,24,785	" 5,47,992	" 8,30,418	" 2,67,901	" 4,88,039	" 3,96,605	" 5,39,184
" do. " 9 lbs. do.	" 1,98,921	" 2,98,488	" 3,07,083	" 1,98,814	" 3,23,174	" 3,63,906	" 2,07,449	" 1,66,462	" 1,66,685	" 1,64,802
" do. " do above 9 lbs. ...	" 87,667	" 1,57,428	" 1,19,664	" 1,04,147	" 1,31,179	" 94,601	" 1,50,439	" 1,30,539	" 1,67,669	" 1,16,519
40/5 " do. " 6 lbs. & under	" 6,802	" 81,029	" 41,812	" 82,120	" 16,492	" 79,800	" 89,999	" 86,518	" 82,660	" 12,323
" do. " 7 lbs. do.	" 1,24,606	" 1,44,800	" 84,717	" 89,370	" 88,148	" 69,024	" 16,554	" 69,810	" 42,179	" 14,309
" do. " 8 lbs. do.	" 1,45,491	" 93,177	" 1,63,399	" 1,09,660	" 86,159	" 1,29,733	" 96,077	" 1,65,428	" 2,41,983	" 1,07,719
" do. " 9 lbs. do.	" 2,68,861	" 2,98,050	" 2,99,967	" 2,41,911	" 2,64,460	" 3,05,811	" 2,96,686	" 4,16,926	" 4,84,983	" 8,90,823
" do. " do above 9 lbs. ...	" 5,47,547	" 5,19,065	" 5,42,044	" 5,00,164	" 5,84,862	" 4,36,164	" 5,07,289	" 6,62,968	" 4,75,976	" 8,22,091
46/49 " do. " all weights	" 1,95,806	" 1,90,806	" 1,83,071	" 1,37,747	" 1,66,420	" 90,370	" 1,86,976	" 1,73,861	" 1,89,682	" 1,98,676
50/2 " do. " do.	" 90,221	" 87,255	" 1,08,419	" 98,525	" 1,04,611	" 49,927	" 80,770	" 1,11,993	" 1,81,455	" 96,004
54/60 " do. " do.	" 1,30,170	" 1,58,636	" 1,67,999	" 1,11,281	" 1,49,826	" 1,48,066	" 1,60,776	" 1,58,915	" 2,18,011	" 74,867
All widths x 23/24 yds. T. Cloths 4 lbs. & under	" 200	" 1,31,936	" 1,050	" 200	" 200	" 200	" 200	" 200	" 200	" 200
" do. " 5 lbs. do.	" 200	" 1,31,936	" 1,050	" 200	" 200	" 200	" 200	" 200	" 200	" 200
" do. " 6 lbs. do.	" 200	" 1,31,936	" 1,050	" 200	" 200	" 200	" 200	" 200	" 200	" 200
" do. " 7 lbs. do.	" 1,18,513	" 1,18,513	" 90,225	" 54,894	" 19,993	" 14,465	" 11,786	" 7,564	" 901	" 2,417
" do. " do above 7 lbs. ...	" 8,558	" 11,808	" 8,891	" 9,496	" 5,937	" 1,015	" 1,600	" 2,472	" 8,44	" 2,900
29 in & under x 23/24 yds. Madapolans 2 1/2 lbs. & under	" 48,382	" 57,119	" 88,784	" 11,586	" 2,000	" 95,755	" 17,168	" 41,944	" 42,182	" 3,866
" do. " 2 1/2 lbs. & over.	" 29,710	" 16,706	" 68,373	" 9,975	" 3,200	" 807	" 8,019	" 8,400	" 8,001	" 8,068
30/32 in. " do. " 2 1/2 lbs. & under.	" 1,857	" 3,750	" 4,887	" 4,887	" 8,627	" 4,000	" 12,870	" 12,870	" 5,250	" 970
" do. " 2 1/2 lbs. & over.	" 7,175	" 5,798	" 4,866	" 18,180	" 4,454	" 1,200	" 7,060	" 8,989	" 7,050	" 2,417
38/42 in. " do. " 3 to 4 1/2 lbs. ...	" 13	" 4	" 1,892	" 1,904	" 16	" 16	" 16	" 16	" 1,410	" 240
45 in. & over " do. " 4 1/2 to 6 1/2 lbs. ...	" 1,04,478	" 1,03,472	" 1,82,987	" 1,28,989	" 41,078	" 84,684	" 1,10,391	" 82,955	" 58,600	" 48,101
18/24 in. x 28/30 yds. Printers 2 to 3 lbs.	" 0,757	" 10,684	" 375	" 375	" 8,627	" 8,688	" 1,710	" 12,870	" 5,250	" 970
Above 24 in. x do. " do above 3 lbs. ...	" 1,857	" 3,750	" 4,887	" 4,887	" 8,627	" 4,000	" 12,870	" 12,870	" 5,250	" 970
31 to 46 in. x 18/20 yds. Jacquets, all weights	" 1,38,907	" 2,58,081	" 1,88,429	" 1,19,978	" 61,669	" 1,74,808	" 1,52,464	" 91,491	" 1,66,112	" 1,85,102
41 in. x 22 yds. " do. " do.	" 7,00,878	" 10,39,091	" 11,71,692	" 7,41,787	" 7,86,768	" 11,55,475	" 6,34,108	" 8,90,289	" 12,24,881	" 6,54,318
Above 44 in. x 22 yds. " do. " do.	" 2,48,018	" 2,67,481	" 1,78,023	" 1,36,073	" 1,68,066	" 1,30,841	" 1,89,398	" 1,67,827	" 1,97,929	" 1,41,870
36/0 in. x 18 to 22 yds. Mulls	" 2,65,426	" 4,17,647	" 5,10,423	" 2,56,967	" 1,51,118	" 2,88,383	" 8,21,599	" 2,03,168	" 2,03,168	" 2,14,005
40/12 in. x 19/20 yds. " do. " do.	" 69,389	" 5,07,411	" 30,845	" 23,510	" 81,708	" 8,078	" 18,515	" 36,201	" 10,348	" 27,881
" do. " do. " do.	" 65,383	" 2,07,846	" 41,278	" 1,17,622	" 80,155	" 1,17,602	" 1,76,374	" 60,303	" 1,83,410	" 1,95,790
Above 43 in. x 19/20 yds. Twills and Drills	" 3,60,390	" 4,01,748	" 2,74,682	" 2,87,416	" 8,27,206	" 2,69,720	" 2,78,568	" 8,81,730	" 2,77,285	" 2,47,571
Total for 12 Months	Pcs. 50,73,165	Pcs. 66,11,489	Pcs. 60,09,119	Pcs. 40,74,225	Pcs. 45,35,442	Pcs. 51,73,837	Pcs. 46,11,698	Pcs. 54,03,304	Pcs. 57,92,284	Pcs. 47,91,484

* Printers of 60 yds. are entered in the equivalent of 30-yd. pieces, and similarly with T. Cloths of 48, 72 and 86 yards.

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1905.	From 1st Jan. to 31st Dec. 1906.	From 1st Jan. to 31st Dec. 1907.	From 1st Jan. to 31st Dec. 1908.	From 1st Jan. to 31st Dec. 1909.	From 1st Jan. to 31st Dec. 1910.	From 1st Jan. to 31st Dec. 1911.	From 1st Jan. to 31st Dec. 1912.	From 1st Jan. to 31st Dec. 1913.	From 1st Jan. to 31st Dec. 1914.
WHITE GOODS.										
28/36 in. x 80/42 yds. Shirtings and Longcloths ...	Pcs. 10,76,075	Pcs. 6,08,282	Pcs. 11,09,425	Pcs. 9,12,865	Pcs. 7,45,278	Pcs. 7,30,667	Pcs. 11,59,785	Pcs. 14,34,811	Pcs. 8,71,407	Pcs. 9,32,547
28/39 in. x 18/30 yds. Jaconets ...	" 3,26,981	" 2,29,181	" 1,80,496	" 1,94,794	" 1,77,392	" 1,77,615	" 2,45,998	" 2,80,723	" 2,61,126	" 2,84,780
40 in. & wider do. ...	" 49,32,495	" 51,57,818	" 45,47,247	" 54,17,183	" 27,47,456	" 46,57,320	" 36,79,580	" 40,10,011	" 47,71,788	" 80,94,660
26/39 in. x Mulls and Nainsooks ...	" 8,23,191	" 7,54,980	" 11,49,512	" 8,47,017	" 7,91,298	" 8,98,005	" 8,45,492	" 8,39,268	" 10,35,995	" 10,55,076
40/45 in. x do. do. ...	" 12,54,848	" 10,69,613	" 13,63,870	" 11,75,953	" 11,74,297	" 15,04,877	" 13,06,547	" 16,07,956	" 20,55,996	" 21,45,402
46 in. and upwards do. do. ...	" 1,75,782	" 7,366	" 18,732	" 10,596	" 12,106	" 7,990	" 12,351	" 15,581	" 16,601	" 18,164
32 to 42 in. x 12 to 18 yds. Cambrics ...	" 1,27,676	" 61,574	" 71,763	" 56,531	" 45,997	" 51,237	" 1,01,580	" 14,428	" 98,529	" 87,588
Twills and Drills ...										
Total for 12 months ...	Pcs. 85,55,248	Pcs. 78,83,664	Pcs. 82,40,044	Pcs. 66,12,988	Pcs. 56,03,724	Pcs. 79,27,720	Pcs. 75,51,383	Pcs. 82,69,268	Pcs. 91,41,887	Pcs. 76,68,167
TURKEY RED AND SCARLET GOODS.										
24 in. x 28 yds. Cambrics ...	Pcs. 3,71,726	Pcs. 4,57,071	Pcs. 3,96,952	Pcs. 2,14,515	Pcs. 1,87,159	Pcs. 3,87,510	Pcs. 4,76,430	Pcs. 3,72,056	Pcs. 6,24,040	Pcs. 4,14,552
32 in. x 24 yds. do. ...	" 12,587	" 10,391	" 9,634	" 2,475	" 693	" 130	" 310	" 220	" 220	" 220
All widths and lengths, Shirtings ...	" 3,91,824	" 3,70,810	" 2,98,028	" 3,68,650	" 3,38,123	" 3,37,604	" 4,82,338	" 4,18,552	" 7,57,059	" 5,86,010
30 in. and over x 19/20 yds. Mulls ...	" 37,849	" 15,410	" 62,415	" 33,650	" 18,590	" 12,363	" 14,433	" 11,669	" 13,044	" 13,371
Do. do. Jaconets ...	" 14,513	" 15,268	" 1,498	" 5,454	" 11,442	" 6,429	" 10,651	" 9,301	" 25,988	" 24,587
All widths and lengths, Twills and Dimities ...	" 32,690	" 26,552	" 38,707	" 34,777	" 27,296	" 53,226	" 48,842	" 28,532	" 22,731	" 51,494
30 in. and over x 19/20 yds. Mull Stripes ...	" 4,27,993	" 4,54,997	" 4,42,885	" 2,96,547	" 3,36,796	" 4,32,766	" 5,44,059	" 3,28,862	" 3,71,489	" 4,48,979
All widths and lengths, Prints and Obituz ...	" 1,86,334	" 1,71,748	" 2,18,850	" 1,70,637	" 1,55,633	" 2,56,244	" 1,70,839	" 2,37,472	" 2,39,331	" 1,98,835
30 in. & over x 20 yds. Printed Jaconets ...	" 14,69,841	" 13,02,356	" 17,49,432	" 11,38,855	" 12,49,859	" 18,02,418	" 16,75,138	" 10,67,725	" 11,10,706	" 15,76,358
Sarufs and Sarries ...	" 4,63,355	" 10,84,019	" 8,64,938	" 4,80,065	" 2,93,874	" 6,04,628	" 85,171	" 2,14,752	" 10,02,828	" 4,57,544
Bandanas or Handkerchiefs ...										
Total for 12 months ...	Pcs. 34,15,672	Pcs. 39,17,744	Pcs. 35,94,064	Pcs. 27,44,153	Pcs. 26,17,864	Pcs. 32,53,188	Pcs. 33,15,010	Pcs. 27,09,325	Pcs. 41,94,866	Pcs. 35,71,630
WOOLENS.										
Army Cloth ...	Yds. 1,35,321	Yds. 1,45,771	Yds. 2,23,168	Yds. 1,26,580	Yds. 1,54,939	Yds. 2,20,323	Yds. 1,96,411	Yds. 1,31,200	Yds. 1,74,470	Yds. 1,22,135
Spanish Stripes or Ladies' Cloth ...	" 3,05,054	" 2,40,065	" 1,37,426	" 46,161	" 61,254	" 1,78,796	" 2,27,163	" 81,180	" 79,938	" 21,939
Flannels ...	" 56,53,288	" 16,27,890	" 24,85,837	" 29,90,746	" 34,86,233	" 36,95,683	" 34,16,556	" 25,66,104	" 36,42,856	" 16,35,415
Bread Cloth ...	" 2,92,874	" 1,79,591	" 2,32,411	" 1,85,894	" 1,44,880	" 1,76,824	" 3,10,055	" 2,43,206	" 2,42,008	" 97,776
Alpacas, Merino, Italian, &c. ...	" 9,74,930	" 7,36,738	" 9,52,259	" 13,26,302	" 8,70,441	" 13,42,955	" 14,36,770	" 12,66,683	" 15,04,280	" 8,85,905
Union Cloth ...	" 69,874	" 39,410	" 56,136	" 39,877	" 31,800	" 56,786	" 35,919	" 66,255	" 37,980	" 48,351
Cashmere and Coatings ...	" 38,46,032	" 17,92,178	" 26,27,578	" 31,63,979	" 22,56,232	" 32,54,888	" 34,75,741	" 30,00,523	" 32,63,659	" 16,70,189
All other Sorts ...	" 32,44,299	" 22,53,461	" 26,51,727	" 17,83,044	" 22,93,171	" 43,89,441	" 30,47,783	" 26,82,523	" 45,68,893	" 23,56,760
Total for 12 months ...	Yds. 14,01,472	Yds. 12,18,324	Yds. 12,47,841	Yds. 9,611,633	Yds. 8,78,999	Yds. 12,18,208	Yds. 12,11,608	Yds. 10,07,074	Yds. 12,18,524	Yds. 69,06,480

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1905.	From 1st Jan. to 31st Dec. 1906.	From 1st Jan. to 31st Dec. 1907.	From 1st Jan. to 31st Dec. 1908.	From 1st Jan. to 31st Dec. 1909.	From 1st Jan. to 31st Dec. 1910.	From 1st Jan. to 31st Dec. 1911.	From 1st Jan. to 31st Dec. 1912.	From 1st Jan. to 31st Dec. 1913.	From 1st Jan. to 31st Dec. 1914.
FANCY GOODS.										
Dyed Shirtings and Umbrella Cloth	Pcs. 8,69,184	Pcs. 2,69,636	Pcs. 3,75,731	Pcs. 5,05,088	Pcs. 2,08,118	Pcs. 3,39,267	Pcs. 4,10,630	Pcs. 3,69,840	Pcs. 4,71,118	Pcs. 4,13,310
" Madapolams or Cambrics	1,46,348	1,66,898	1,76,465	1,70,671	1,82,178	2,74,285	1,50,463	1,17,680	1,42,484	1,30,918
" Jaconets	6,632	5,093	3,470	2,926	4,388	1,214	100	4,019	.....	.....
" Prints and Chintz, all Widths and Lengths	17,30,775	19,56,418	20,76,082	14,21,961	14,05,672	23,33,115	23,25,644	23,84,733	31,41,482	23,68,948
Printed Muslins and Jaconets, all Widths and Lengths	2,85,740	3,01,408	3,00,787	4,38,508	2,39,500	4,39,617	4,21,056	4,26,892	5,60,907	7,23,183
" Lappets, White	1,19,900	1,25,300	1,90,586	1,49,379	1,14,868	1,69,806	1,61,137	1,49,988	2,31,687	1,48,163
" Coloured	48,764	49,681	44,964	38,123	23,866	41,384	41,795	54,721	34,899	22,814
" Lappot and Lace Scarfs	31,783	28,378	48,053	38,197	41,705	85,318	34,088	43,251	19,894	2,100
" Dhories, Grey	23,68,574	47,40,740	39,09,056	25,40,174	25,58,366	33,18,260	35,64,686	30,04,918	31,54,075	40,92,615
" Bleached	9,16,170	8,83,378	9,08,567	12,20,976	6,85,816	9,00,001	14,18,073	13,56,899	23,40,884	29,68,588
" Scarfs and Barries, Grey	56,306	1,04,035	91,065	26,339	53,132	43,479	55,983	39,313	49,190	34,058
" Bleached	3,64,932	3,99,347	3,62,418	2,78,838	1,68,897	3,71,052	2,18,628	88,042	1,47,437	1,76,391
" Colored and Printed	17,42,172	25,37,339	15,05,420	18,80,099	8,56,679	14,16,544	21,38,628	20,36,402	37,08,622	32,13,869
" Book Muslins and Lawns	3,09,912	2,87,381	3,88,616	3,75,314	2,59,639	4,56,426	5,45,557	5,57,036	9,47,585	5,68,362
" Gauze, Plain, Figured, Striped and Checked	8,86,168	2,15,233	6,71,698	2,93,785	2,11,270	2,64,390	3,56,409	4,18,933	2,97,126	2,99,899
" Doris and Bull Stripes	5,49,481	8,84,970	7,65,342	6,49,736	4,01,032	5,95,361	6,79,491	5,37,389	6,15,800	5,32,361
" Cotton and Linen Ticks	5,391	3,708	2,904	4,301	3,086	2,778	3,764	3,641	3,451	2,359
" Twills and Drills, Colored and Denims	110,830	83,423	1,03,907	1,07,373	95,129	1,24,436	1,21,543	1,24,684	1,69,830	1,22,772
" Imitation Linen Dhories and Scarries	59,675	53,839	63,893	78,083	69,340	64,536	63,973	51,648	56,445	68,259
" Embd. Muslins, Jaconets, and Scarfs (White)	1,57,437	1,15,882	2,40,640	2,34,024	2,42,350	2,84,961	2,56,357	2,56,814	2,47,642	1,60,801
" Nainsooka, Colored, 12 yds.	8,254	2,931	3,232	3,274	2,363	1,713	2,378	2,378	238	734
" Trouserings	75,169	50,552	42,732	25,710	25,162	33,805	25,635	39,433	1,49,338	1,14,422
" Merced.-Tussore Suitings	18,088	26,298	36,312	49,325	34,931	79,564	1,08,045	72,532	1,52,694	1,03,121
" Harward, Oxford, Zephyrs, &c.	36,328	55,668	41,723	41,907	84,942	55,645	55,357	77,348	2,03,003	1,30,090
" Satin	1,39,524	84,439	1,26,323	1,32,244	87,945	1,51,601	1,89,915	1,36,858	1,81,814	1,02,980
" Coatings	56,635	54,367	86,084	73,970	60,220	1,04,352	1,25,705	1,36,400	2,08,460	1,10,194
" Italians	87,931	45,802	77,623	77,036	33,950	70,480	81,631	75,072	1,10,848	81,375
" Dimities, Brocades or Brilliants	1,51,400	1,57,417	1,84,365	2,34,140	1,35,601	2,55,442	2,48,300	3,13,788	5,41,789	3,88,234
Total for 12 months	Post, 07,58,662	Pos. 1,39,67,855	Pcs. 1,34,09,223	Pcs. 1,04,01,336	Pcs. 81,92,312	Pcs. 1,30,87,183	Pcs. 1,36,77,192	Pcs. 1,29,20,072	Pcs. 1,79,05,708	Pcs. 1,67,62,910
Flannels, cotton	yds. 59,44,392	yds. 49,48,485	yds. 72,04,731	yds. 42,37,072	yds. 19,55,928	yds. 37,01,768	yds. 44,52,550	yds. 52,57,561	yds. 55,15,189	yds. 14,86,634
Nets	Do. 21,97,723	Do. 13,74,368	Do. 14,45,722	Do. 16,74,248	Do. 11,31,729	Do. 15,80,801	Do. 16,44,794	Do. 15,50,434	Do. 18,24,890	Do. 12,35,330
Haukerohetsfs, White	dox. 1,06,997	dox. 1,46,632	dox. 2,30,965	dox. 1,18,438	dox. 2,08,534	dox. 1,89,052	dox. 1,76,168	dox. 1,44,517	dox. 1,88,527	dox. 1,14,568
 " Printed	Do. 5,63,854	Do. 8,28,010	Do. 6,17,245	Do. 8,34,529	Do. 2,70,768	Do. 6,14,151	Do. 10,54,089	Do. 8,17,039	Do. 12,65,406	Do. 7,33,768

DESCRIPTION OF GOODS.	From 1st Jan. to 31st Dec. 1905.	From 1st Jan. to 31st Dec. 1906.	From 1st Jan. to 31st Dec. 1907.	From 1st Jan. to 31st Dec. 1908.	From 1st Jan. to 31st Dec. 1909.	From 1st Jan. to 31st Dec. 1910.	From 1st Jan. to 31st Dec. 1911.	From 1st Jan. to 31st Dec. 1912.	From 1st Jan. to 31st Dec. 1913.	From 1st Jan. to 31st Dec. 1914.
YARNS.										
Grey Mule and Medio, 16/24's say 20's	lbs. 56,150	lbs. 19,628	lbs. 27,207	lbs. 51,071	lbs. 16,765	lbs. 22,251	lbs. 11,197	lbs. 2,48,666	lbs. 4,88,200	lbs. 1,17,765
" " 26/32's " 30's	" 12,72,128	" 15,84,816	" 6,77,686	" 4,77,785	" 5,45,648	" 2,16,947	" 5,55,577	" 4,62,408	" 4,02,512	" 26,84,144
" " 34/42's " 40's	" 14,76,696	" 17,91,260	" 15,16,769	" 20,83,337	" 26,58,981	" 10,89,071	" 19,90,918	" 21,14,438	" 26,80,606	" 21,85,698
" " 44/52's " 50's	" 5,82,468	" 7,64,570	" 5,74,761	" 9,01,823	" 11,78,587	" 6,15,374	" 10,41,126	" 11,86,675	" 11,70,464	" 10,97,391
" " 54/60's " 60's	" 2,06,927	" 4,17,448	" 4,11,336	" 6,02,964	" 12,92,332	" 5,88,075	" 5,71,639	" 6,80,867	" 7,10,507	" 5,73,247
" " above 60's	" 1,26,948	" 4,62,240	" 2,93,214	" 4,99,742	" 11,66,306	" 5,61,509	" 6,93,577	" 6,86,176	" 11,13,849	" 7,14,340
Grey Water and Mock, 16/24's say 20's	" 3,300	" 26,469	" 17,205	" 14,551	" 8,000	" 4,456	" 10,519	" 4,88,037	" 1,08,573	" 12,000
" " 26/32's " 30's	" 24,87,738	" 16,89,186	" 18,92,880	" 11,16,867	" 28,89,265	" 9,72,305	" 22,80,644	" 21,98,937	" 14,74,158	" 15,45,216
" " 40's "	" 9,87,980	" 13,56,868	" 7,86,156	" 11,05,374	" 14,58,968	" 4,21,479	" 15,96,268	" 11,08,030	" 7,80,758	" 9,06,224
" " above 40's	" 26,925	" 96,878	" 64,186	" 17,700	" 65,790	" 8,000	" 78,578	" 1,00,482	" 1,02,600	" 1,14,910
Total for 12 months (Grey Yarns)...	lbs. 71,25,000	lbs. 82,08,838	lbs. 62,80,183	lbs. 67,01,114	lbs. 1,12,19,516	lbs. 44,40,946	lbs. 88,10,980	lbs. 92,25,586	lbs. 96,37,586	lbs. 99,80,944
Bleached Total for 12 months ...	lbs. 10,58,572	lbs. 8,52,937	lbs. 15,15,636	lbs. 9,22,470	lbs. 15,46,438	lbs. 12,25,193	lbs. 16,13,446	lbs. 16,82,998	lbs. 17,37,378	lbs. 18,93,495
Turkey Red	lbs. 10,76,718	lbs. 18,54,560	lbs. 15,16,619	lbs. 18,46,998	lbs. 25,97,805	lbs. 8,94,671	lbs. 11,07,091	lbs. 11,60,737	lbs. 14,50,348	lbs. 10,43,360
Orange and Yellow	" 5,82,000	" 3,91,366	" 4,25,050	" 6,09,657	" 7,67,408	" 3,84,650	" 6,75,373	" 8,09,200	" 5,18,683	" 7,71,490
Green	" 1,32,400	" 94,860	" 1,00,000	" 1,01,690	" 1,58,338	" 1,22,000	" 1,66,100	" 2,18,710	" 1,62,700	" 2,32,763
Other Colours	" 8,76,481	" 6,46,094	" 11,21,328	" 13,19,926	" 14,06,463	" 11,25,107	" 9,96,480	" 12,66,384	" 12,97,550	" 10,85,477
Total for 12 months (Coloured Yarns)...	lbs. 21,16,594	lbs. 24,86,859	lbs. 31,92,997	lbs. 36,77,871	lbs. 58,64,004	lbs. 25,24,428	lbs. 42,94,414	lbs. 34,55,031	lbs. 34,29,281	lbs. 30,72,050
Total all Yarns...	lbs. 1,03,00,226	lbs. 1,16,46,684	lbs. 1,09,69,810	lbs. 1,12,71,153	lbs. 1,66,80,168	lbs. 81,90,567	lbs. 1,33,69,370	lbs. 1,48,68,615	lbs. 1,46,94,747	lbs. 1,44,47,490
SUNDRY.										
Coals (from Europe and Australia). (Private) Total for 12 months ...	Tons 1,27,638	Tons 1,87,569	Tons 1,38,606	Tons 2,28,549	Tons 2,74,968	Tons 2,22,543	Tons 2,24,785	Tons 2,04,482	Tons 2,03,122	Tons 1,21,452
" (" Japan) Do.	" 28,302	" 8,367	" 2,581	"	" 10	" 6,659	" 6,975	" 39,824	" 11,847	" 16,105
" (" other Foreign Ports) Do.	"	" 846	" 8,962	" 56,811	" 34,324	" 16,161	" 18,302	" 1,48,001	" 1,78,687	" 1,22,080
" (" Calcutta) Do.	" 7,78,848	" 8,06,416	" 7,48,470	" 8,80,718	" 5,26,076	" 6,60,368	" 6,28,237	" 6,81,670	" 4,70,398	" 4,17,495
Coke (" Europe) Do.	" 2,504	" 5,272	" 5,901	" 6,341	" 6,847	" 1,000	" 3,841	" 1,488	" 5,634	" 2,271
" (" Calcutta) Do.	"	"	" 1,795	" 619	" 631	" 364	" 628	" 55	"	" 107
" (" Europe) By State Rys. Do.	"	"	" 3,502	" 3,770	" 1,709	" 471	" 1,840	"	" 562	"
Coal (" Europe and Australia) Do.	" Figures not recorded.	"	" 10,682	" 16,406	" 35,587	" 10,268	" 22,927	" 80,138	" 37,594	" 6,960
" (" other Foreign Ports) Do.	"	"	" 8,150	" 7,697	" 38,832	"	"	" 61,914	" 1,08,270	" 14,084
" (" Calcutta) Do.	"	"	" 2,15,149	" 2,73,986	" 1,56,470	" 2,00,724	" 1,80,852	" 1,64,086	" 1,60,551	" 2,16,216

* This—includes mercerized yarn.

† Corrected.

EXPORTS OF INDIAN MANUFACTURED PIECE-GOODS AND YARNS FROM BOMBAY.

BY STEAMERS, SHIPS, AND NATIVE CRAFT.

From 1st January to 31st December 1914.

As per Export General Manifests.

TO	Grey and White Piece-Goods.			Coloured Piece-Goods.		Total.		Twist.	
	Pckgs.	Yards.	Lbs.	Pckgs.	Yards.	Pckgs.	Yards.	Bales.	Lbs.
BENGAL—Calcutta	4,289	80,79,986	22,47,495	2,071	88,22,127	6,310	1,14,01,068	15,865	68,07,084
BENGAL—Other Ports .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
MADAG.	.....	.....	.....	.....	.....	.....	.....	.....	.....
MALABAR AND COCHIN AND THE COASTS (Calicut, Cochin, Tellicherry, Cannanore, Mangalore, Tuticorin, Beypore, Coconada, Vizagapatnam, &c.)	614	5,81,095	1,84,947	266	9,49,198	899	15,81,088	4,625	16,51,285
KUTCH AND KATTYAWAR	59,873	12,09,58,518	3,07,76,504	26,294	4,52,61,916	86,167	16,62,20,484	17,882	67,97,968
BRITISH CONCAN & GUZERAT	419	8,66,569	2,88,646	247	6,47,164	666	15,13,728	17,310	68,64,900
(Rutnagberry, Carwar, Vingorla, Compta, Hurnee, Charoja, Panvel, Malwa, Surat, Broach, &c.)	484	9,36,604	2,75,964	1,079	25,92,145	1,568	36,28,749	762	2,71,293
FOREIGN CONCAN	27	25,210	10,674	59	1,21,948	86	1,57,158	40	18,080
(Jafferahad, Shreevardhan, Rajpore, Jambl, Coombharoo, &c.)	400	6,70,029	1,75,789	159	3,19,092	559	9,89,121	179	62,068
MARAGAO, GOA, DAMAUN AND DIV.	2,958	39,18,763	11,56,684	3,113	48,78,449	5,781	82,97,212	7,795	26,84,029
BRITISH BURMAH	6	6,686	2,350	186	2,13,286	142	2,20,616	176	67,040
(Rangoon and Moulmein.)	.....	.....	.....	.....	.....	.....	.....	.....	.....
CEYLON (Colombo and Galle)	61	79,920	21,060	.....	.....	61	79,920	178,017	5,52,06,800
CHINA (Hongkong)	30	46,600	10,700	.....	.....	80	45,800	1,51,411	6,05,64,400
CHINA (Hankow, Tientsin, &c.)	.....	.....	.....	7	14,600	7	14,600	138	68,200
JAPAN (Yokohama and Kobe) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
STRAIT SETTLEMENTS	117	2,18,820	68,867	642	12,78,688	759	14,97,456	12,258	46,34,890
(Penang and Singapore.)	1,906	86,20,509	9,68,498	1,227	20,28,616	8,138	56,44,125	8,818	14,58,460
PERIA	778	18,18,861	3,54,148	400	8,50,867	1,208	21,64,208	1,486	5,17,990
(Bussiere, Zibin, Malombo, &c.)	1,886	38,81,000	8,79,065	1,182	21,25,601	3,018	59,26,601	18,680	53,72,240
ARABIA	46	62,760	17,040	1	1,000	47	63,760	3	1,200
(Muscat, Hoodeda, Jeddah, &c.)	.....	.....	.....	.....	.....	.....	.....	.....	.....
TURKEY IN ASIA	4,631	68,64,081	18,70,082	687	15,20,501	5,318	88,84,682	3,369	12,71,500
(Smyrna, Beyrout, Bagdad, Duesrah, &c.)	715	18,89,070	3,28,857	490	9,31,850	1,205	22,64,420	.....	.....
MEXICO AND SOMALIA	6,659	71,67,857	17,25,562	1,351	18,32,062	8,610	90,49,889	219	82,062
(Veraculla, Guwahur, &c.)	950	14,18,727	2,67,173	246	3,58,589	1,196	17,87,616	10	3,135
ADEN .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
AFRICA (Mauritius and Seychelles)	472	4,71,180	1,17,519	82	2,64,150	554	7,35,280	184	58,000
AFRICA (Zanzibar)	1,160	10,12,742	2,64,870	150	8,14,546	1,810	18,27,287	5	3,000
AFRICA (Mozambique)	1,149	13,92,717	2,38,885	39	114,600	25	55,050	4,178	17,92,800
AFRICA AFRICANIA (Massowa)	1,477	20,26,144	4,19,815	198	3,92,059	1,670	28,67,208	.....	.....
AFRICA (Shakim) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
AFRICA (Egypt) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
AFRICA (Natal) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
AFRICA (Beira) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
AFRICA (Madagascar) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SOUMATRA (Padang) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
AFRICA (Tripoli, Tunis, &c.) .....	.....	.....	.....	.....	.....	.....	.....	3,647	14,68,800
JAVA (Batavia, Cherbon, &c.)	4	12,000	3,000	5	6,096	11	18,096	267	91,850
SIAM (Bangkok)	805	15,60,005	8,64,840	1,221	23,75,624	2,026	89,89,819	987	3,94,920
AFRICA—French Somal Land (Djibouti)	664	10,87,960	2,60,468	356	3,03,068	920	18,41,008	402	1,65,098
EAST INDIAN & PHILIPPINE ISLANDS. (Manila, Macassar, &c.)	.....	.....	.....	10	16,000	10	15,800	642	1,92,200
EUROPE .....	.....	.....	.....	5	5,841	5	5,841	2,086	3,14,200
TURKEY IN EUROPE .....	.....	.....	.....	3	6,700	3	6,200	1,068	4,21,200
AUSTRALIA .....	.....	.....	.....	9	18,873	9	18,873	.....	.....
AMERICA .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total Exports from 1st January to 31st December 1914	91,837	16,95,16,987	4,98,61,518	42,084	7,26,02,270	1,38,921	34,21,18,207	4,97,169	17,31,72,958
Exported same time 1913	97,003	17,72,29,370	5,06,27,873	55,071	9,24,67,657	1,52,076	36,97,07,227	5,18,290	20,52,07,963
Do. do. 1912	1,26,481	28,19,16,487	6,60,09,051	64,185	16,22,99,828	1,90,850	39,39,56,455	6,79,291	22,97,35,817
Do. do. 1911	1,12,601	22,44,86,098	6,36,24,949	54,000	8,34,11,376	1,76,901	31,38,50,674	4,06,214	15,85,82,640
Do. do. 1910	1,36,972	25,04,89,940	6,88,12,614	46,833	7,56,73,845	1,22,805	32,61,68,785	5,66,999	22,37,58,970
Do. do. 1909	1,41,920	25,29,92,500	7,00,93,139	39,426	6,67,51,717	1,21,246	31,37,44,217	6,86,329	26,24,60,745
Do. do. 1908	1,20,690	21,36,98,697	6,08,62,003	30,997	5,07,92,242	1,51,297	26,64,91,029	5,38,621	23,44,84,640
Do. do. 1907	1,29,857	22,25,06,983	6,06,17,174	31,486	5,10,05,309	1,55,453	27,39,12,252	6,06,360	24,10,85,788
Do. do. 1906	1,07,653	18,60,18,348	4,87,19,629	24,346	4,28,35,922	1,32,220	22,86,54,270	7,08,006	27,88,91,732
Do. do. 1905	1,18,474	18,92,98,879	4,94,06,422	24,447	4,12,26,870	1,38,921	22,05,54,749	7,50,689	29,78,89,184
Do. do. 1904	1,08,730	17,10,27,292	4,29,41,062	24,338	3,78,64,072	1,23,068	20,98,91,304	6,80,847	32,94,80,205

EXPORTS OF EUROPE MANUFACTURED PIECE-GOODS AND YARNS FROM BOMBAY.

BY STEAMERS, SHIPS, AND NATIVE CRAFT.

From 1st January to 31st December 1914.

As per Export General Manifests.

TO	PIECE-GOODS								TOTAL		Yarns.	
	Grey.		White.		Colored and Printed.		Country Dyed.		Pkggs.	Yards.	Pkggs.	Lbs.
	Pkggs.	Yards.	Pkggs.	Yards.	Pkggs.	Yards.	Pkggs.	Yards.				
BOMBAY-CALCUTTA	10	47,047	...	...	27	73,128	...	...	87	1,20,176	6	8,000
BOMBAY-Other Ports .....	...	...	...	...	81	44,640	...	...	81	44,640	...	...
MADRAS .....	...	...	...	...	...	...	...	...	...	...	...	...
MALABAR AND COCHINMANDEL COASTS (Calicut, Cochin, Tel- licherry, Cannanore, Mangal- ore, Tuticorin, Bepore, Cocanada, Vizagapatam, &c.)	5,181	1,08,34,078	1,257	80,48,365	483	9,78,515	...	...	6,920	1,42,06,958	428	1,33,177
SOND (Kutch)	6,280	1,20,99,486	4,408	1,08,74,517	8,878	87,61,670	14	18,138	14,825	8,17,48,801	414	1,37,050
KUTCH and KATTIWAR	8,265	74,43,760	8,279	74,24,781	4,133	97,67,564	4	10,100	10,681	2,46,86,185	150	59,850
BRITISH CONCAN, & GUZERAT, (Rutnagerry, Carwar, Vin- golis, Compta, Hurnee, Caranja, Farwell, Malwan, Surat, Broach, &c.)	768	16,65,427	484	7,47,870	446	6,00,689	...	...	1,593	81,18,836	116	36,880
FOREIGN CONCAN	22	82,124	12	12,196	14	16,872	8	4,900	61	67,892	..	...
(Jafferbud, Shreevudhan, Rajpore, Jambli, Coom- bharoo, &c.)	...	...	...	...	...	...	...	...	...	...	...	...
MARAGO, GOA, DAMAUN, and Diu	218	4,14,178	518	6,66,746	466	8,89,267	164	2,18,523	1,861	28,78,701	8	625
BRITISH BURMAH (Rangoon and Moulmein.)	728	10,16,882	783	11,01,424	489	7,48,568	81	67,180	1,981	20,84,002	162	49,875
CYLON	99	1,24,729	144	8,11,890	184	2,98,147	14	85,024	441	7,69,790	18	5,120
(Colombo and Galle.)	...	...	...	...	...	...	...	...	...	...	...	...
CHINA (Hongkong) .....	...	...	2	880	26	15,947	...	...	28	16,777	...	...
CHINA (Shanghai) .....	...	...	...	...	2	1,651	...	...	2	1,651	...	...
CHINA (Hankow, Amoy, Tientsin, &c.)	...	...	...	...	4	2,494	...	...	4	2,494	...	...
JAPAN (Yokohama and Kobe.)	...	...	...	...	...	...	...	...	...	...	...	...
STRAITS SETTLEMENTS (Penang and Singapore.)	...	...	18	42,192	58	84,721	22	54,800	98	1,81,218	...	...
PERIA	51	1,04,551	220	4,18,256	1,144	18,08,098	4,084	71,88,696	5,409	94,50,496	1,586	4,79,060
(Bussipo, Abbas, Malabar, &c.)	...	...	...	...	...	...	...	...	...	...	...	...
ARABIA	64	1,88,965	448	11,51,089	1,711	38,96,192	2,118	60,81,842	4,386	1,12,11,668	125	41,440
(Muscat, Hodeida, Jeddah, &c.)	...	...	...	...	...	...	...	...	...	...	...	...
TURKEY IN ASIA .....	...	...	11	21,658	92	1,69,898	156	1,88,280	259	3,24,866	46	18,600
(Smyrna, Beyoot, Bagdad, Bussowah, &c.)	...	...	...	...	...	...	...	...	...	...	...	...
MEKKAN AND SOMMIANI .....	...	...	...	...	16	24,205	2	8,000	18	32,205	...	...
(Vermla, Gwadhar, &c.)	...	...	...	...	...	...	...	...	...	...	...	...
ADEN	14	19,040	81	2,34,276	409	10,74,026	379	9,95,774	898	28,28,116	123	26,200
AFRICA (Madagascar)	94	1,49,868	26	48,776	723	4,02,489	89	1,45,880	936	7,46,225	...	...
AFRICA (Zanzibar)	242	8,48,950	829	7,18,806	889	18,76,104	366	17,09,686	2,568	46,90,516	10	8,200
AFRICA (Mozambique)	53	77,822	71	1,12,518	125	2,65,076	281	4,01,838	580	8,57,109	...	...
AFRICA (Natal) .....	...	...	4	14,860	26	62,660	18	71,600	48	1,28,610	1	360
AFRICA (Siam) .....	...	...	11	22,850	7	13,190	4	7,200	22	42,240	...	...
AFRICA (Egypt) .....	...	...	22	88,280	69	1,22,264	28	48,584	117	2,10,268	...	...
AFRICA (Soudan)	4	8,190	22	88,280	69	1,22,264	28	48,584	117	2,10,268	...	...
AFRICA (Siam)	88	89,476	51	1,08,901	126	3,18,484	286	8,18,868	440	7,75,663	...	...
SIAM (Bangkok) .....	...	...	2	8,000	6	15,196	98	1,98,080	106	2,16,772	...	...
EAST INDIAN AND PHILIPPINE ISLANDS .....	...	...	...	...	...	...	...	...	...	...	...	...
(Manila, Macassar, &c.)	...	...	...	...	...	...	...	...	...	...	...	...
AFRICA .....	...	...	18	28,690	68	1,68,416	80	66,840	116	2,83,866	180	40,200
(French Somali Land Djibouti)	...	...	...	...	...	...	...	...	...	...	...	...
SUMATRA (Padang)	1	8,000	4	10,700	10	20,860	...	...	15	34,560	...	...
JAVA .....	...	...	...	...	...	...	...	...	...	...	...	...
(Batavia, Cherbon, &c.)	...	...	...	...	...	...	...	...	...	...	...	...
AFRICA .....	...	...	...	...	...	...	...	...	...	...	...	...
(Algon Bay, Cape Town, East London.)	...	...	...	...	...	...	...	...	...	...	...	...
EUROPE	1	1,091	24	78,914	23	47,151	...	...	48	1,27,156	...	...
TURKEY IN EUROPE .....	...	...	...	...	...	...	...	...	...	...	...	...
BATOU .....	...	...	...	...	...	...	...	...	...	...	...	...
AMERICA .....	...	...	...	...	...	...	...	...	...	...	...	...
LAOCCADIVE and MALDIVES .....	...	...	...	...	...	...	...	...	...	...	...	...
Total Exports from 1st January to 31st December 1914	17,068	8,89,61,118	12,183	2,74,69,214	15,198	8,27,42,440	9,082	1,76,60,134	58,478	11,16,12,921	3,312	10,26,875
Exported same time 1913	20,276	4,07,21,654	16,768	3,80,87,808	19,996	4,65,80,680	14,197	2,67,70,281	71,286	16,27,02,818	4,414	13,89,188
Do. do. 1912	18,907	3,89,53,284	13,787	4,61,94,158	18,788	4,39,01,599	15,898	3,37,58,974	75,208	16,88,02,960	4,245	15,04,258
Do. do. 1911	20,123	4,17,86,487	21,844	6,10,38,980	18,961	4,51,65,278	17,185	3,60,04,146	77,823	17,19,49,890	4,078	12,08,488
Do. do. 1910	22,168	4,29,95,012	23,705	5,66,97,072	16,468	8,92,11,666	17,088	3,88,24,917	79,417	17,26,28,887	5,466	16,48,048
Do. do. 1909	22,740	4,82,75,589	17,465	4,18,89,802	14,640	3,27,41,944	14,504	2,46,62,088	69,849	14,22,58,821	4,642	13,23,769
Do. do. 1908	22,186	4,60,77,880	16,750	4,16,37,236	13,024	3,11,80,088	14,180	2,64,89,378	66,000	14,44,24,219	2,990	8,79,106
Do. do. 1907	23,805	4,86,80,298	20,686	5,20,49,680	15,518	3,80,53,650	16,906	2,92,94,211	76,859	16,83,87,219	4,698	14,04,700
Do. do. 1906	23,658	4,98,20,688	19,399	5,10,46,460	14,921	3,65,76,027	17,910	2,88,85,768	75,722	16,44,84,884	3,405	10,57,000
Do. do. 1905	28,000	5,00,28,774	19,972	5,28,29,126	14,098	3,49,68,700	20,894	3,24,58,477	77,469	16,37,70,477	4,967	14,74,598
Do. do. 1904	26,685	5,69,46,107	24,641	6,68,86,180	16,166	3,78,67,020	17,437	3,80,24,673	82,879	18,82,12,980	4,522	18,25,718

**EXPORTS OF INDIAN MANUFACTURED PIECE-GOODS AND YARNS
FROM BOMBAY BY RAIL.**

From 1st January to 31st December 1914.

G. I. P. AND CONNECTED RAILWAYS.

TO	COUNTRY PIECE-GOODS.		COUNTRY TWIST.	REMARKS.
	Bales.	Boxes.	Bales.	
GREAT INDIAN PENINSULA RAILWAY.				
BOMBAY TO NASIK, EXCLUDING NASIK	20	2	...	
NASIK	24	...	11	
NASIK TO MANMAD	19	...	...
MANMAD TO BHUSAVAL	29	9	5	
BHUSAVAL TO AKOLA, EXCLUDING AKOLA AND KHAM- GAON	27	2	13	
AKOLA	83	10	7	
AKOLA TO BADNERA	81	8	2	
BADNERA TO WARDHA, EXCLUDING WARDHA	42	4	...	
WARDHA	24	...	1	
WARDHA TO ITWARI BAZAR, EXCLUDING NAGPUR	4	...	71	
NAGPUR	208	...	525	
BHUSAVAL TO KHANDWA, EXCLUDING KHANDWA	57	13	17	
KHANDWA	...	...	...
KHANDWA TO ITARSI	36	...	...
ITARSI TO BETUL	40	4	...	
ITARSI TO GADARVADA	112	...	...
GADARVADA TO JUBBULPORE, EXCLUDING JUBBUL- PORE	14	...	3	
JUBBULPORE	202	...	14	
G. I. P. RAILWAY.—BRANCH LINES.				
DHOND-MANMAD RAILWAY.				
MANMAD TO DHOND, EXCLUDING AHMEDNAGAR	20	...	1	
AHMEDNAGAR	16	...	2	
CHALISGAON-DHULIA LINE	33	1	13	
JALGAON—AMALNER do.	9	1	6	
JALAMB TO KHAMGAON	21	1	5	
BADNERA TO AMRAOTI	32	1	...	
WARDHA COAL RAILWAY.				
WARDHA TO BALLARSHAH, EXCLUDING WARORA	69	...	2	
WARORA	24	...	...
MOHPANI VIA GADARVADA	...	...	...
INDIAN MIDLAND RAILWAY via ITARSI.				
ITARSI TO BHOPAL INCLUSIVE	32	2	...	
BHOPAL TO UJJAIN SECTION AND VIA	55	...	1	
BHOPAL TO BINA	9	...	...
BINA TO KATNI AND VIA	274	5	...	
BINA TO BARAN AND VIA	102	2	34	
BINA TO JHANSI	80	...	2	
JHANSI TO CAWNPORE, EXCLUDING CAWNPORE	2	...	...
CAWNPORE AND VIA	2,315	46	4	
STATIONS BETWEEN JHANSI AND MANIKPUR AND VIA	98	3	8	
JHANSI TO GWALIOR, EXCLUDING GWALIOR	...	...	...
GWALIOR AND VIA GWALIOR	37	1	...	
GWALIOR TO AGRA, EXCLUDING AGRA	5	...	...
AGRA AND VIA	60	6	2	
STATIONS BETWEEN AGRA AND ALIGARH	...	...	...
ALIGARH	11	...	...
VIA ALIGARH OUDH AND ROHILKHAND RAILWAY	...	...	...
STATIONS BETWEEN AGRA AND DELHI	...	...	...
ALIGARH TO SABARANPUR VIA GHAZIABAD AND CHANDOUSI	...	...	...
GHAZIABAD TO MORADABAD	2	...	1	
DELHI	19	1	...	
DELHI-KALKA RAILWAY	3	...	...
STATIONS BETWEEN SAHARANPUR AND LAHORE, EX- CLUDING AMRITSAR AND LAHORE	...	...	...
AMRITSAR	...	...	...
LAHORE	...	1	...	
STATIONS BEYOND LAHORE	...	...	...
SOUTHERN PUNJAB RAILWAY AND VIA	...	...	...
Carried forward	4,350	123	752	

G. I. P. AND CONNECTED RAILWAYS—continued.

TO	COUNTRY PIECE-GOODS.		COUNTRY TWIST.	REMARKS.
	Bales.	Boxes.	Bales.	
Brought forward ...	11,544	143	5,110	
NEZAM'S RAILWAY.				
WADI TO BEGAMPAT ...	.....	.....	.....
HYDERABAD ...	53	.....	1	
SECUNDERABAD ...	.....	.....	.....
SECUNDERABAD TO WARANGAL ...	.....	.....	.....
STATIONS BETWEEN WARANGAL AND BEZVADA ...	.....	.....	.....
BEZVADA AND VIA ...	.....	.....	.....
VIA SECUNDERABAD (H. G. V. RY.) ...	1	.....	.....
MADRAS AND SOUTHERN MAHRATTA RAILWAY.				
RAICHUR TO GUNTAKAL ...	6	2	46	
STATIONS BETWEEN GUNTAKAL AND MADRAS ...	.....	.....	194	
MADRAS ...	218	29	1,396	
STATIONS EAST OF BANGALORE, EXCLUDING BANGA- LOBE ...	3	38	173	
BANGALORE CITY ...	.....	.....	.....
HOTGI TO BIJAPUR ...	1	.....	.....
BIJAPUR TO BHAGALKOT ...	.....	.....	.....
BHAGALKOT TO GADAG ...	.....	.....	.....
POONA TO MIRAJ ...	.....	.....	.....
MIRAJ TO KOLHAPUR ...	.....	.....	.....
STATIONS BETWEEN MIRAJ AND BELGAUM ...	.....	.....	.....
BELGAUM ...	.....	.....	.....
BELGAUM TO LONDA ...	.....	.....	.....
LONDA TO MARMAGAO ...	.....	.....	.....
STATIONS BETWEEN LONDA AND HUBLI ...	.....	.....	.....
HUBLI ...	.....	.....	.....
HUBLI TO BIRUR ...	.....	.....	.....
BIRUR TO SHIMOGA ...	.....	.....	.....
STATIONS BETWEEN BIRUR AND BANGALORE ...	.....	.....	.....
BANGALORE ...	172	9	65	
BANGALORE TO NANJANGUD ...	.....	.....	.....
STATIONS BETWEEN HUBLI AND GADAG ...	.....	.....	.....
GADAG ...	.....	.....	.....
GADAG TO BELLARY ...	1	4	.....
BELLARY ...	3	3	3	
BELLARY TO GUNTAKAL ...	.....	.....	.....
GUNTAKAL TO BEZVADA AND BEYOND ...	31	3	68	
GUNTAKAL TO DHARMAVARAM ...	.....	.....	.....
DHARMAVARAM TO BANGALORE ...	.....	.....	13	
STATIONS SOUTH-EAST OF DHARMAVARAM ...	.....	.....	.....
TOTAL EXPORTS BY G. I. P. & CONNECTED RYS. IN 1914...	12,038	231	7,050	
Do. do. do. 1913...	4,612	185	1,326	
Do. do. do. 1912 ..	4,841	288	1,830	
Do. do. do. 1911...	6,253	266	2,724	
Do. do. do. 1910...	8,377	364	2,934	
Do. do. do. 1909...	8,251	2,976	1,728	
Do. do. do. 1908...	3,823	128	2,263	
Do. do. do. 1907...	3,087	197	2,135	
Do. do. do. 1906...	3,142	725	1,133	
Do. do. do. 1905...	2,768	503	2,448	

Bombay, Baroda & Central India Railway
(INCLUDING RAJPUTANA-MALWA RAILWAY).

TO	Country Piece-Goods.		Country Twist.	REMARKS.	
	Bales.	Boxes.	Bales.		
BROAD-GAUGE SYSTEM.					
BOMBAY TO SURAT, EXCLUDING SURAT	1,011	46	1,177		
SURAT... ..	280	136	1,441		
SURAT TO BROACH, EXCLUDING BROACH	115	3	223		
BROACH	112	19	393		
BROACH TO BARODA, EXCLUDING BARODA	68	4	13		
BARODA	82	6	663		
BARODA TO ANAND, EXCLUDING ANAND	6	...	140		
ANAND	2	...	241		
ANAND TO GODHRA, EXCLUDING GODHRA	41	2	75		
BARODA TO GODHRA, EXCLUDING BARODA AND GODHRA, GODHRA	9	2	3		
ANAND TO AHMEDABAD, EXCLUDING AHMEDABAD	32	...	48		
AHMEDABAD	361	39	1,170		
AHMEDABAD TO KHARAGHODA	15	8	4,450		
GODHRA TO RUTLAM	17	3	132		
RUTLAM TO UJJAIN	63	2	995		
NAGDA TO MUTTRA JUNCTION	66	4	141		
VIA KANKRAKHARI	267	...	701		
" KOSAMBA	1	...	939		
" ANKLESVAR	57	...	2		
" BROACH	2	...	23		
" MIYAGAM AND VISHVAMITRI	385	12	3		
" CHAMPANER	7	...	712		
" GODHRA	15	...	...
" ANAND	4	1	73		
" AHMEDABAD	43	...	1,249		
" SABARMATI (A. D. RY.)	4	...	265		
" UJJAIN (G. I. P. RY.) ... ..	...	...	53		
" KOTAH ... ..	...	...	5		
" SIWAI MADHOPUR	10	...	6		
" BILIMORA	6	...	...
" MUTTRA (EXCLUDING DELHI SADAR AND DELHI JUNCTION) ... ..	...	...	...
" " TO DELHI SADAR STATION ... ..	...	...	327		
" " TO VIA DELHI ... ..	...	...	...
" " NADIAD	28	...	6		
METRE-GAUGE SYSTEM.					
VIA RUTLAM	RUTLAM TO KHANDWA	87	10	765	
	RUTLAM TO CHITORGARH	17	12	935	
VIA CHITORGARH	VIA CHITORGARH	32	1	1	
	CHITORGARH TO AJMER, EXCLUDING AJMER	4	...	12	
	AJMER	18	3	5	
	AHMEDABAD TO MARWAR BY JUNCTION	24	3	2,758	
	MARWAR BY JUNCTION TO AJMER	36	...	367	
	AJMER TO PHULERA	46	...	...
	PHULERA TO KUCHAMAN ROAD ... ..	...	...	...
	REWARI-PHULERA CHORD LINE	5	7	3	
	PHULERA TO JEYPUR	2	...	48	
	JEYPUR TO BANDIKUI ... ..	...	...	...
	BANDIKUI TO ACHNERA ... ..	...	...	...
	ACHNERA TO AGRA, EXCLUDING AGRA ... ..	...	...	...
VIA SABARMATI	AGRA ... ..	...	4	6	
	ACHNERA TO CAWNPORE VIA BHARATPUR	5	...	41	
	BANDIKUI TO DELHI, EXCLUDING DELHI	9	...	...
	DELHI	49	7	6	
	REWARI TO FAZILKA AND BEYOND	1,985	1	768	
	VIA KALOL	9	1	276	
	" MEHSANA	9	...	1,269	
	" PALANPUR	1	...	6	
	" MARWAR RAILWAY JUNCTION	229	15	917	
	" KUCHAMAN ROAD ... ..	...	...	16	
	" SANGANER ... ..	...	...	...
	" BHARATPUR ... ..	...	...	...
	" AGRA ... ..	...	...	...
	" IDGAH AGRA ... ..	...	...	...
	" MUTTRA ... ..	...	...	...
	" HATHRAS VIA BHARATPUR ... ..	...	...	...
	" KASGANJ Do.	10	...	...
	" CAWNPORE Do. ... ..	...	...	...
	" DELHI ... ..	...	...	...
	VIRAMGAM TO WADHWAN	3	2	6	
	VIA WADHWAN (B-G-J-P. RY. & MORVI RY.)	123	48	177	
TOTAL EXPORTS BY B. B. & C. I. RY. IN					
	1914	5,812	451	24,044	
	Do. 1913	6,467	558	15,352	
	Do. 1912	9,482	953	14,023	
	Do. 1911	10,814	962	14,413	
	Do. 1910	12,181	1,377	16,400	
	Do. 1909	13,474	1,568	16,768	
	Do. 1908	12,695	1,340	17,588	
	Do. 1907	18,810	4,814	17,238	
	Do. 1906	30,583	11,395	15,166	

SUMMARY OF EXPORTS BY ALL RAILWAYS.

TO	Country Piece-Goods.		Country Twist.	REMARKS.
	Bales.	Boxes.	Bales.	
G. I. P. AND CONNECTED RAILWAYS	12,033	231	7,059	
B. B. & C. I. RAILWAY (INCLUDING RAJPUTANA-MALWA RAILWAY).	5,812	451	24,144	
TOTAL EXPORTS, 1914 ...	17,845	682	31,103	
Do. do. 1913 ...	10,979	993	16,578	
Do. do. 1912 ...	14,323	1,335	15,843	
Do. do. 1911 ...	17,067	908	17,137	
Do. do. 1910 ...	20,558	1,641	19,324	
Do. do. 1909 ...	21,725	4,544	18,491	
Do. do. 1908 ...	16,517	1,463	19,851	
Do. do. 1907 ...	21,847	5,011	19,373	
Do. do. 1906 ...	33,725	12,120	16,299	
Do. do. 1905 ...	25,075	5,562	9,097	
Do. do. 1904 ...	37,922	12,703	10,321	

* Revised.

ANNUAL PROGRESS OF RAILWAYS IN INDIA SINCE THEIR COMMENCEMENT.

Year.	Total Mileage.	Year.	Total Mileage.	Year.	Total Mileage.	Year.	Total Mileage.
1853	20	1868	4,008	1884	11,631	1900	24,752
1854	71	1869	4,255	1885	12,283	1901	25,363
1855	169	1870	4,771	1886	12,892	1902	25,931
1856	272	1871	5,074	1887	14,193	1903	26,956
1857	287	1872	5,369	1888	14,576	1904	27,565
1858	427	1873	5,697	1889	15,887	1905	28,295
1859	625	1874	6,226	1890	16,461	1906	29,097
1860	838	1875	6,541	1891	17,308	1907	29,357
1861	1,587	1876	6,860	1892	17,815	1908	30,576
1862	2,333	1877	7,320	1893	18,504	1909	31,490
1863	2,507	1878	8,217	1894	18,900	1910	32,099
1864	2,968	1879	8,494	1895	19,547	1911	32,839
1865	3,363	1880	9,162	1896	20,254	1912	33,484
1866	3,563	1881	9,890	1897	21,115	1913	34,656
1867	3,929	1882	10,149	1898	22,049	1913-14	34,656
		1883	10,458	1899	23,523		

* Official year ending 31st March 1911.

Statement showing the Exports of Indian Manufactured Piece-Goods and Yarns by Sea and Rail from Bombay during the years 1905 to 1914.

YEAR.	PIECE-GOODS		TOTAL.	YARNS		TOTAL.		REMARKS.	
	By Sea.	By Rail.		By Sea.	By Rail.	Packages.	lbs.		
1905	Packages. 1,38,391	Packages. 20,637	Packages. 1,59,028	Packages. 7,50,639	lbs. 29,73,89,194	Packages. 9,097	lbs. 32,89,740	Packages. 7,69,786	lbs. 30,06,32,934
1906	1,32,230	45,845	1,78,065	7,09,006	27,88,21,792	16,299	61,67,066	7,19,805	28,49,88,348
1907	1,55,453	24,858	1,80,311	6,08,980	24,10,85,783	19,978	76,87,179	6,26,358	24,87,72,952
1908	1,51,297	17,980	1,69,277	5,98,621	23,44,84,640	19,851	78,53,714	6,18,472	24,18,16,854
1909	1,81,246	26,369	2,07,615	6,86,329	25,24,60,745	18,491	77,20,704	6,64,820	26,01,81,449
1910	1,82,805	22,199	2,04,994	5,65,999	22,37,68,970	19,324	76,41,586	5,85,328	23,14,00,506
1911	1,76,601	17,975	1,94,576	4,09,214	15,85,82,640	17,187	75,70,779	4,20,283	16,81,68,419
1912	1,90,850	13,678	2,06,508	5,79,281	22,87,69,617	15,848	63,60,266	5,95,134	23,47,19,873
1913	1,52,076	11,972	1,64,048	5,18,280	20,62,07,963	16,578	60,04,425	5,34,808	21,12,12,387
1914	1,39,921	18,627	1,62,448	4,87,164	17,31,72,963	31,103	1,23,82,689	4,68,262	18,56,55,636

Statement showing the arrivals of Cotton into Bombay by Sea and Rail during the years 1905 to 1914.

By	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1912.	1914.
	Cwts. 11,14,840	Cwts. 10,41,687	Cwts. 17,52,604	Cwts. 12,30,107	Cwts. 14,12,960	Cwts. 16,57,925	Cwts. 16,40,686	Cwts. 20,30,983	Cwts. 19,69,363	Cwts. 17,73,926
Steamers and Country Craft	23,74,232	20,63,295	37,71,951	16,70,484	21,42,445	27,76,926	21,07,749	19,91,482	34,83,305	35,53,077
B. & C. I. Railway	64,50,836	56,36,946	58,20,671	41,18,135	56,23,478	55,74,764	48,00,247	*51,91,333	*54,46,844	54,82,985
G. I. P. Railway										
Total Cwts...	99,38,908	87,41,918	1,03,45,226	70,18,676	91,78,383	1,00,09,604	80,48,582	92,13,798	1,09,01,509	1,08,09,938
Total F.-P. Bales of 3½ Cwts. each...	28,39,688	24,97,691	29,55,779	20,05,336	26,22,539	28,59,887	22,99,693	*26,32,514	*31,14,717	80,68,664

Statement showing the Exports of Cotton to Europe, China, Japan, Calcutta, &c., from Bombay during the years 1905 to 1914.

To	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.
	F. P. Bales. 6,67,323	F. P. Bales. 9,89,693	F. P. Bales. 11,36,376	F. P. Bales. 6,59,822	F. P. Bales. 6,72,247	F. P. Bales. 11,53,299	F. P. Bales. 7,76,417	F. P. Bales. 4,36,262	F. P. Bales. 7,26,262	F. P. Bales. 11,13,016
Europe	93,490	25,128	41,874	48,874	66,320	80,493	15,381	38,650	59,167	59,676
China	5,69,398	4,40,115	6,06,525	4,23,894	6,32,101	8,01,574	6,10,704	7,81,391	10,43,194	12,44,812
Japan				100	2,265	797	450	200	100	26
America										
Calcutta and other Ports	38,803	43,170	60,983	83,930	29,519	32,692	38,266	20,226	31,166	19,310
Total Bales	13,08,019	14,98,101	18,35,867	11,61,620	14,29,449	20,71,769	14,39,168	12,76,778	19,08,909	24,09,839

* Corrected.

**EXPORTS OF INDIAN MANUFACTURED PIECE-GOODS AND
YARNS FROM BOMBAY PORT ONLY.**

(From Official Returns.) 1913-1914. *(Year ending 31st March 1914.)*

EXPORTED TO	LENGTH AND WEIGHT.								VALUE.							
	Piece-Goods.			Yarns.		Percentage of		Total Weight.	Lakhs of Rupees.		Percentage of		Total Value	Per cent- age.		
	Millions of [0000's omitted.]			Goods.	Yarns.	Goods.	Yarns.	Mil- lions of lbs. [0000's omit- ted.]	Per- cent- age.	(000's omitted.)		Goods.	Yarns.		Lakhs of Rupees	
	Yards.	lbs.	lbs.	%	%	%	%	%	%	Goods.	Yarns.	%	%	[000's omit- ted.]	%	
Foreign Ports.....	61-22	*15-30	185-92	21-11	88-87	201-22	68-41	†	1,11-67	9,21-00	21-06	83-96	†	10,32-47	63-45	
Indian Ports	206-67	*51-67	27-06	71-81	12-21	76-78	26-76	‡	3,64-22	1,39-20	72-42	12-69	‡	5,23-42	32-16	
Interior by Rail.....	*21-97	5-49	8-70	7-5b	3-92	14-19	4-83	§	84-65	36-74	6-53	3-85	§	71-89	4-89	
Total Indian...	228-64	57-16	35-76	78-89	18-13	92-92	81-59	†	4,18-87	1,76-94	78-95	16-04	†	5,94-81	80-55	
GRAND TOTAL...	289-86	72-46	221-68	100-00	100-00	394-14	100-00	†	5,30-54	10,96-94	100-00	100-00	†	16,97-48	100-00	

* Assuming 4 yards to be the equivalent of 1 lb. and *vice versa*.

† Piece-Goods only : value including all other sorts (Handkerchiefs, Hosiery, &c., &c.) Rs. 117-97 lakhs ; or

‡ Inclusive of Yarns Rs. 1,938-97 lakhs.

§ Estimated, Government having discontinued the publication of the values of Indian Manufactured Goods despatched to "Other Provinces" from Bombay Port.

(a) Piece-Goods only : value including all other sorts (Handkerchiefs, Hosiery, &c., &c.) Rs. 389-69 lakhs, or

(b) Inclusive of Yarns, Rs. 636-69 lakhs.

1912-1913.

Foreign Ports.....	59-70	*14-92	191-86	16-58	83-12	206-78	64-46	†	108-95	9,27-07	16-64	82-37	†	11,08-03	68-19
Indian Ports	268-40	*67-10	31-28	74-60	13-55	98-88	30-67	‡	496-58	1,66-01	75-23	14-75	‡	659-39	37-04
Interior by Rail.....	*81-72	7-93	7-68	8-82	3-33	15-61	4-87	§	352-59	332-37	8-08	2-88	§	384-96	4-77
Total Indian...	800-12	75-03	38-96	83-42	16-88	118-99	85-54	†	645-97	1,98-38	83-36	17-63	†	744-35	41-81
GRAND TOTAL...	359-82	89-95	230-82	100-00	100-00	320-77	100-00	†	654-92	1,128-46	100-00	100-00	†	1,780-37	100-00

* Assuming 4 yards to be the equivalent of 1 lb. and *vice versa*.

† Piece-Goods only : value including all other sorts (Handkerchiefs, Hosiery, &c., &c.) Rs. 116-89 lakhs ; or

‡ Inclusive of Yarns Rs. 1,042-46 lakhs.

§ Estimated, Government having discontinued the publication of the values of Indian Manufactured Goods despatched to "Other Provinces" from Bombay Port.

(a) Piece-Goods only : value including all other sorts (Handkerchiefs, Shawls, &c., &c.) Rs. 499-81 lakhs ; or,

(b) Inclusive of Yarns Rs. 666-82 lakhs.

1911-1912.

Foreign Ports.....	57-40	*14-95	142-45	15-84	78-37	156-80	57-37	†	101-78	709-89	16-31	77-56	†	811-67	52-78
Indian Ports	268-38	*67-09	30-69	74-06	16-83	97-68	33-86	‡	486-12	1,61-55	74-67	17-65	‡	627-67	40-77
Interior by Rail	*86-61	9-15	8-73	10-10	4-80	17-88	6-57	§	356-30	348-79	9-02	4-79	§	100-09	6-50
Total Indian...	804-99	76-24	39-93	84-16	21-69	118-56	43-43	†	523-43	2,05-84	83-69	23-44	†	727-76	47-27
GRAND TOTAL...	862-39	90-59	181-77	100-00	100-00	272-36	100-00	†	624-20	918-23	100-00	100-00	†	1,339-43	100-00

* Assuming 4 yards to be the equivalent of 1 lb. and *vice versa*.

† Piece-Goods only : value including all other sorts (Handkerchiefs, Hosiery, &c., &c.) 107-84 lakhs ; or

‡ Inclusive of Yarns Rs. 617-73 lakhs of Rupees.

§ Estimated, Government having discontinued the publication of the values of Indian Manufactured Goods despatched to "Other Provinces" from Bombay Port.

(a) Piece-Goods only : value including all other sorts (Handkerchiefs, Hosiery, &c., &c.) 473-56 lakhs, or

(b) Inclusive of Yarns 635-11 lakhs of Rupees.

EXPORTS OF INDIAN SPUN TWIST BY SEA AND RAIL.
REDUCED TO BALES OF 400 lbs. EACH.

JANUARY 1ST TO DECEMBER 31ST.	To China.	To Japan.	Total to China and Japan.	Total to other Ports.	Total Exports by Sea.	Total Exports by Rail.	Total Ex- ports by Sea and Rail.
1880.....	63,194	4,527	67,721	38,825	106,546	14,002	120,638
1881.....	61,783	7,378	69,161	41,092	110,253	14,333	124,586
1882.....	81,434	9,854	91,288	41,502	132,790	14,400	147,190
1883.....	94,982	17,421	112,403	42,130	154,533	9,091	163,624
1884.....	127,318	13,846	141,164	43,226	189,890	6,049	195,439
1885.....	154,517	19,020	173,537	43,197	216,734	5,129	221,863
1886.....	199,407	20,543	219,950	45,103	265,053	4,649	269,702
1887.....	205,158	39,730	244,888	47,799	292,687	3,451	296,138
1888.....	234,071	52,897	286,968	49,789	336,557	2,250	338,807
1889.....	254,697	62,220	316,917	59,326	376,243	1,615	377,858
1890.....	325,060	37,722	362,782	67,201	429,983	13,942	443,925
1891.....	365,038	10,939	375,977	78,136	454,113	9,147	463,260
1892.....	385,771	21,445	407,216	69,547	476,763	7,850	484,613
1893.....	297,572	14,198	311,770	88,130	399,900	9,139	409,039
1894.....	338,703	10,743	349,446	105,863	455,309	10,388	465,697
1895.....	374,119	2,515	376,634	104,871	481,505	7,443	488,948
1896.....	471,023	2,467	473,490	99,877	573,367	6,274	579,641
1897.....	361,221	645	361,866	91,095	452,961	5,822	458,783
1898.....	437,645	475	438,120	108,691	546,811	7,125	553,936
1899.....	579,519	250	579,869	94,029	673,898	4,408	678,306
1900.....	253,331	100	253,431	87,998	341,429	5,480	346,909
1901.....	536,195	.....	536,195	99,599	635,794	6,876	642,670
1902.....	555,487	.....	555,487	111,259	666,746	7,427	674,173
1903.....	604,044	.....	604,044	113,256	717,300	8,348	725,648
1904.....	460,316	3	460,319	113,381	573,700	9,789	583,489
1905.....	651,870	.....	651,870	91,603	743,473	8,097	751,570
1906.....	598,926	500	599,426	99,628	697,054	15,417	712,471
1907.....	412,127	200	412,327	150,337	602,714	20,018	622,732
1908.....	441,899	.....	441,899	144,312	586,211	19,098	605,309
1909.....	510,746	.....	510,746	120,406	631,152	18,491	649,643
1910.....	424,893	.....	424,893	130,506	555,399	19,324	574,723
1911.....	275,087	.....	275,087	121,369	396,456	17,137	413,593
1912.....	433,989	.....	433,989	137,910	571,899	15,843	587,742
1913.....	405,359	.....	405,359	107,661	513,020	16,578	529,598
1914.....	324,586	.....	324,586	108,346	432,932	31,103	464,035

COTTON.

RECEIPTS at, and Exports from, Bombay Port, also Mill consumption in the Island of Bombay. In thousands of Bales (000's omitted).

Years ending 30th June.

Years ending 30th June.	Receipts.	EXPORTS TO			Mill consumption.	Total.	Years ending 30th June.	Receipts.	EXPORTS TO			Mill consumption.	Total.
		Europe.	Elsewhere.	Total.					Europe.	Elsewhere.	Total.		
1859	.....	490	152	642			1886	1,480	1,009	61	1,070	591	1,461
1860	.....	566	202	768			1887	1,703	1,147	40	1,187	454	1,641
1861	.....	335	61	396			1888	1,472	893	58	951	500	1,451
1852	.....	911	8	919			1889	1,651	1,286	46	1,332	566	1,897
1863	.....	867	3	870			1890	2,235	1,388	71	1,559	636	2,195
1864	.....	1,065	1	1,066			1891	2,020	1,070	107	1,177	762	1,989
1865	.....	1,187	14	1,201			1892	1,770	905	202	1,107	728	1,835
1866	.....	1,277	5	1,282			1893	1,738	816	169	985	724	1,709
1867	.....	1,030	48	1,078			1894	1,769	908	159	1,067	731	1,798
1868	.....	1,225	56	1,281			1895	1,540	325	143	668	815	1,483
1869	.....	1,115	50	1,165			1896	3,151	800	346	1,146	819	1,995
1870	.....	967	39	1,006			1897	1,612	608	405	1,008	708	1,711
1871	1,085	1,002	48	1,050			1898	1,780	424	409	833	817	1,650
1872	1,151	1,079	34	1,113			1899	2,093	578	520	1,098	951	2,049
1873	978	917	34	951			1900	988	117	444	561	745	1,306
1874	1,311	1,182	25	1,207			1901	1,896	620	340	960	696	1,656
1875	1,345	1,285	20	1,305			1902	2,142	525	732	1,257	987	2,244
1876	1,073	980	35	1,015			1903	2,464	921	349	1,270	986	2,256
1877	1,141	920	38	958			1904	2,151	1,086	428	1,459	973	2,432
1878	961	890	46	936			1905	2,609	864	664	1,048	1,072	2,120
1879	832	652	64	716			1906	2,665	1,017	477	1,494	1,141	2,635
1880	1,171	874	34	908			1907	2,949	1,169	747	1,916	1,115	3,031
1881	2,314	874	60	934			1908	2,123	731	454	1,185	1,079	2,264
1882	1,833	1,521	87	1,608			1909	2,166	643	723	1,366	1,099	2,465
1883	1,770	1,335	95	1,430			1910	3,152	1,054	968	2,022	984	3,006
1884	1,759	1,295	100	1,395			1911	2,467	1,014	668	1,682	953	2,635
1885	1,139	791	70	861			1912	2,540	383	923	1,306	1,078	2,384

Year ending 31st August.	RECEIPTS.			Total Receipts.	EXPORTS.			Total Exports.	Mill consumption.	Total.
	India.	Foreign countries.			Europe.	China and Japan.	Elsewhere.			
1913	° 2,733	46		2,779	584	1,023	30	1,587	1,047	2,634
1914	3,733	6		3,739	1,301	1,245	24	2,570	1,078	3,648

* Corrected.

**FOREIGN COUNTRIES TO WHICH INDIAN YARNS HAVE BEEN
EXPORTED FROM BOMBAY SINCE 1908-1909.**
(From Government Returns.) Years ending 31st March.

TO	IN LAKHS OF LBS. (000's omitted).					
	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.
United Kingdom	19-85	6-21	6-47	8-69	6-68	8-01
Malta and Gozo	1-32	1-32	1-29	1-98	1-72	1-46
Cyprus	43	08	.....	18	.....	.....
Germany	3-94	.....	02	.....	.....	.....
Holland ... ..	.....	03	.....	.....	.....	.....
Belgium	3-29	76	704	.....	.....	.....
France	72	12	02	02	.....	0-8
Spain	04	.....	.....	.....	.....	.....
Italy	48	72	04	.....	.....	.....
Austria-Hungary	5-41	3-76	1-43	77	84	26
Bulgaria	5-86	2-63	1-46	1-08	20	46
Roumania	1-10	.....	.....	34	20	.....
Greece	13	.....	06	02	.....	.....
Aden and Dependencies	16-37	19-00	19-10	22-55	20-85	15-07
Ceylon	41	39	61	82	82	85
Straits Settlements	41-97	48-40	29-62	40-83	42-04	44-81
China { Hongkong, &c.	859-48	774-99	778-18	537-69	900-63	900-74
{ Shanghai, &c.	1,132-34	1,098-29	727-78	672-62	818-85	765-32
Japan	3-76	.....	.....	.....	.....	.....
Zanzibar and Pemba	63	28	42	3-22	52	30
East Africa Protectorate	17	17	15	18	18	36
Turkey in Europe	3-84	42	1-06	2-85	5-18	2-34
Turkey in Asia	86-60	97-31	95-02	75-46	64-09	72-90
Arabia—Bahrein, Muscat, &c.	5-00	5-78	7-46	9-41	8-28	4-94
Persia	17-68	23-42	25-41	15-87	18-74	18-04
Java	7-32	8-57	12-18	9-14	2-37	2-47
Siam	2-01	5-32	1-86	1-63	2-72	3-24
Philippines	21	29	31	22	21	45
Egypt	20-77	22-46	28-82	17-65	21-08	16-10
Portuguese, German and Italian East Africa	1-13	1-36	2-06	70	75	1-10
Tripoli	03	.....	06	26	1-51	4-57
Other Countries	32	46	08	28	13	73
Total Yarns	2,252-41	2,118-64	1,741-01	1,424-49	1,918-59	1,859-20
Value in Lakhs of Rupees	927-17	906-42	818-49	709-85	927-07	921-00

**FOREIGN COUNTRIES TO WHICH GREY COTTON PIECE—GOODS OF INDIAN
MANUFACTURE HAVE BEEN EXPORTED FROM BOMBAY SINCE 1908-1909.**
(From Government Returns.) Years ending 31st March.

TO	IN LAKHS OF YARDS (000's omitted)					
	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.
Aden and Dependencies	79-54	82-26	80-83	78-50	90-48	51-63
Ceylon	22	48	18	14	46	22
Straits Settlements	98	1-00	1-03	64	1-66	81
China { Hongkong, &c.	3-11	71	1-43	40	79	61
{ Shanghai, &c.	32-60	30-18	15-67	1-27	8-65	5-99
Mauritius and Dependencies	14-96	14-83	14-94	14-17	17-12	11-11
Zanzibar and Pemba	9-31	12-09	12-23	11-25	6-00	4-38
East Africa Protectorate	20-47	28-64	35-88	30-55	37-08	29-77
Seychelles	08	28	20	67	44	04
Turkey—Asiatic	88-09	86-34	181-16	57-11	57-14	102-29
Arabia—Bahrein, Muscat, etc.	7-94	13-08	25-51	21-08	17-66	11-57
Persia	23-85	53-33	26-41	40-46	36-31	36-69
Egypt	22-15	17-51	19-39	19-51	10-42	19-75
Madagascar	16	45	04	22	04	16
Siam	17-80	18-64	16-38	13-11	21-32	21-27
Abyssinia ... ..	.....	.....	.....	1-75	.....	.....
Portuguese East Africa	49-34	64-19	53-50	36-58	46-36	45-01
German	39-89	58-77	53-61	55-40	69-41	56-89
Italian	16-71	14-46	13-05	5-83	3-87	4-98
French Somali Land ... ..	.....	.....	.....	.....	37	18-36
Other Countries	1-52	38	1-37	24	04	06
Total Grey Piece-goods	428-72	500-62	552-19	386-88	426-02	420-49
Value in Lakhs of Rs.	62-24	72-41	82-27	60-62	69-92	67-33

STATISTICS OF COTTON SPINNING AND WEAVING IN THE INDIAN MILLS in the twelve months, April 1914 to March 1915, compared with the corresponding periods of 1912-1913 and 1913-1914.

No. 1.—ABSTRACT STATEMENT of the QUANTITY (in pounds) of YARN Spun.

	TWELVE MONTHS, APRIL TO MARCH.		
	1912-13.	1913-14.	1914-15.
British India.			
Bombay	485,566,927	473,682,975	448,556,493
Madras	44,974,138	44,673,626	43,031,691
Bengal	37,355,113	33,219,947	31,708,798
United Provinces of Agra and Oudh (also Ajmer-Merwara)	43,765,289	44,468,505	50,281,155
Punjab (including Delhi)	5,333,339	6,274,754	6,213,549
Central Provinces and Berar	33,581,772	36,532,870	34,565,150
TOTAL ...	650,582,578	644,852,677	614,956,316
Foreign Territory.			
Native States of Indore, Mysore, Baroda, Nandgaon, Bhavnagar, Hyderabad, Wadhwan, Kishengarh, (a) Ujjain, Kolhapur (b) and Pondicherry (c) ...	37,890,324	37,924,174	36,946,491
GRAND TOTAL ...	688,472,902	682,776,851	651,903,307

(a) The mill in Kishengarh was burnt down in December 1914.

(b) The mill in Kolhapur has stopped work from July 1914.

(c) Including the production of one mill only.

No. 2.—ABSTRACT STATEMENT of the QUANTITY of WOVEN GOODS Produced.

[N.B.—The weight in pounds represents the weight of all woven goods; the measure in yards relates only to grey and coloured piece-goods and is estimated from the poundage on a conventional basis, the figures in dozens relate to grey and coloured goods other than piece-goods and to hosiery, the weight of these being estimated mainly on a conventional basis and included in the poundage.]

	TWELVE MONTHS, APRIL TO MARCH.		
	1912-13.	1913-14.	1914-15.
British India.			
Bombay	pounds. 230,208,530	218,042,731	222,159,912
	yards. 1,001,664,978	941,672,526	926,589,896
	dozens. 485,076	701,305	500,180
Madras	pounds. 9,178,207	9,358,435	8,992,268
	yards. 30,909,866	31,786,940	30,112,721
	dozens. 63,290	42,330	73,975
Bengal	pounds. 4,008,266	3,437,088	2,707,983
	yards. 20,980,285	19,361,356	15,002,257
	dozens. 10,450,689	10,943,613	11,764,287
United Provinces of Agra and Oudh (also Ajmer-Merwara)	pounds. 45,111,390	45,763,897	41,912,475
	yards. 84,631	96,230	65,647
	dozens. 859,285	1,078,498	578,697
Punjab (including Delhi)	pounds. 3,806,223	3,856,947	1,913,393
	yards. 5,635	8,110	6,196
	dozens. 12,863,006	13,494,637	11,937,237
Central Provinces and Berar	pounds. 42,653,903	51,306,725	46,362,534
	yards. 9,565	11,316	10,092
	dozens. 267,662,983	256,406,002	258,180,384
TOTAL ...	pounds. 1,151,126,645	1,098,748,461	1,061,893,776
	yards. 648,197	854,291	666,090
	dozens. 2,885,471,002	2,743,988,550	2,770,005,900
Foreign Territory.			
Native States of Indore, Mysore, Baroda, Nandgaon, Bhavnagar, Hyderabad, Wadhwan, Kishengarh (a) and Pondicherry (b)	pounds. 17,808,019	17,982,548	18,325,516
	yards. 69,315,900	70,543,127	73,314,176
	dozens. 51,735	50,760	35,768
GRAND TOTAL ...	pounds. 2,885,471,002	2,743,988,550	2,770,005,900
	yards. 1,220,442,545	1,164,291,588	1,135,707,952
	dozens. 699,932	905,051	691,858

(a) The mill in Kishengarh was burnt down in December 1914.

(b) Including the production of one mill only.

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun.

Counts or Number.	TWELVE MONTHS, APRIL TO MARCH.			Counts or Number.	TWELVE MONTHS, APRIL TO MARCH.		
	1912-13.	1913-14.	1914-15.		1912-13.	1913-14.	1914-15.
BOMBAY PRESIDENCY.				BOMBAY ISLAND.			
1	....	....	....	1	....	....	....
2	3,596	....	17,303	2	....	....	17,593
3	1,446,598	1,470,129	1,191,610	3	1,410,647	1,466,597	1,191,317
4	2,077,688	2,336,771	2,207,164	4	1,756,109	2,022,455	1,807,918
5	214,270	379,044	692,540	5	193,301	374,368	693,472
6	7,194,884	7,067,425	8,625,164	6	6,705,658	6,824,336	7,467,698
7	9,314,284	10,660,666	15,094,384	7	8,414,980	9,328,384	14,203,009
8	3,008,273	2,905,680	3,116,589	8	2,755,243	2,940,900	2,826,268
9	8,330,377	7,601,604	4,265,526	9	1,912,221	2,366,111	2,755,246
10	74,814,710	66,551,623	69,805,589	10	73,262,227	63,238,611	56,867,531
TOTAL Nos. 1 to 10	101,394,783	95,002,420	94,724,256	TOTAL Nos. 1 to 10	95,429,441	89,361,691	89,210,969
11	28,870,740	37,806,979	31,606,726	11	37,660,902	31,172,119	30,629,136
12	46,679,445	46,228,071	31,206,072	12	45,126,124	44,577,124	30,293,832
13	6,368,067	6,390,333	6,230,184	13	4,464,637	5,091,532	5,117,069
14	10,232,643	8,769,884	11,403,836	14	8,703,438	7,105,295	9,668,698
15	2,000,175	1,460,677	1,639,414	15	1,513,120	968,293	1,643,828
16	16,823,889	19,679,350	17,401,336	16	12,739,305	15,147,916	12,841,900
17	3,320,666	3,847,640	2,704,124	17	2,808,470	2,617,076	1,684,121
18	11,172,829	10,373,533	12,428,988	18	8,811,931	7,962,725	8,139,696
19	1,690,437	1,046,865	921,443	19	659,879	613,880	613,880
20	107,500,436	101,130,733	97,851,237	20	75,511,336	70,671,328	62,196,948
TOTAL Nos. 11 to 20	234,676,017	231,102,911	213,960,169	TOTAL Nos. 11 to 20	188,102,363	168,216,653	163,957,978
21	20,635,925	23,107,948	30,506,714	21	13,766,847	15,917,969	11,465,706
22	34,611,325	40,747,705	36,301,698	22	20,006,237	22,063,338	19,371,021
23	5,362,824	4,023,871	4,008,564	23	2,925,530	1,064,075	1,291,016
24	32,445,601	39,900,313	28,913,300	24	21,754,644	21,530,259	20,177,478
25	2,122,083	1,932,100	835,806	25	891,152	164,326	286,979
26	3,204,410	3,898,728	7,678,970	26	5,549,858	6,846,124	4,807,671
27	1,386,136	1,264,596	1,245,131	27	629,027	517,243	729,366
28	5,741,911	5,399,139	5,060,384	28	4,330,414	3,844,366	3,836,281
29	406,100	324,031	451,137	29	....	....	26,202
30	16,481,312	17,882,022	16,715,437	30	5,587,025	5,402,365	4,938,313
TOTAL Nos. 21 to 30	124,997,657	133,670,971	123,134,061	TOTAL Nos. 21 to 30	74,860,464	74,701,131	66,563,073
31	126,705	192,368	871,261	31	15,800	435	60,169
32	4,927,747	7,366,700	6,921,923	32	5,030,746	1,672,748	2,028,777
33	2,124,923	1,164,179	1,306,664	33	....	....	....
34	4,121,959	3,369,672	3,212,179	34	1,029,500	657,221	841,979
35	249,213	663,749	571,280	35	....	235	....
36	1,970,637	2,217,322	1,993,412	36	507,076	623,780	775,737
37	170,013	16,577	82,196	37	10,028	16,760	23,437
38	675,268	116,729	90,773	38	877,354	80,683	14,023
39	12,368	733	22,442	39	....	....	....
40	8,325,642	2,161,973	1,174,707	40	890,117	371,725	273,764
TOTAL Nos. 31 to 40	17,712,972	17,372,729	15,436,361	TOTAL Nos. 31 to 40	4,420,761	3,826,673	4,016,808
Above 40	2,231,409	2,282,328	1,082,692	Above 40	837,260	822,237	469,962
Wastes, etc.	54,120	142,608	135,191	Wastes, etc.	40,701	51,911	105,902
TOTAL ...	438,568,337	479,622,976	448,536,498	TOTAL ...	341,661,000	324,624,696	323,133,229

NOTE.—The suburb of Coorla, in the Thana district, is treated for statistical purposes as part of the Island of Bombay.

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS
(or numbers) of YARN Spun—continued.

Count or Number.	TWELVE MONTHS, APRIL TO MARCH.			Count or Number.	TWELVE MONTHS, APRIL TO MARCH.		
	1913-14.	1913-14.	1914-15.		1913-14.	1913-14.	1914-15.
AHMEDABAD.				MADRAS.			
1	....	....	....	1	85,474	84,440	46,898
2	....	....	....	2	....	....	87,279
3	....	....	302	3	....	....	....
4	....	....	....	4	268,675	241,222	423,501
5	14,989	....	....	5	....	....	1,028
6	30,891	21,785	22,876	6	168,453	160,818	407,219
7	678,461	878,999	816,166	7	....	....	42,075
8	2,172	14,820	78,884	8	605,607	289,983	1,094,941
9	886,764	678,128	1,028,403	9	....	6,622	5,220
10	280,688	210,721	490,724	10	1,197,417	717,121	683,700
TOTAL Nos. 1 to 10	2,088,676	1,958,604	2,269,905	TOTAL Nos. 1 to 10	2,174,822	1,489,940	2,758,593
11	678,869	890,856	808,905	11	116,086	27,818	82,092
12	171,484	227,923	1,500,008	12	1,861,505	1,290,822	1,945,016
13	1,497,682	918,737	742,804	13	209,007	273,228	178,494
14	829,854	999,839	1,181,910	14	8,276,878	8,346,877	2,864,190
15	205,860	61,816	148,029	15	1,592,072	1,781,081	1,496,482
16	1,160,710	1,840,979	1,466,150	16	2,337,119	1,689,127	1,284,266
17	773,827	889,183	874,286	17	1,202,154	1,639,672	1,298,247
18	938,928	944,969	8,045,723	18	8,164,841	2,467,227	1,978,998
19	180,847	272,838	232,008	19	8,998,530	3,740,617	3,501,224
20	9,258,767	6,776,148	12,928,584	20	14,847,484	16,170,073	12,618,390
TOTAL Nos. 11 to 20	18,688,678	14,212,447	21,611,020	TOTAL Nos. 11 to 20	22,618,714	21,279,081	27,028,402
21	4,849,908	6,618,766	6,229,780	21	2,777,288	4,207,198	4,413,400
22	10,157,276	18,862,138	13,611,378	22	1,064,181	1,914,168	1,672,720
23	2,808,622	1,949,777	2,296,316	23	16,814	61,697	11,684
24	7,265,267	6,217,659	8,938,821	24	1,858,467	1,764,487	1,441,410
25	1,446,922	1,314,990	377,678	25	1,800	1,500	...
26	2,627,601	2,867,241	2,127,660	26	1,484,629	1,474,721	1,337,331
27	822,411	478,138	263,883	27	....	....	4,252
28	1,067,264	1,202,907	1,148,368	28	876,284	661,861	773,661
29	181,761	50,628	198,851	29	....	....	....
30	6,841,822	7,028,250	6,691,765	30	1,674,668	1,616,906	1,815,518
TOTAL Nos. 21 to 30	57,049,666	29,943,101	28,011,871	TOTAL Nos. 21 to 30	9,766,143	11,467,684	11,478,603
31	38,122	78,364	801,897	31	300	....	1,696
32	2,188,247	4,840,278	2,606,173	32	16,602	16,449	18,391
33	2,194,838	1,126,788	1,292,108	33	....	....	....
34	2,930,140	2,374,331	2,198,368	34	614	....	1,194
35	840,213	601,849	671,830	35	....	....	....
36	1,786,610	1,484,087	1,066,804	36	....	....	1,321
37	167,727	..	2,520	37	....	....	....
38	296,048	322,869	12,626	38	....	....	....
39	8,177	....	....	39	....	....	....
40	2,434,676	1,248,809	817,034	40	378,994	801,686	825,508
TOTAL Nos. 31 to 40	11,637,071	11,680,406	4,270,046	TOTAL Nos. 31 to 40	888,816	318,922	918,317
Above 40	1,373,446	888,218	332,203	Above 40	160,339	128,419	674,345
Waste, etc.	1,682	144,969	4,713	TOTAL	44,074,128	44,673,626	63,030,521
TOTAL	67,610,194	68,937,737	72,487,652				

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS (or numbers) of YARN Spun—continued.

Count or Number.	TWELVE MONTHS, APRIL TO MARCH.			Count or Number.	TWELVE MONTHS, APRIL TO MARCH.		
	1912-13.	1913-14.	1914-15.		1912-13.	1913-14.	1914-15.
BENGAL.				UNITED PROVINCES OF AGRA & OUDH (ALSO AJMER-MERWARA).			
1	....	478	....	1	....	....	....
2	169,391	246,296	213,630	2	....	....	....
3	407	....	295	3	....	....	....
4	..	469	69	4	1,126,546	918,513	1,032,003
5	540	205	....	5	178,164	20,979	1,374
6	418,575	173,313	264,501	6	229,293	823,986	728,068
7	434,815	262,220	790,450	7	711,976	1,052,268	820,313
8	229,850	210,149	233,228	8	418,642	704,297	871,007
9	211,267	220,646	552,225	9	207,431	471,516	226,700
10	7,169,878	9,509,427	2,986,266	10	2,020,210	6,339,173	11,230,913
TOTAL Nos. 1 to 10	8,227,132	6,768,428	5,084,904	TOTAL Nos. 1 to 10	11,832,861	12,444,717	16,081,296
11	3,37,128	2,478,586	2,200,257	11	3,149,199	3,501,039	2,312,177
12	2,673,148	3,050,099	2,164,221	12	2,733,213	3,008,218	3,254,823
13	1,663,628	1,502,221	1,29,394	13	2,361,173	2,822,908	2,400,573
14	4,890,142	2,303,412	4,707,375	14	3,524,461	4,747,424	5,014,894
15	61,443	761,077	261,831	15	2,232,277	2,006,201	3,545,890
16	2,776,774	4,238,366	2,640,747	16	1,077,422	6,759,149	7,922,293
17	2,111,716	2,48,428	1,867,487	17	1,785,979	2,449,812	3,472,007
18	981,266	1,138,393	1,311,538	18	2,261,227	2,500,178	2,863,669
19	1,003,742	627,297	1,002,730	19	1,002,267	920,413	729,202
20	1,220,627	1,912,426	1,527,574	20	1,417,159	1,004,282	1,111,006
TOTAL Nos. 11 to 20	23,629,426	21,611,613	20,676,470	TOTAL Nos. 11 to 20	30,142,229	30,119,126	36,918,414
21	1,119,408	767,926	1,373,977	21	72,200	18,506	113,069
22	1,697,394	1,183,664	1,670,388	22	775,638	840,599	823,706
23	282,277	416,224	590,482	23	1,755	30,028	17,111
24	281,297	1,105,255	775,655	24	62,222	242,789	129,421
25	19,922	103,122	220,222	25	66,471	66,028	50,025
26	98,544	117,176	246,687	26	169,406	24,028	2,104
27	640,257	270,524	620,127	27	....	....	....
28	42,706	816,111	....	28	48,918	79,245	29,364
29	....	4,016	....	29	....	....	....
30	317,270	120,222	127,222	30	6,627	16,227	12,122
TOTAL Nos. 21 to 30	4,460,222	4,297,222	5,734,222	TOTAL Nos. 21 to 30	1,186,464	1,298,127	910,227
31	82,101	142,204	....	31	..	....	....
32	43,448	82,212	21,576	32	10,271	....	....
33	213	4,607	....	33	..	....	....
34	805	129	....	34	....	29,712	1,023
35	....	....	....	35	....	....	....
36	....	....	6,222	36	708	32,866	20,107
37	....	....	....	37	....	....	..
38	....	....	....	38	85,206	19,926	4,754
39	....	....	....	39	....	....	....
40	212,215	25,222	222,722	40	44	2,272	....
TOTAL Nos. 31 to 40	226,222	246,222	262,222	TOTAL Nos. 31 to 40	66,224	76,222	26,222
Above 40	69,725	2,220	....	Above 40	119	....	....
Wastes, etc.	....	....	....	Wastes, etc.	52,222	53,109	29,209
TOTAL ..	27,222,113	21,219,547	21,708,728	TOTAL ..	42,762,222	44,466,209	50,222,122

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS
(or numbers) of YARN Spun—continued.

Count or Number.	TWELVE MONTHS, APRIL TO MARCH.			Count or Number.	TWELVE MONTHS, APRIL TO MARCH.		
	1913-14.	1913-14.	1914-15.		1913-14.	1913-14.	1914-15.
PUNJAB (including DELHI).				CENTRAL PROVINCES and BERAR.			
1	....	....	....	1	124,972	69,386	62,439
2	....	....	2,395	2	132,713	92,297	102,905
3	....	299	758	3	15,568	52,481	24,439
4	89,884	44,741	....	4	181,254	120,940	260,993
5	....	1,218	....	5	6,719	2,711	64,798
6	....	5,004	46,822	6	746,232	916,440	927,655
7	140,969	27,308	22,634	7	1,126,705	1,123,008	1,769,019
8	....	10,603	27,268	8	146,800	199,666	221,389
9	111,942	78,820	172,121	9	1,217,715	623,380	1,022,149
10	827,018	194,022	97,953	10	2,074,102	6,232,446	2,091,653
TOTAL Nos. 1 to 10	622,808	379,712	374,007	TOTAL Nos. 1 to 10	7,672,781	2,648,696	7,548,685
11	1,210,161	1,615,241	1,604,268	11	2,222,451	2,890,165	3,778,519
12	514,234	120,812	126,108	12	5,266,225	4,156,089	4,670,622
13	889,097	1,000,990	1,189,407	13	1,223,548	1,241,546	1,295,556
14	891,458	839,731	1,183,344	14	2,642,982	2,761,928	2,821,094
15	310,167	268,730	146,929	15	318,366	659,782	666,707
16	728,988	602,728	987,302	16	3,806,138	3,620,940	2,561,479
17	164,425	390,984	220,668	17	407,179	422,427	393,273
18	23,636	87,368	23,827	18	926,412	827,586	782,464
19	47,742	....	....	19	17,942	54,848	249,063
20	99,512	231,811	240,482	20	2,700,100	2,860,856	2,737,529
TOTAL Nos. 11 to 20	4,676,998	6,277,085	5,302,116	TOTAL Nos. 11 to 20	20,228,057	20,614,374	21,033,353
21	....	....	....	21	671,202	878,004	878,570
22	....	72,815	27,701	22	977,036	862,277	860,721
23	401	....	....	23	6,284	15,284	6,945
24	....	96,822	2,066	24	2,081,234	2,304,162	2,925,415
25	....	....	....	25	560	637	2,809
26	....	47,970	84,768	26	273,223	218,228	69,223
27	....	....	20,027	27	1,169	6,862	47,308
28	....	12,998	104,301	28	64,378	179,430	68,810
29	....	....	46,722	29	....	227	3,774
30	4,350	89,194	41,872	30	228,018	321,079	200,704
TOTAL Nos. 21 to 30	1,751	310,801	241,216	TOTAL Nos. 21 to 30	4,905,915	6,802,211	4,812,398
31	....	....	63,333	31	....	....	....
32	....	16,465	265,617	32	425,607	237,660	479,937
33	....	93,454	....	33	....	....	....
34	....	....	4,613	34	168,610	219,487	203,117
35	....	....	2,646	35	....	....	....
36	....	....	....	36	....	....	110,296
37	....	....	....	37	....	....	....
38	....	....	....	38	....	....	....
39	....	14,480	4,135	39	....	42	8,729
40	....	44,283	96,382	40	87,071	104,816	101,443
TOTAL Nos. 31 to 40	....	291,234	479,178	TOTAL Nos. 31 to 40	682,068	658,515	1,001,022
Above 40	19,455	67,220	119,033	Above 40	85,821	105,097	123,217
Waste, etc.	16,114	2,902	..	Waste, etc.	....	..	825
TOTAL ..	8,329,239	6,274,754	6,612,449	TOTAL	32,911,722	26,632,270	24,565,153

No. 3.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS
(or numbers) of YARN Spun—concluded.

TOTAL OF BRITISH INDIA.

Count or Number.	TWELVE MONTHS, APRIL TO MARCH.		
	1912-13.	1913-14.	1914-15.
1	207,446	151,155	112,338
2	506,900	338,602	495,582
3	1,462,603	1,531,909	1,227,109
4	3,685,241	2,637,688	3,914,315
5	394,722	468,758	765,749
6	9,465,408	9,157,583	10,971,899
7	11,729,658	13,226,521	18,546,824
8	4,528,278	4,380,387	5,572,460
9	4,979,022	5,201,478	6,334,246
10	95,472,821	87,654,281	77,562,078
TOTAL Nos. 1 to 10 ...	182,431,997	125,721,512	125,503,200
11	38,761,015	41,799,126	41,956,444
12	60,677,990	57,937,092	44,697,263
13	12,973,989	13,041,378	12,584,188
14	27,007,416	28,981,269	27,656,486
15	7,165,490	7,486,528	8,715,368
16	84,849,808	87,392,569	83,820,288
17	9,608,049	10,849,898	9,950,702
18	18,649,413	17,399,867	19,474,548
19	7,379,880	6,492,740	6,602,677
20	129,176,561	129,557,820	116,655,828
TOTAL Nos. 11 to 20 ...	846,054,071	839,958,182	822,112,587
21	25,217,628	29,137,467	27,167,670
22	89,985,924	45,651,926	42,561,024
23	6,261,166	4,539,464	4,738,586
24	36,930,811	35,504,328	34,189,726
25	2,211,972	2,168,937	819,058
26	11,321,908	10,877,921	9,422,093
27	2,038,252	1,634,172	1,951,885
28	6,471,332	6,448,772	6,095,909
29	406,100	328,204	661,633
30	18,610,310	20,360,706	19,605,845
TOTAL Nos. 21 to 30 ...	149,365,398	156,336,917	144,463,679
31	175,106	842,907	938,892
32	5,314,575	7,821,485	7,007,626
33	2,125,305	1,244,210	1,205,664
34	4,281,318	3,616,066	3,522,466
35	849,213	688,749	673,976
36	1,971,380	2,475,578	2,141,869
37	170,013	18,577	32,198
38	735,064	136,707	104,271
39	12,288	733	67,597
40	4,009,366	2,651,172	2,504,798
TOTAL Nos. 31 to 40 ...	19,144,376	18,971,184	18,198,857
Above 40 ...	2,935,781	2,686,284	2,213,277
Wastes, etc. ...	650,955	478,598	475,316
TOTAL ...	650,682,578	644,852,677	614,956,816

No. 4.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS
(or numbers) of YARN Spun.

NATIVE STATES.—(a)

Count or Number.	TWELVE MONTHS, APRIL TO MARCH.		
	1912-13.	1913-14.	1914-15.
1	.....	.....	.....
2	17,225	9,980	20,860
3	177,309	220,522	214,616
4	91,011	72,682	65,942
5	1,465	4,414	6,280
6	782,787	1,409,618	1,314,758
7	996,465	787,087	1,022,918
8	772,408	860,987	889,417
9	244,560	244,042	199,107
10	1,487,202	1,752,944	1,741,124
TOTAL Nos. 1 to 10	4,570,277	5,062,286	5,474,922
11	2,162,780	2,135,648	1,547,748
12	1,124,091	981,781	982,089
13	766,673	810,565	546,528
14	3,195,093	3,348,408	4,000,909
15	671,187	556,461	659,478
16	2,467,760	1,981,268	2,460,140
17	366,482	395,242	220,541
18	8,021,156	8,288,410	8,181,692
19	647,026	494,097	762,884
20	8,920,113	8,028,887	6,811,285
TOTAL Nos. 11 to 20	22,839,211	21,950,782	21,178,289
21	1,283,702	1,378,881	1,741,506
22	3,267,681	3,605,968	3,153,489
23	791,795	410,128	825,985
24	1,460,103	1,514,411	1,562,722
25	78,400	98,945	233,875
26	657,682	1,126,249	994,869
27	693,645	891,915	851,885
28	631,448	790,860	801,117
29	43,521	46,770	1,008
30	573,586	799,577	640,259
TOTAL Nos. 21 to 30	9,481,418	10,157,690	9,776,695
31	.....	5,137	2,593
32	186,541	222,316	215,648
33	368	43,926	13,078
34	226,347	214,481	186,182
35	11,786	34,017	49,422
36	16,486	81,846	3,496
37	1,531	.....	.....
38	.....	7,301	.....
39	204	.....	.....
40	50,111	182,090	25,365
TOTAL Nos. 31 to 40	497,334	741,114	602,344
Above 40	2,099	12,402	19,991
TOTAL	87,890,324	87,914,174	86,946,491

(a) See notes at foot of Table No. 1.

No. 5.—DETAILED STATEMENT of the QUANTITY (in pounds) and the COUNTS
(or numbers) of YARN Spun.

GRAND TOTAL, INDIA (British India and Native States.)

Count or Number.	TWELVE MONTHS, APRIL TO MARCH.		
	1913-13.	1913-14.	1914-15.
1	207,446	151,165	112,888
2	624,125	848,642	516,442
3	1,639,813	1,752,431	1,441,625
4	5,776,255	8,780,880	8,980,257
5	396,187	465,167	772,029
6	10,318,140	10,267,601	12,288,657
7	12,726,028	14,012,608	19,569,742
8	5,500,681	5,191,824	6,461,877
9	5,228,582	5,445,515	6,598,938
10	96,560,028	89,416,225	79,803,202
TOTAL Nos. 1 to 10	187,002,274	150,788,748	180,978,122
11	40,920,745	45,234,769	48,504,192
12	61,802,081	58,888,873	45,679,352
13	13,670,572	13,851,838	13,159,716
14	80,212,699	27,222,677	81,666,845
15	7,880,877	8,042,989	9,374,736
16	37,903,068	59,863,857	86,280,878
17	9,969,531	11,245,640	10,171,048
18	21,670,669	20,687,777	22,656,444
19	7,926,856	6,986,887	7,365,511
20	188,096,674	181,586,657	123,467,113
TOTAL Nos. 11 to 20	369,338,282	361,908,914	343,285,826
21	26,501,325	50,516,948	28,909,176
22	43,265,555	49,257,894	45,714,613
23	7,052,981	4,949,587	5,064,771
24	88,890,914	87,018,639	85,742,448
25	2,390,372	3,952,902	1,054,938
26	12,879,490	12,004,161	10,416,462
27	2,781,897	2,026,087	2,358,770
28	7,192,730	7,489,632	6,807,026
29	449,821	889,074	502,641
30	19,188,896	21,160,288	19,346,134
TOTAL Nos. 21 to 30	168,886,811	166,994,607	166,280,374
31	194,129	348,044	94,085
32	5,484,340	8,348,801	7,222,371
33	2,146,945	1,398,138	1,322,702
34	4,492,172	3,220,547	3,708,648
35	356,982	697,766	628,194
36	1,987,875	2,507,424	2,145,865
37	171,266	18,577	32,198
38	735,064	144,008	104,271
39	12,790	733	67,697
40	4,060,077	2,338,262	2,531,663
TOTAL Nos. 31 to 40	19,641,700	19,712,298	18,701,101
Above 40	2,937,880	2,698,686	2,232,668
Wastes, etc.	660,955	672,598	475,216
TOTAL	688,472,932	632,776,851	651,903,307

No. 6.—*DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced.*

BOMBAY PRESIDENCY.

Description.	TWELVE MONTHS, APRIL TO MARCH.		
	1913-13.	1913-14.	1914-15.
<i>Grey and bleached piece-goods—</i>			
Chadars	pounds 21,954,846	20,036,108	19,737,641
	yards 66,042,568	59,569,202	57,088,674
Dhatis	pounds 48,867,784	47,990,508	47,542,456
	yards 236,487,400	227,753,193	218,696,430
Drills and jeans	pounds 4,005,496	3,986,178	4,834,878
	yards 16,798,308	16,326,067	18,184,476
Cambrics and lawns	pounds 989,308	689,287	496,303
	yards 6,860,344	4,804,776	3,489,965
Printers	pounds 4,956,092	5,352,197	5,269,102
	yards 29,131,945	24,427,716	23,211,601
Shirtings and longcloth	pounds 60,856,551	58,922,499	67,586,240
	yards 268,483,940	268,349,945	285,526,761
T-cloth, domestics and sheetings	pounds 22,599,984	19,318,305	20,706,944
	yards 105,469,122	89,006,767	96,093,385
Tent cloth	pounds 915,182	863,393	1,775,942
	yards 1,924,186	1,878,120	8,625,696
Other sorts	pounds 8,252,143	8,694,286	4,271,829
	yards 24,555,903	16,446,561	17,777,163
TOTAL	pounds 188,376,358	160,163,756	172,220,432
	yards 798,667,178	696,114,947	718,669,550
<i>Coloured piece-goods</i>	pounds 80,163,815	55,870,534	48,362,950
	yards 269,197,608	243,558,349	207,919,846
<i>Grey and coloured goods other than piece-goods</i>	pounds 1,220,639	1,607,639	1,170,365
	dozens 250,929	429,456	232,926
<i>Hosiery</i>	pounds 849,878	322,287	208,884
	dozens 294,454	218,819	147,254
<i>Miscellaneous</i>	pounds 53,968	78,565	201,781
	dozens 230,208,530	218,042,781	222,169,912
TOTAL BOMBAY	yards 1,001,864,986	941,672,596	926,569,896
	dozens 485,078	701,305	500,180

BOMBAY ISLAND.

Description	TWELVE MONTHS, APRIL TO MARCH.		
	1912-13.	1913-14.	1914-15.
<i>Grey and bleached piece-goods—</i>			
Chadars	pounds 13,878,161	12,435,644	10,147,706
	yards 39,726,363	35,962,094	28,519,378
Dhatis	pounds 11,514,980	12,049,376	10,353,617
	yards 54,700,508	56,703,489	46,725,856
Drills and jeans	pounds 3,779,480	3,872,480	4,670,659
	yards 14,865,439	14,858,332	17,567,141
Cambrics and lawns	pounds 853,617	515,714	398,954
	yards 5,950,877	3,636,198	2,880,947
Printers	pounds 23,983	51,304	14,811
	yards 122,822	277,944	78,828
Shirtings and longcloth	pounds 48,487,589	42,070,159	46,219,796
	yards 198,954,840	189,617,397	201,048,445
T-cloth, domestics and sheetings	pounds 19,863,703	16,927,296	17,669,711
	yards 92,935,249	78,821,962	84,275,266
Tent cloth	pounds 794,688	719,737	1,533,723
	yards 1,683,721	1,535,211	3,103,090
Other sorts	pounds 1,418,264	1,590,888	1,577,124
	yards 6,792,216	7,941,122	7,417,566
TOTAL	pounds 95,609,415	90,226,608	92,580,611
	yards 415,732,035	388,833,689	391,866,517
<i>Coloured piece-goods</i>	pounds 51,819,625	46,451,349	39,311,202
	yards 226,369,675	203,531,319	170,436,350
<i>Grey and coloured goods other than piece-goods.</i>	pounds 1,209,325	1,582,374	1,145,970
	dozens 246,206	478,051	348,126
<i>Hosiery</i>	pounds 254,736	231,011	123,250
	dozens 180,685	178,865	103,954
<i>Miscellaneous</i>	pounds 93,968	78,565	201,784
	yards 148,987,129	138,569,907	133,362,817
TOTAL BOMBAY ISLAND...	yards 642,101,710	592,365,008	562,322,867
	dozens 427,041	636,916	452,080

Note.—The suburb of Coorla, in the Thana District, is treated for statistical purposes as part of the Island of Bombay.

No. 6.—*DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—continued.*

AHMEDABAD.

Description of Goods.	TWELVE MONTHS, APRIL TO MARCH.			
	1912-13.	1913-14.	1914-15.	
<i>Grey and bleached piece-goods—</i>				
Chadars	pounds	7,313,320	6,850,071	8,635,693
	yards	24,168,986	21,288,977	25,628,262
Dhutis	pounds	31,155,163	28,760,888	30,775,257
	yards	155,366,488	142,676,817	140,117,125
Drills and jeans	pounds	88,621	61,812	88,272
	yards	278,288	798,111	398,921
Cambrics and lawns	pounds	102,175	73,704	28,186
	yards	648,562	472,670	162,055
Printers	pounds	3,193,736	3,204,853	3,890,585
	yards	15,484,406	15,390,079	14,925,366
Shirtings and longcloth	pounds	10,592,197	10,517,431	15,431,280
	yards	46,175,877	46,788,540	65,838,066
T-cloth, domestics and sheetings	pounds	2,374,874	2,059,258	2,774,872
	yards	10,836,689	8,971,264	10,688,934
Tent cloth	pounds	191	8,940	139,193
	yards	890	7,960	282,165
Other sorts	pounds	1,069,460	1,235,975	2,024,769
	yards	5,038,791	5,601,197	8,409,329
TOTAL	pounds	55,889,737	52,747,432	68,288,031
	yards	257,996,477	241,944,715	286,445,228
<i>Coloured piece-goods</i>	pounds	2,592,737	2,484,186	2,208,092
	yards	12,907,321	12,229,422	10,568,117
<i>Grey and coloured goods, other than piece-goods.</i>	pounds	4,322	3,732	4,227
	dozens	2,610	1,003	2,184
<i>Hosiery</i>	pounds	95,074	91,225	80,632
	dozens	53,616	39,955	43,295
<i>Miscellaneous</i>	pounds	.....	.....	.....
TOTAL, AHMEDABAD	yards	58,582,470	55,326,545	65,580,932
	dozens	270,903,798	254,174,137	277,013,340
	dozens	56,226	40,958	45,479

MADRAS.

Description of Goods.	TWELVE MONTHS, APRIL TO MARCH.			
	1912-13.	1913-14.	1914-15.	
<i>Grey and bleached piece-goods—</i>				
Chadars	pounds	229,119	377,667	311,631
	yards	481,203	961,147	428,759
Dhutis	pounds	568,375	668,843	623,055
	yards	2,040,716	2,585,776	2,521,659
Drills and jeans	pounds	1,674,047	1,888,231	1,366,164
	yards	5,982,101	4,888,180	4,944,172
Cambrics and lawns	pounds	.....	920	.....
	yards	.....	3,734	.....
Printers	pounds	1,820	269	.....
	yards	5,289	1,010	.....
Shirtings and longcloth	pounds	31,583	20,638	15,337
	yards	147,652	99,190	56,612
T-cloth, domestics and sheetings	pounds	377,109	210,632	235,123
	yards	1,184,760	695,598	779,699
Tent cloth	pounds	11,667	20,159	39,127
	yards	16,901	30,330	69,318
Other sorts	pounds	462,928	433,151	341,080
	yards	1,616,289	1,455,378	1,319,258
TOTAL	pounds	3,351,743	3,115,568	2,833,642
	yards	11,474,760	10,918,322	10,118,368
<i>Coloured piece-goods</i>	pounds	5,570,333	6,070,064	5,560,322
	yards	19,435,106	20,668,718	19,994,855
<i>Grey and coloured goods, other than piece-goods...</i>	pounds	356,069	172,475	216,363
	dozens	63,290	42,330	73,976
<i>Hosiery</i>	pounds	.....	.....	.....
<i>Miscellaneous</i>	yards	63	398	1,356
TOTAL, MADRAS	yards	9,178,207	8,358,435	8,992,265
	dozens	30,909,666	31,786,940	30,113,721
	dozens	63,290	42,330	73,975

N^o. 6.—*DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—continued.*

BENGAL.

Description of Goods.	TWELVE MONTHS, APRIL TO MARCH.		
	1912-13.	1913-14.	1914-15.
<i>Grey and bleached piece-goods—</i>			
Chadars	{ pounds 296,655	228,201	108,824
	{ yards 1,183,031	895,870	442,226
Dhutis	{ pounds 1,460,901	1,295,481	775,838
	{ yards 8,820,910	8,423,895	5,284,570
Drills and jeans	{ pounds 54,008	2,678	6,766
	{ yards 199,539	7,256	22,537
Cambrics and lawns	{ pounds .....	.....	.....
	{ yards .....	.....	.....
Printers	{ pounds 935	.....	177
	{ yards 6,840	.....	879
Shirtings and longcloth	{ pounds 652,760	508,321	572,601
	{ yards 3,058,568	2,643,990	2,749,086
T-cloth, domestics and sheetings	{ pounds 1,409,723	1,378,008	1,066,924
	{ yards 7,391,149	7,053,207	5,546,149
Tent cloth	{ pounds 202	148	2,776
	{ yards 456	312	3,962
Other sorts... ..	{ pounds 18,528	19,095	69,909
	{ yards 107,468	176,166	771,374
TOTAL	{ pounds 8,887,687	8,427,477	3,603,920
	{ yards 30,717,851	19,200,496	14,769,628
<i>Coloured piece-goods</i>	{ pounds 52,641	82,943	49,519
	{ yards 262,434	160,860	282,634
<i>Grey and coloured goods other than piece-goods</i>	{ pounds .....	.....	.....
	{ dozens .....	.....	.....
<i>Hosiery</i>	{ pounds 67,935	26,069	55,564
<i>Miscellaneous</i>	{ pounds .....	.....	.....
TOTAL, BENGAL	{ pounds 4,008,966	3,487,088	2,707,988
	{ yards 30,980,283	19,381,356	15,002,267

UNITED PROVINCES of AGRA and OUDH (also AJMER-MERWARA).

Description of Goods.	TWELVE MONTHS, APRIL TO MARCH.		
	1912-13.	1913-14.	1914-15.
<i>Grey and bleached piece-goods—</i>			
Chadars	{ pounds 464,565	356,178	449,342
	{ yards 1,818,412	1,090,019	1,503,511
Dhutis	{ pounds 3,333,721	3,199,839	2,038,616
	{ yards 18,781,162	18,136,032	10,087,345
Drills and jeans	{ pounds 894,506	511,546	479,071
	{ yards 1,051,666	1,872,709	1,808,830
Cambrics and lawns	{ pounds 1,154	584	.....
	{ yards 9,215	4,821	.....
Printers	{ pounds 72,421	46,147	3,920
	{ yards 543,012	378,468	18,309
Shirtings and longcloth	{ pounds 1,706,827	1,860,072	2,146,380
	{ yards 9,405,178	9,597,929	10,284,079
T-cloth, domestics and sheetings	{ pounds 2,606,718	3,121,038	3,743,616
	{ yards 9,399,515	10,707,685	11,661,426
Tent cloth	{ pounds 1,259,627	1,165,185	1,863,740
	{ yards 5,448,164	5,249,897	4,707,334
Other sorts	{ pounds 232,507	272,061	639,489
	{ yards 690,266	918,693	3,098,588
TOTAL	{ pounds 10,069,046	10,592,135	11,382,128
	{ yards 44,684,990	46,496,263	41,665,059
<i>Coloured piece goods</i>	{ pounds 81,990	78,304	87,164
	{ yards 426,400	267,844	247,416
<i>Grey and coloured goods other than piece-goods</i>	{ pounds 277,929	323,747	262,952
	{ dozens 84,631	96,230	65,047
<i>Hosiery</i>	{ pounds .....	.....	.....
	{ dozens .....	.....	.....
<i>Miscellaneous</i>	{ pounds 21,734	36,537	42,048
TOTAL, U. P. OF AGRA AND OUDH (ALSO AJMER-MERWARA)	{ pounds 10,460,689	10,949,613	11,764,287
	{ yards 45,111,390	46,763,897	41,919,475
	{ dozens 84,631	96,230	65,647

No. 6.—*DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—continued.*

PUNJAB (including DELHI).

Description of Goods.	TWELVE MONTHS, APRIL to MARCH.		
	1912-13.	1913-14.	1914-15.
<i>Grey and bleached piece-goods—</i>			
Chadars	pounds 184,295	119,546	29,485
	yards 534,057	247,132	65,227
Dhutis	pounds 64,201	182,864	55,737
	yards 198,068	482,329	127,950
Drills and jeans	pounds 5,045	8,288	19,110
	yards 16,605	9,547	27,918
Cambries and lawns	pounds 145	.....	.....
	yards 1,290	.....	.....
Printers	pounds .....	.....	.....
	yards .....	.....	.....
Shirtings and longcloth	pounds 69,805	162,986	101,598
	yards 185,339	76,718	504,286
T-cloth, domestics and sheetings	pounds 480,062	410,689	98,497
	yards 2,648,010	1,849,796	417,615
Tent cloth... ..	pounds 6,327	1,963	2,802
	yards 18,751	4,829	5,208
Other sorts	pounds 45,056	84,861	188,019
	yards 91,605	191,035	806,018
TOTAL... ..	pounds 848,487	915,647	455,183
	yards 2,688,720	3,490,166	1,664,817
<i>Coloured piece-goods</i>	pounds 76,487	121,748	79,880
	yards 132,508	866,761	848,576
<i>Grey and coloured goods other than piece-goods</i>	pounds 17,977	10,789	21,883
	dozens 5,655	8,110	6,196
<i>Hosiery</i>	pounds .....	.....	.....
	dozens .....	.....	.....
<i>Miscellaneous</i>	pounds 16,284	28,314	22,261
TOTAL, PUNJAB (including DELHI)	pounds 969,845	1,073,496	678,697
	yards 3,806,223	5,956,947	1,913,393
	dozens 5,655	3,110	6,196

CENTRAL PROVINCES AND BERAR.

Description of Goods.	TWELVE MONTHS, APRIL to MARCH.		
	1912-13.	1913-14.	1914-15.
<i>Grey and bleached piece-goods—</i>			
Chadars	pounds 1,091,926	1,285,242	985,147
	yards 2,300,429	3,204,922	2,753,675
Dhutis	pounds 2,736,713	5,168,418	2,944,335
	yards 11,027,909	12,721,687	12,250,819
Drills and jeans	pounds 1,661,885	1,550,347	1,476,858
	yards 5,759,787	5,524,343	4,178,736
Cambries and lawns	pounds 76,252	58,332	19,854
	yards 192,741	287,761	74,658
Printers	pounds 681,006	605,527	391,003
	yards 3,370,092	2,807,109	1,799,592
Shirtings and longcloth	pounds 2,047,972	1,785,487	1,638,779
	yards 8,518,732	7,509,460	6,532,647
T-cloth, domestics and sheetings	pounds 612,866	795,465	534,868
	yards 2,378,053	3,545,976	2,233,864
Tent cloth	pounds 186,709	255,572	128,469
	yards 575,065	889,411	295,591
Other sorts	pounds 602,078	868,520	673,915
	yards 1,866,872	3,264,678	2,429,489
TOTAL... ..	pounds 9,596,825	10,506,010	8,789,319
	yards 36,688,969	89,448,331	23,908,902
<i>Coloured piece-goods</i>	pounds 3,219,635	3,150,784	3,146,705
	yards 11,964,944	11,863,394	12,462,632
<i>Grey and coloured goods other than piece-goods</i>	pounds 28,854	37,364	58,752
	dozens 9,655	11,316	19,092
<i>Hosiery</i>	pounds .....	.....	.....
<i>Miscellaneous</i>	pounds 17,692	579	12,661
TOTAL, CENTRAL PROVINCES AND BERAR	pounds 12,863,008	13,494,637	11,987,287
	yards 48,658,903	61,906,725	46,862,534
	dozens 9,655	11,316	19,092

No. 6.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced—concl'd.

TOTAL OF BRITISH INDIA.

Description of Goods.	TWELVE MONTHS, APRIL TO MARCH.			
	1912-13.	1913-14.	1914-15.	
<i>Grey and bleached piece-goods—</i>				
Chedars	{ pounds ...	24,221,406	22,847,938	21,522,020
	{ yards ...	72,804,700	66,058,092	62,257,063
Dhutis	{ pounds ...	57,027,695	55,850,403	53,975,512
	{ yards ...	277,250,453	270,102,911	243,969,064
Drills and jeans	{ pounds ...	7,794,383	7,451,178	3,172,852
	{ yards ...	28,602,080	27,628,081	29,701,665
Cambries and lawns	{ pounds ...	1,066,857	744,123	516,759
	{ yards ...	7,052,590	5,051,082	3,544,623
Printers	{ pounds ...	5,711,264	5,904,130	5,663,202
	{ yards ...	26,957,278	27,664,303	25,025,381
Shirtings and longcloth	{ pounds ...	65,358,088	63,250,051	72,059,380
	{ yards ...	289,399,709	278,906,232	306,057,254
T-cloth, domestics and sheetings.	{ pounds ...	28,079,482	25,224,287	26,382,077
	{ yards ...	128,070,679	112,855,029	116,782,631
Tent cloth	{ pounds ...	2,379,664	2,306,420	3,812,856
	{ yards ...	5,773,513	5,742,599	3,707,603
Other sorts	{ pounds ...	4,493,232	5,372,063	6,143,941
	{ yards ...	18,907,442	22,654,506	24,701,935
TOTAL	{ pounds ...	196,130,071	188,450,593	198,253,599
	{ yards ...	855,717,450	816,632,335	820,697,819
<i>Coloured piece-goods</i>				
...	{ pounds ...	69,164,001	65,924,266	57,676,540
	{ yards ...	295,409,195	277,085,626	241,195,957
<i>Grey and coloured goods, other than piece-goods.</i>				
...	{ pounds ...	1,801,367	2,150,914	1,710,120
	{ dozens ...	413,743	635,472	508,836
Hosiery	{ pounds ...	319,676	322,237	203,884
	{ dozens ...	264,454	218,519	147,254
Miscellaneous	{ pounds ...	217,668	157,992	336,241
	{ " ...	267,662,983	256,406,002	258,180,384
TOTAL	{ yards ...	1,151,126,645	1,093,748,461	1,061,893,776
	{ dozens ...	648,197	854,291	656,090

No. 1.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced.

NATIVE STATES (a)

Description.	TWELVE MONTHS, APRIL TO MARCH.			
	1912-13.	1913-14.	1914-15.	
<i>Grey and bleached piece-goods—</i>				
Chadars	{ pounds ...	982,278	1,324,858	1,274,540
	{ yards ...	2,591,117	3,812,414	3,246,220
Dhutis	{ pounds ...	3,125,328	3,281,515	3,124,497
	{ yards ...	14,225,469	14,666,508	15,005,419
Drills and jeans	{ pounds ...	100,398	58,544	347,788
	{ yards ...	328,508	184,979	1,087,818
Cambrics and lawns	{ pounds ...	9	169	.....
	{ yards ...	72	1,621	.....
Printers	{ pounds ...	547,018	608,167	784,771
	{ yards ...	2,493,184	2,719,578	2,981,557
Shirtings and longcloth	{ pounds ...	3,286,052	3,207,904	3,460,875
	{ yards ...	13,225,747	13,581,509	14,047,496
T-cloth, domestics and sheetings	{ pounds ...	5,158,516	4,509,018	4,432,597
	{ yards ...	19,124,501	16,113,092	17,555,757
Tent cloth... ..	{ pounds ...	3,330	20,372	93,358
	{ yards ...	8,652	71,246	254,844
Other sorts	{ pounds ...	1,778,396	1,302,314	1,504,516
	{ yards ...	6,476,536	4,681,238	4,924,679
TOTAL	{ pounds ...	14,981,320	14,372,856	15,322,842
	{ yards ...	53,473,786	55,782,685	59,803,799
<i>Coloured piece-goods</i>				
...	{ pounds ...	2,664,051	3,504,938	3,390,647
	{ yards ...	10,842,114	14,760,242	14,010,377
<i>Grey and coloured goods, other than piece-goods... ..</i>				
...	{ pounds ...	11,527	15,582	24,967
	{ dozens ...	1,390	2,168	3,649
<i>Hosiery</i>				
...	{ pounds ...	151,121	149,112	82,084
	{ dozens ...	50,345	48,392	32,119
<i>Miscellaneous</i>				
...	{ pounds ...	.....	.....	5,026
	{ dozens ...	.....	.....	.....
TOTAL	{ pounds ...	17,868,019	17,982,548	18,825,516
	{ yards ...	63,315,900	70,543,127	73,814,176
	{ dozens ...	51,735	50,760	35,768

(a) See note at foot of Table No. 2.

No. 8.—DETAILED STATEMENT of the QUANTITY (in pounds and their equivalent in yards) and DESCRIPTION of WOVEN GOODS produced.

GRAND TOTAL INDIA (British India and Native States).

Description.	TWELVE MONTHS, APRIL TO MARCH.			
	1912-13.	1913-14.	1914-15.	
<i>Grey and bleached piece-goods—</i>				
Chadars	{ pounds ...	25,208,684	23,672,793	22,796,560
	{ yards ...	75,895,817	69,870,506	65,608,292
Dhatis	{ pounds ...	60,151,023	59,131,918	57,406,009
	{ yards ...	291,475,928	284,769,519	258,974,488
Drills and jeans	{ pounds ...	7,894,781	7,509,722	8,520,640
	{ yards ...	28,930,588	27,813,060	30,789,483
Cambrics and lawns	{ pounds ...	1,066,866	744,292	516,759
	{ yards ...	7,052,662	5,052,703	3,544,623
Printers	{ pounds ...	6,258,277	6,512,297	6,447,873
	{ yards ...	29,450,462	30,383,881	28,006,938
Shirtings and longcloth	{ pounds ...	68,644,140	66,457,955	75,520,255
	{ yards ...	302,624,456	292,487,741	320,705,350
T-cloths, domestics and sheetings... ..	{ pounds ...	33,237,998	24,733,800	30,814,674
	{ yards ...	148,095,180	128,968,721	134,288,388
Tent cloth... ..	{ pounds ...	2,382,994	2,326,792	3,906,214
	{ yards ...	5,782,165	5,813,845	8,962,447
Other sorts	{ pounds ...	6,271,628	6,674,377	7,653,457
	{ yards ...	25,383,978	27,285,744	29,626,614
TOTAL	{ pounds ...	211,111,391	202,768,449	213,576,441
	{ yards ...	914,191,236	872,445,720	880,501,618
<i>Coloured piece-goods</i>				
... ..	{ pounds ...	71,828,052	68,829,264	61,067,187
	{ yards ...	306,251,309	291,845,868	255,206,334
<i>Grey and coloured goods, other than piece-goods... ..</i>				
... ..	{ pounds ...	1,812,894	2,166,496	1,735,087
	{ dozens ...	415,138	637,640	512,485
<i>Hosiery... ..</i>				
... ..	{ pounds ...	500,997	471,349	285,918
	{ dozens ...	284,799	267,411	179,373
<i>Miscellaneous</i>				
... ..	{ pounds ...	217,668	157,992	341,267
TOTAL	{ pounds ...	285,471,002	274,388,550	277,005,900
	{ yards ...	1,220,442,645	1,164,291,588	1,135,707,952
	{ dozens ...	639,932	905,051	691,858

No. 9.—STATEMENT of the AMOUNT (in rupees) of EXCISE DUTY realised from goods woven in the Cotton Mills in India, under the Cotton Duties Act, II of 1896.

	1912-13.	1913-14.	1914-15 (a).
	Rs.	Rs.	Rs.
British India.			
Bombay	48,27,698	45,68,188	42,31,544
Madras	2,06,862	2,13,166	1,79,569
Bengal	81,719	78,951	53,028
United Provinces of Agra and Oudh (also Ajmer-Merwara) ...	2,11,847	2,55,466	2,07,454
Punjab (Including Delhi)	17,971	22,353	10,285
Central Provinces and Berar	2,71,882	3,00,919	2,52,282
TOTAL, GROSS DUTY	56,17,969	54,39,043	49,34,162
TOTAL, NET DUTY	55,76,567	53,95,014	48,79,385
Foreign Territory.			
Native States of Indore, Mysore, Baroda, Nandgaon, Bhavnagar and Wadhwan—			
GROSS DUTY	2,21,178	2,38,398	2,33,160
NET DUTY	2,21,178	2,38,398	2,33,160
GRAND TOTAL, GROSS DUTY	58,39,147	56,77,441	51,67,322
GRAND TOTAL, NET DUTY... ..	57,97,745	56,33,407	51,12,545

(a) Provisional.

RULES AND REGULATIONS.

*Revised and adopted down to the Annual General Meeting of the
Association held on the 23rd April 1915.*

1. The Association shall be called the *Bombay Millowners' Association*.
2. The objects of the Association are—
 - (a) The protection of the interests of Millowners and users of steam, water and/or electric power in India.
 - (b) The promotion of good relations between the persons and bodies using such power.
 - (c) The doing of all those acts and things by which these objects may be furthered.
3. Any individual, partnership or company owning one or more mill or mills or one or more press or presses or one or more ginning or other factory or factories actuated by steam, water, electric and/or other power shall be eligible for membership of the Association.
4. Members of the Association shall be elected by ballot in the manner hereinafter mentioned.
5. Save as is hereinafter otherwise provided every member shall be entitled to one vote for every complete sum of Rs. 50 paid by him as annual subscription under Rule 34 (a) and (b) of the Rules and Regulations of the Association.
6. Each individual, who, as an individual, shall be a member of the Association, shall, subject as hereinafter mentioned, be entitled either to act and vote on his own behalf or to empower, subject as hereinafter mentioned, any one or more persons, who shall have been duly authorized to sign his name per procreation, to act and vote on his behalf.
7. Every partner in any firm, which shall be a member of the Association, shall, subject as hereinafter mentioned, be entitled to act and vote on behalf of his said firm, and the said firm may also empower, subject as hereinafter mentioned, any one or more persons, who shall have been duly authorized to sign the name of the firm per procreation, to act and vote on behalf of the said firm.
8. Every Director of a Joint Stock Company, which shall be a member of the Association, shall, subject as hereinafter mentioned, be entitled to act and vote on behalf of such Company, and the Agent, Secretary or Manager, as the case may be, of such Company, and every partner in any firm, which shall be Agents, Secretaries or Managers, as the case may be, of such Company, and likewise any one or more persons, who shall have been duly authorized by the Agent, Secretary or Manager, as the case may be, of such Company, or by the firm,

which shall be Agents, Secretaries or Managers, as the case may be, of such Company, to sign either the name of such Agent, Secretary or Manager or the name of such firm, per pro-cu-ration, shall also, subject as hereinafter mentioned, be entitled to act and vote on behalf of such Company.

9. The name of every person entitled or empowered to act and vote on behalf of any member of the Association, whether such person be the member himself or any other person, shall be notified in writing by such member to the Secretary of the Association to be entered by the Secretary of the Association as hereinafter provided in the register hereinafter mentioned, and if more than one person shall be entitled or empowered to act and vote on behalf of any member, such member shall notify in writing to the Secretary of the Association the order of the precedence in which such person shall be entitled to act and vote on behalf of such member.

10. When any member shall notify to the Secretary of the Association that any one or more persons, other than the member himself, is entitled or empowered to act and vote on behalf of such member, such member shall, in such notification, state the capacity in which such person or each of such persons is so entitled or empowered to vote, that is to say, either as a member of a firm or as a Director or Agent or Secretary or Manager of a Company or as the holder of a power to sign per pro-cu-ration or otherwise as the case may be.

11. If the name of any person shall be notified as a person empowered to act and vote on behalf of a member by virtue of being the holder of a power to sign per pro-cu-ration, the notification shall be accompanied by the document authorizing such person to sign per pro-cu-ration, in order that the same may be registered by the Secretary, and the Secretary shall, after registering the same, return the same to the person who sent it.

12. If the name of more than one person shall be notified by any member as persons entitled or empowered to act and vote for such member, the notification shall state the order of precedence in which such persons shall be entitled to act and vote for such member.

13. The Association shall provide a Register, to be called "Register of members and of persons entitled to act and vote for members," and in such register the names of all members of the Association shall be entered and opposite to the name of each member the name of each person entitled or empowered in accordance with these rules, to act and vote for such member, shall, so soon as may be after the name of such persons and all particulars regarding him and all formalities shall have been duly notified and observed in accordance with these rules, also be entered; and when the name of more than one person shall have been notified as entitled to act and vote for any one member of the Association, the names of such persons shall be numbered in the order of precedence in which such persons are entitled to act and vote for such member.

14. No person shall be entitled to act or vote on behalf of any member of the Association, unless and until his name shall have been entered in the "Register of members or persons entitled to act and vote for members" as a person entitled to act and vote for such members.

15. If two or more persons, who shall be entitled to act and vote on behalf of one and the same member of the Association, shall be present at any meeting of the Association, that one, who takes priority in the order of the precedence in the said "Register of members and persons entitled to act and vote for members," shall alone be entitled to vote at such meeting.

16. If any one person shall, according to these rules, be entitled to act and vote for more than one member of the Association, such person shall be entitled to act and to exercise the right of voting, according to these rules, for each member, on whose behalf he is so entitled to act and vote.

17. The foregoing rules as to voting shall apply to voting at all meetings and also to voting for all purposes other than meetings of the spinning section and weaving section hereinafter mentioned or voting by members of those sections or either of them alone.

18. Voting for the election of a member of the Association shall be by ballot.
19. Every candidate for election as a member of the Association must be proposed by one member of the Association and seconded by another, and a letter of proposal signed by the proposer or seconder must be sent to the Managing Committee of the Association (hereinafter called "The Committee").
20. After the receipt by them of a proposal duly made and seconded according to these rules of a candidate for election as a member of the Association, the Committee shall fix a day for the commencement of the ballot for the election of such candidate.
21. Not less than seven days before the day so fixed as aforesaid for the commencement of the ballot for the election of any candidate, notice in writing shall be given by the Committee to all members of the Association of the name of the candidate and of his proposer and seconder and of the date so fixed as aforesaid for the commencement of the ballot for the election of such candidate.
22. The Committee shall, before the day appointed for the commencement of the ballot for the election of a candidate for membership of the Association, appoint a scrutineer for such election.
23. The Association shall, for the purposes of all elections by ballot, provide a ballot-box with a lock and key and with an aperture sufficiently large to admit of the deposit therein of voting papers.
24. Before the time appointed under these rules for the commencement of the ballot for the election of any candidate for membership of the Association, the Secretary of the Association shall satisfy himself that the ballot-box is empty and shall lock the same, and the same shall not be opened until after the expiration of the full time appointed for such election.
25. The Committee shall provide voting papers for the election of a member of the Association in such form as they shall, from time to time, think fit and shall send to each member of the Association, not less than seven days before the day fixed according to these rules for the commencement of the ballot for the election of any candidate for membership of the Association, one voting paper in respect of every vote to which he is entitled under Rule 5 hereof.
26. If any person entitled or empowered to vote concerning the election of a candidate for membership of the Association shall desire to exercise his right of voting, he shall fill up each voting paper in accordance with the directions contained therein, stating whether he votes for or against the election of such candidate and shall sign the paper and shall deposit it or cause it to be deposited in the ballot-box in a sealed cover.
27. Voting papers may be deposited in the ballot-box in accordance with these rules at any time between the hours of 10-30 A.M. and 4 P.M. on the day appointed for the commencement of the ballot or on any one of the six succeeding days, exclusive of Sundays.
28. The ballot-box shall, at 4 P.M. on the seventh of the days appointed for the election of any candidate for membership, be opened by the Secretary in the presence of the scrutineer, and the votes shall be counted and scrutinized by the scrutineer, and the scrutineer shall report to the Committee in writing under his hand the result of the election according to his counting and scrutiny.
29. No candidate for election as a member shall be deemed to have been elected unless at least one-fourth of the members of the Association shall have voted and whatever the number of votes recorded may be, one adverse vote in every six votes recorded shall exclude. The result of every election shall be recorded in the Minutes of the Proceedings of the Committee.
30. If any candidate for election as a member of the Association shall not be elected, his proposer shall be informed of his non-election by the Secretary.
31. Particulars of the voting for the election of any candidate for election as a member of the Association shall be confidential and shall not be disclosed by the scrutineer or by the Secretary to any one whomsoever.

32. A candidate, who shall have been put up for election as a member of the Association and shall not have been elected, shall not be again eligible for election as a member of the Association until after the expiration of six months from the date of the election at which he shall not have been elected.

33. If a candidate for election as a member of the Association shall be elected, his election shall be notified in writing by the Secretary to his proposer and likewise to the candidate himself, and a copy of the last annual report of the Association and also a copy of the Rules of the Association, with a bill for his subscription shall be sent to him by the Secretary.

34. Each member of the Association shall pay the following annual subscription to the Association:—

- (a) Rupees 4 per annum for every 1,000 or part of 1,000 mule spindles, Rs. 4 for every 666 or part of 666 ring spindles and Rs. 3 for every 50 or part of 50 looms set up in the mill or mills, factory or factories, which, for the time being, shall belong to such member.
- (b) Rupees 5 per annum for every Rs. 50,000 of the estimated value of the machinery, buildings and land shown on the audited balance sheet for the year previous to that in respect of which the subscription is payable of the factory or factories not being Spinning and Weaving Mills which, for the time being, shall belong to such member :

Provided that the minimum subscription payable by any one member shall be Rs. 50 per annum.

- (c) In addition to the above subscription, each Spinning and Weaving Mill, that is a member, shall pay annually to the Association 1 anna for every 100 spindles, and 3 pies for every loom set up in the mill, plus 20 per cent. of the total amount thus levied, as their share of the subscription payable by this Association to the International Federation of Master Cotton Spinners' and Manufacturers' Associations, so long as this Association may be affiliated to the Federation.

35. All subscriptions shall be payable in advance, and if any member shall be a member for a part only of any year he shall pay the full subscription for such year.

36. Each member shall, on election to the Association, sign a form of adherence to the Rules of the Association in the form set out below :—

In consideration of the protection afforded by members of the Bombay Millowners' Association to the Trade Marks and Tickets used by $\frac{m\&w}{us}$ and in consideration of the general maintenance by the Association of the interest of the industry in which $\frac{I}{we}$ are engaged $\frac{I}{we}$ engaged in.....in the town of.....
 having carefully read and fully understood all the rules of the said Association and the rules relating to Registration of Trade Marks do hereby declare and agree that $\frac{I}{we}$ will during $\frac{m\&w}{our}$ membership of the said Association in all things conform faithfully and absolutely to all the said rules and to such other rules as the Association shall institute by resolution duly passed in accordance with the relevant provisions herein and $\frac{I}{we}$ will register with the Association all the Trade Marks applied by $\frac{m\&w}{us}$ to any of the produce of the Mill or Mills, Factory or Factories owned by $\frac{m\&w}{us}$ and $\frac{I}{we}$ declare that all Trade Marks so applied by $\frac{m\&w}{us}$ whether they be registered with the Association or not, shall be subject to the rules of the Association and that $\frac{I}{we}$ will submit to arbitration any dispute in which $\frac{I}{we}$ may be concerned with another member or members of the Association in respect of a Trade Mark or Trade Marks and that $\frac{I}{we}$ will in all things endeavour to further the objects of the Association.

37. Every member of the Association shall have power to terminate his membership thereof by giving three months' notice in writing to the Secretary of the Association of his desire to terminate such membership.

38. The Association shall have power, by passing a resolution in the manner and subject to the conditions hereinafter mentioned, to expel any member from the Association in respect of the following things, that is to say—

- (a) for any act done or conduct pursued by such member which, in the opinion of the Association, shall be in contravention of the Rules of the Association or to the detriment or discredit of the Association or shall be injurious to the welfare and interests of the Association :

provided that a member shall not be expelled from the Association, unless—

- (1) an opportunity shall have been given to such member by the Committee of the Association to defend or explain his acts and conduct ;
- (2) a Special General Meeting of the Association shall have been duly called to consider the acts and conduct of such member ;
- (3) a resolution shall have been passed at such General Meeting at which a quorum shall be present by a majority of three-fourths of the members present at such Meeting declaring that such member is expelled.

39. Whenever a resolution shall have been passed as in the last preceding rule mentioned, such resolution shall be final and conclusive and the member thereby declared to be expelled shall thenceforth cease to be a member of the Association.

40. The affairs and funds of the Association shall be managed by a Managing Committee hereinbefore and hereinafter called " The Committee " to be constituted as hereinafter mentioned.

41. The members of the Association shall, in each year between the 1st and the 31st day of January in such year, elect the Committee from amongst the members of the Association and the Committee so elected shall hold office for one year.

42. The Committee shall consist of a Chairman, a Deputy Chairman and not more than eighteen other members, making a maximum of twenty members in all.

43. The Committee, holding office for the time being, shall appoint a day between the 1st and the 31st day of January in each year for the election of a Chairman of the Committee and a subsequent day between the dates aforesaid for the election of a Deputy Chairman of the Committee and a subsequent day also between the dates aforesaid for the election of the remaining eighteen members of the Committee for the ensuing year, and shall cause notice of the several days so appointed for such election as aforesaid to be advertised in one English and one Vernacular newspaper published in Bombay.

44. The Secretary of the Association shall also give to each member of the Association notice in writing of the several dates appointed for the said several elections seven days before the date appointed for the first of the said elections.

45. The Chairman and Deputy Chairman of the Committee and the other members of the Committee respectively shall be elected by ballot.

46. The Committee shall, before the respective days appointed for the elections of the Chairman, Deputy Chairman and the other members of the Committee, respectively, appoint a scrutineer for each of the said elections.

47. Before the time appointed under these rules for the commencement of the ballot upon any day appointed for the election of a Chairman or a Deputy Chairman or of the other members of the Committee as the case may be, the Secretary of the Association shall satisfy himself that the ballot-box is empty and shall lock the same and the same shall not be opened until 4 p. m. upon that day.

48. The Committee shall provide separate voting papers for—

- (a) the election of a Chairman of the Committee,
- (b) the election of a Deputy Chairman of the Committee,
- (c) the election of eighteen members of the Committee,

in such form as they shall, from time to time, think fit and shall send to each member of the Association not less than seven days before the day fixed for the election of the Chairman, Deputy Chairman and the other members of the Committee one voting paper in respect of the election of the Chairman, one voting paper in respect of the election of the Deputy Chairman and one voting paper in respect of the election of the other members of the Committee.

49. On each of the respective days appointed for the election of a Chairman, Deputy Chairman and the remaining eighteen members of the Committee, respectively, voting shall commence at 10-30 a.m. and terminate at 4 p.m.

50. If any person entitled or empowered to vote concerning the election of the Chairman, Deputy Chairman and the other members of the Committee shall desire to exercise his right of voting, he shall, in the case of the election of a Chairman, write on a voting paper relative to the election of a Chairman the name of the person representing a member of the Association whom he desires should be appointed such Chairman and shall sign the said voting paper and shall deposit it or cause it to be deposited in the ballot-box in a sealed cover and he shall, in the case of the election of a Deputy Chairman, write on a voting paper relative to the election of a Deputy Chairman the name of the person representing a member of the Association whom he desires should be appointed such Deputy Chairman and shall sign the said voting paper and shall deposit it or cause it to be deposited in the ballot-box in a sealed cover and he shall, in the case of the election of the other members of the Committee, write on a voting paper relative to the election of the said other members of the Committee, the names of the eighteen persons representing members of the Association whom he desires should be appointed as such other members of the Committee as aforesaid and shall sign the said voting paper and shall deposit it or cause it to be deposited in the ballot-box in a sealed cover.

51. Voting papers regarding the elections of a Chairman, Deputy Chairman or the other members of the Committee may be deposited in the ballot-box in accordance with these Rules between the hours of 10-30 a.m. and 4 p.m. on the respective days which shall have been appointed under these Rules for such elections respectively.

52. At 4 p.m. on the day appointed for an election of a Chairman, Deputy Chairman or the other members of the Committee as the case may be, the ballot-box shall be opened by the Secretary of the Association in the presence of the scrutineer who shall have been appointed as scrutineer of the election appointed for that day and the votes shall be counted and scrutinised by such scrutineer and the said scrutineer shall report to the Committee in writing under his hand the result of the election according to his counting and scrutiny.

53. Particulars of the voting for the election of a Chairman, a Deputy Chairman and the other members of the Committee respectively shall be confidential and shall not be disclosed by the scrutineer or by the Secretary to any one whomsoever.

54. The names of all members of the Association, who are eligible for election as Chairman, Deputy Chairman or members of the Committee in any year, shall be circulated by the Secretary amongst the members of the Association at least seven days before the day appointed under these Rules for the election of a Chairman of the Committee.

55. Two members of any one firm entitled to only one vote shall not be on the Committee at the same time.

56. All the members of the Committee shall retire each year immediately after the Annual General Meeting but shall be eligible for re-election.

57. If two members of one firm shall be elected to serve on the Committee at the same time, the election of both of them shall be void and there shall be a fresh election by the members of the Association to fill the vacancies caused by their elections being void.

58. No member of the Association shall vote for more than one Chairman, one Deputy Chairman and eighteen other members of the Committee.

59. Those persons representing members of the Association, in whose favour the largest number of votes shall have been cast for appointment as Chairman or Deputy Chairman or members of the Committee as the case may be, shall be deemed to have been appointed Chairman or Deputy Chairman or members of the Committee as the case may be.

60. In the event of any member of the Association who shall have been elected according to these Rules either as the Chairman of the Committee or as the Deputy Chairman of the Committee or as a member of the Committee refusing to act as such Chairman, Deputy Chairman or member of the Committee as the case may be, there shall be a fresh election by the members of the Association for such Chairman or Deputy Chairman or member of the Committee as the case may be.

61. If the number of votes cast in favour of any two members of the Association for appointment as Chairman or Deputy Chairman or as a member of the Committee shall be equal, there shall be a fresh election by the members of the Association for such Chairman or Deputy Chairman or member of the Committee as the case may be.

62. The new Committee shall take office on the first day succeeding the holding of the first Annual General Meeting of the members of the Association after their election, and shall continue to act until the first day succeeding the next Annual General Meeting of the members of the Association.

63. If any member of the Committee shall be absent from the regular meetings of the Committee for more than three consecutive months he shall, unless he shall have previously obtained leave of absence from the Committee, be deemed to have vacated his office.

64. When any vacancy shall occur in the Committee, such vacancy not being caused by a vacancy in the office of Chairman or Deputy Chairman of the Committee, the members of the Committee shall have power to fill such vacancy by the appointment of any member of the Association to fill the same.

65. When any vacancy shall occur in the office of Chairman or Deputy Chairman of the Committee, such vacancy shall be filled by the election according to these Rules by the members of the Association of a member of the Association to fill such vacancy.

66. The Chairman of the Committee shall, if present, preside at all meetings of the Committee held during his term of office. In the absence of the Chairman, the Deputy Chairman shall preside, and failing both of these, the chair shall be taken by one of the members of the Committee who shall be appointed by the other members of the Committee present at such meeting.

67. In case of a tie in voting in Committee the Chairman for the time being shall have a casting vote.

68. Five members of the Committee shall constitute a quorum.
69. The Committee shall meet at least once in every month, and may meet oftener if need be.
70. A Secretary of the Association shall be appointed, and his remuneration shall be fixed by the Committee. His duties shall be to keep the records and accounts of the Association, to collect subscriptions and all other monies due or payable to the Association and to pay the same into the Bank of Bombay, or into such other Bank as may from time to time be approved by the Committee in this behalf, to the credit of the account of the Association in such Bank, to study and consider all proposed legislative measures or any other matter that may affect the interests of the Association and to report to the Committee thereon and generally to act in the Association's interests under the orders of the Committee.
71. Minutes of all proceedings of the Committee shall be made and shall be entered or caused to be entered regularly by the Secretary in a minute book to be kept by him. This book shall be open to the inspection of any member of the Association at any reasonable time.
72. The Committee for the time being shall have the control of the funds of the Association, and shall have authority to provide suitable accommodation for the meetings of the Association and to pay all expenses of the establishment of the Association and also to pay all legal expenses which they may deem it necessary to incur. The Committee shall have authority to expend, pay or disburse in each year any sum or sums of money not exceeding in the aggregate the sum of Rs. 5,000 out of the funds of the Association for any purpose or purposes whatsoever which they in their absolute discretion may deem to be fit and proper in the interests of the Association.
73. If at any time during any year the disbursements of the Committee shall amount to seven-eighths of so much of the funds belonging to the Association as shall remain in the hands of the Committee after providing for ordinary expenditure, such as the salary of the Secretary, printing, stationery, etc., then the Committee shall, in such case, call a general meeting of the members of the Association and lay the accounts of the Association before such meeting.
74. Previous to each Annual General Meeting of the members of the Association, the Committee shall prepare a statement of the accounts of the Association and shall cause the same to be printed and shall send at least one printed copy thereof to each member of the Association not less than seven days prior to the date fixed for the said Annual General Meeting of the members of the Association.
75. Previous to each Annual General Meeting of the members of the Association, the Committee shall prepare a report of the proceedings of the Association during the year prior to such General Meeting and shall cause the same to be printed and shall send at least one printed copy thereof to each member of the Association not less than seven days prior to the date fixed for the said Annual General Meeting. The Committee may also, if they see fit to do so, send any one or more copies of the said report to any individual or Corporation or Association to whom or to which they may think it desirable in the interests of the Association to send the same.
76. The Committee shall have authority to appoint Solicitors to the Association and the Committee may consult them whenever they deem it expedient to do so.
77. At the first meeting in each year after the Annual General Meeting of the members of the Association shall have been held, the Committee shall appoint three of their own number to form a Sub-Committee for the purpose of deciding questions, other than arbitrations, arising under the Rules of the Association relating to the registration of trade-marks, and the decision of such Sub-Committee on such questions shall have the same effect as if given by the entire Committee. Any vacancy which may from time to time occur in any such Sub-Committee as in this Rule mentioned shall be filled by the appointment by the Committee of a member of the Committee to fill such vacancy.

78. The Committee may, from time to time, appoint a Sub-Committee or Sub-Committees to investigate and to report upon any matter whatsoever and may invite any member of the Association not being a member of the Committee to serve on any such Sub-Committee, if for any special reason such a course may seem to them advisable.

79. Sub-Committees other than a Sub-Committee appointed under Rule 77 shall have no executive or substantive power or authority, and the duty of every Sub-Committee shall be to report to the Committee the result of its investigations, deliberations or other proceedings.

80. A general meeting of the members of the Association to be called the Annual General Meeting shall be held in each year at such time as the Committee may appoint.

81. The Committee may also at any time call a General Meeting should it seem to them expedient to do so.

82. If any four members of the Association shall, by a requisition in writing signed by the said four members respectively, addressed to the Committee and containing a statement of their reasons for the requisition, request the Committee to call a General Meeting of the members of the Association, the Committee shall call such General Meeting to be held within fourteen days after the receipt by the Committee of the said requisition, and if the Committee shall refuse or neglect to call such General Meeting to be held within the time aforesaid, the said four members, who shall have signed the said requisition, shall have power themselves to call such General Meeting to be held on such day as they themselves shall appoint.

83. Seven clear days' notice of every General Meeting of the members of the Association shall be given by advertisement in at least one English and one Vernacular newspaper published in Bombay.

84. All the moneys and funds of the Association shall be paid into an account to be opened in the name of the Association either with the Bank of Bombay or with such other Bank as may from time to time be approved by the Committee in this behalf.

85. All cheques on any banking account of the Association shall be signed by the Chairman and one member of the Committee or in the absence of the Chairman by the Deputy Chairman and one member of the Committee; or in the absence of both the Chairman and the Deputy Chairman by two members of the Committee.

86. No business shall be transacted at any General Meeting, unless a quorum according to these Rules shall be present at such meeting.

87. On the day originally appointed for holding any Annual General Meeting of the members of the Association, and at any adjournment thereof, which shall not have been necessitated by the want of a quorum, ten representatives of the members of the Association shall constitute a quorum; and on the day originally appointed for the holding of any General Meeting of the members of the Association other than an Annual General Meeting and at any adjournment thereof, which shall not have been necessitated by the want of a quorum, one-fourth of the members of the Association shall constitute a quorum.

88. If on the day originally appointed for holding a General Meeting, a quorum, according to these rules, shall not, within 30 minutes after the time appointed for the commencement of the Meeting, be present, the meeting shall be adjourned to such time on such other day as the members present may determine, and if a quorum shall not, within fifteen minutes after the time appointed for the commencement of such adjourned meeting, be present, the members then present shall constitute a quorum, and may transact the business for which the meeting was called.

89. Whenever any meeting shall be adjourned under Rule 88 on the ground that a quorum was not present within the prescribed time, seven days' notice shall be given by the Committee by advertisement in one English and one Vernacular newspaper, published in Bombay of the day and time to which such meeting shall have been adjourned.

90. The Chairman of the Committee shall, if present, preside at all General Meetings of the members of the Association held during his term of office. In the absence of the Chairman, the Deputy Chairman shall preside, and, failing both of these, the chair shall be taken by one of the members of the Committee, who shall be appointed by the other members of the Committee, present at such meeting.

91. In case of a tie in voting at any General Meeting of the members of the Association the Chairman for the time being of the meeting shall have a casting-vote.

92. Minutes of all proceedings at every General Meeting of the members of the Association shall be made and shall be entered or caused to be entered regularly by the Secretary in minute book to be kept by him. This book shall be open to the inspection of any member of the Association at any reasonable time.

93. All proceedings of the Association, in connection with any proposal for concerted general action on the part of the members of the Association with respect to a strike or a lock-out or in connection with any proposal for concerted general action in relation to any other matter whatsoever, not being a short-time movement or the organized lessening of production and involving the payment of money shall be subject to the following rules (a), (b) and (c), that is to say—

- (a) No such proposal shall be considered at any General Meeting of the members of the Association, except at a Special General Meeting which shall have been duly called for the purpose of considering the same.
- (b) In order to pass any Resolution approving and adopting any such proposal at any General Meeting of the members of the Association, the same must be passed by a majority of the members of the Association present at such General Meeting, and owing at least 80 per cent., to be ascertained in the manner, next hereinafter set forth, of the total number of spindles owned by all the members of the Association.
- (c) For the purpose of ascertaining the percentage of spindles owned by the members of the Association who shall have constituted the majority of the members of the Association, who shall have voted in favour of any such resolution as aforesaid for the approval and adoption of any such concerted general action as aforesaid, the calculation of such percentage shall be made on the following basis :—
 - (1) One mule spindle shall be taken as the basis of the calculation.
 - (2) One ring spindle shall be deemed to be equal to one-and-a-half mule spindle.
 - (3) One loom shall be deemed to be equal to 30 mule spindles.

94. All proceedings of the Association in connection with any proposal for concerted general action with respect to short-time movements or the organized lessening of production shall be subject to the following rules :—

- (a) The members of the Association shall be divided into two sections—one whereof shall consist of all the members of the Association who are engaged in spinning only and who are hereinafter referred to as the "Spinning Section," and the other whereof shall consist of all the members who are engaged in weaving as well as spinning and who are hereinafter referred to as the "Weaving Section."
- (b) The Spinning Section shall have the sole and exclusive power to determine all questions relating to short-time movements or the organized lessening of production in connection with Mills engaged in spinning only.

- (c) The Weaving Section shall have the sole and exclusive power to determine all questions relating to short-time movements or the organized lessening of production in connection with Mills engaged in weaving, as well as spinning.
- (d) The Committee of the Association may at any time call a meeting either of the Spinning Section or of the Weaving Section, and if any four members of the Association, who shall be interested in the Spinning Section, shall request the said Committee to call a meeting of the Spinning Section, the said Committee shall within fourteen days call a meeting thereof, and in like manner if any four members of the Association, who shall be interested in the Weaving Section, shall request the said Committee to call a meeting of the Weaving Section, the said Committee shall within fourteen days call a meeting thereof.
- (e) Seven days' notice of any meeting of the Spinning Section or of any meeting of the Weaving Section, as the case may be, shall be given by advertisement in one English and one Vernacular newspaper, published in Bombay, and such notice shall specify the business to be transacted at such meeting.
- (f) Any proposal for any short-time movement or for any organized lessening of production must, before it can be brought before any meeting either of the Spinning Section or of the Weaving Section, be sanctioned by a majority of two-thirds of the members for the time being of the Committee of the Association.
- (g) No such proposal shall be considered at any meeting of the Spinning Section except a meeting which shall have been duly called for the purpose of considering the same; and in like manner no such proposal shall be considered at any meeting of the Weaving Section except a meeting which shall have been duly called for the purpose of considering the same.
- (h) In order to pass any resolution approving and adopting any such proposal at any meeting of the Spinning Section, the same must be passed by a majority of the members of the Spinning Section present at such meeting and owning at least 75 per cent., to be ascertained in the manner next hereinafter set forth, of the total number of spindles calculated as next hereinafter mentioned, belonging to the Spinning Section; and in like manner, in order to pass any resolution approving and adopting any such proposal at any meeting of the Weaving Section, the same must be passed by a majority of the members of the Weaving Section present at such meeting and owning at least 80 per cent., to be ascertained in the manner next hereinafter set forth, of the total number of spindles, calculated as next hereinafter mentioned belonging to the Weaving Section.
- (i) For the purpose of ascertaining the number of spindles belonging to the Weaving Section, all looms in any Mill which carries on weaving as well as spinning shall be deemed to belong to the Weaving Section, and 20 ring spindles or at the option of the owner 30 mule spindles out of the total number of spindles in such Mill, for every loom in such Mill shall also be deemed to belong to the Weaving Section, and all other spindles in such Mill shall be deemed to belong to the Spinning Section and for the purpose of ascertaining the number of spindles belonging to the spinning section not only shall all such other spindles as last aforesaid in Mills which carry on weaving as well as spinning be deemed to belong to the Spinning Section, but also all spindles whatsoever in any Mill carrying on spinning alone.

(j) For the purpose of ascertaining the percentage of spindles referred to in sub-clause (h) of this rule the calculation of such percentage shall be made on the following basis :—

- (1) One mule spindle shall be taken as the basis of the calculation.
- (2) One ring spindle shall be deemed to be equal to one-and-a-half mule spindle.
- (3) One loom shall be deemed to be equal to 30 mule spindles.

95. Every resolution duly passed in accordance with Rule 94 hereof hereinbefore contained by the Spinning Section shall be binding upon the Spinning Section but shall not bind the Weaving Section; and in like manner every resolution duly passed in accordance with Rule 94 hereof hereinbefore contained by the Weaving Section shall be binding upon the Weaving Section but shall not bind the Spinning Section.

96. If any member of the Association shall work any Mill which carries on spinning only in contravention of any resolution which shall have been duly passed by the Spinning Section, such member shall pay to the Association the sum of three pies per week of 72 hours in respect of every mule spindle in such Mill belonging to the Spinning Section and the sum of four pies and a half per week of 72 hours in respect of every Ring spindle therein belonging to the Spinning Section; and if any member of the Association shall work any Mill which carries on weaving as well as spinning in contravention of any resolution which shall have been duly passed by the Weaving Section, such member shall pay to the Association the sum of three pies per week of 72 hours in respect of every Mule spindle in such Mill belonging to the Weaving Section and the sum of four pies and a half per week of 72 hours in respect of every Ring spindle therein belonging to the Weaving Section and the sum of seven annas and a half per week of 72 hours in respect of every loom therein, provided always that, if any such member as aforesaid shall carry on any such Mill as aforesaid in contravention of any such Rule as aforesaid for any period less than a week of 72 hours, such member shall not be liable to pay to the Association the full amount of the sums aforesaid, but only such proportionate part thereof as shall bear the same proportion to the full amount thereof which the period of time for which such Mill shall be worked shall bear to a full week of 72 hours.

97. Every resolution which shall have been duly passed according to these Rules at any General Meeting of the members of the Association shall be binding upon all the members of the Association.

98. Neither the Chairman, Deputy Chairman nor any member of the Committee nor the Secretary shall be answerable for anything other than his own acts or defaults, nor shall he be answerable for any act done by him for the sake of conformity only, nor for any moneys of the Association other than such as shall come into his own hands, nor for any Collector or receiver of moneys appointed by the Committee, nor for any misfortune, loss or damage happening to the Association by reason of any deed done or executed by him as a Chairman, Deputy Chairman or member of the Committee or as Secretary, nor by reason of any error in judgment or mere indiscretion on his part in the performance of his duties, nor otherwise on any account, except for wilful negligence or fraud. Every person being Chairman, Deputy Chairman or a member of the Committee or Secretary, his heirs, executors or administrators shall at all times be indemnified and saved harmless out of the funds of the Association from and against all costs, losses, damages and expenses whatsoever incurred or sustained by him in the execution of his power or duties, and every person having been or being a Chairman, Deputy Chairman or member of Committee or Secretary of the Association, his heirs, executors and administrators shall be indemnified and saved harmless, out of the funds of the Association against all actions, suits, claims and demands whatsoever brought or made against him or them in respect of any engagement of the Association save such as may be incurred by his own personal wilful neglect or default.

99. These Rules shall come into force on the 29th April 1910, and down to that date the present rules shall be in force. The foregoing Rules and copies of the form of undertaking prescribed under Rule 36 shall forthwith be printed and distributed to all members, and on and after 31st July 1910, no member who has not duly signed and deposited with the Secretary the said form of undertaking shall be entitled to the privileges of membership. No alteration in these Rules shall be made save and except by a majority of three-fourths of the members of the Association present at a general meeting duly convened for the purpose of considering such alteration, the terms of which shall be fully set forth in the notice convening the said general meeting.

RULES FOR THE REGISTRATION OF TRADE MARKS.

*Adopted at the Annual General Meeting of the Association held on the
28th March 1912.*

Interpretation.

1. Throughout all these rules the following words shall bear and include the following meanings:—

- (a) 'The Association' means the Bombay Millowners' Association.
- (b) 'Member' means a member of the Bombay Millowners' Association.
- (c) 'The Secretary' means the Secretary of the Bombay Millowners' Association.
- (d) 'The Managing Committee' means the Managing Committee of the Bombay Millowners' Association.
- (e) 'Trade mark' includes 'ticket' and 'stamp.'
- (f) 'Colourable imitation' includes a trade mark, which is likely to become known by or to acquire the same name as that by which another trade mark is already known or which such other trade mark has already acquired.

Classification of goods.

2. All goods to which these rules apply shall be divided into the following classes:—

Class 1.—Cotton yarns and threads being either grey or bleached.

Class 2.—Cotton yarns and threads being coloured either in whole or in part.

Class 3.—Cotton piece-goods of all kinds.

Registers.

3. The Association shall keep two Registers, one of which shall be called 'The Permanent Register' and the other 'The Suspense Register.'

Duty of members to register trade marks and mode of applying to register same.

4. Every member shall send to the Secretary an application in writing addressed to the Secretary and signed by the applicant or by some person duly authorized to sign the same on behalf of the applicant, to register with the Association every trade mark, not already registered by such member with the Association, which such member desires to apply to any produce of the mill or mills, factory or factories owned by such member; and every such application shall state whose property the trade mark in question is or is to be.

5. Every such application shall be accompanied by one copy of the trade mark to which the application relates for the use of the Association and also by such further number of spare copies thereof as the Managing Committee may from time to time prescribe in that behalf regard being had to the total number of the members, and such application shall contain a statement in writing specifying the class or classes of goods to which such member desires to apply the trade mark in question.

6. No such application shall be entertained by the Association unless the trade mark to which it relates is or is to be the property either of the member applying to register the same or of a dealer dealing exclusively with such member in goods of the class or classes to which such member desires to apply such trade mark.

Secretary to enter every trade mark which a member shall apply to register in the Suspense Register.

7. The Secretary shall forthwith on receipt of an application for registration of a trade mark with the Association made in conformity with these rules enter the said trade mark in 'the Suspense Register' for use on goods of the class or classes specified in the application.

Notice of every application to register a trade mark to be sent to every member.

8. The Secretary shall so soon as may be after any application shall have been made for the registration of any trade mark with the Association send to every member a copy of such application with an intimation of the date when it was made and that such trade mark has been entered in the Suspense Register and shall also send with such intimation one copy of such trade mark, and also if the application shall have been accompanied by a notification in conformity with Rule 20 that the member, who shall have made the application, is not willing to refer to arbitration any matter relating to the application, one copy of such notification and

shall after the expiration of three weeks from the date of the despatch of such intimation send a reminder to each member who shall not in the interval have acknowledged the receipt of such intimation or otherwise intimated that such intimation has been received by such member.

9. The entry of a trade mark in the Suspense Register shall not confer upon the member upon whose application the same shall have been so entered any right against any other member in respect of the trade mark so entered save and except a right to apply for the removal of any other trade mark from the Suspense Register as in Rule 10 hereinafter set forth.

Effect of entry of trade mark in Suspense Register.

10. Any member may apply that any trade mark which has been entered in the Suspense Register may be removed therefrom on the ground that it is an imitation colourable or otherwise of another trade mark which at the time of the entry of the trade mark objected to was then already in the Suspense Register and had been entered therein on application of the member applying for such removal and was intended to be applied to the some class or classes of goods as the class or classes to which the trade mark objected to is intended to be applied.

Applications for removal of trade mark from the Suspense Register.

11. Every application for removal of a trade mark from the Suspense Register shall be made in writing addressed to the Secretary and signed by the applicant or by some person duly authorized to sign on behalf of the applicant and shall set forth the ground on which the same is made.

12. Every application for removal of a trade mark from the Suspense Register shall be determined, in the manner hereinafter prescribed ; and if, when the same shall have been so determined, the application shall be upheld, the trade mark for the removal of which the application shall have been made, shall forthwith be removed from the Suspense Register.

13. Any member may object to any trade mark being entered in the Permanent Register on the ground—

Objections to entry of a trade mark in the Permanent Register.

(a) That such trade mark is an imitation colourable or otherwise of a trade mark which has already, on the application of such objecting member, been entered in the Permanent Register for use on goods of a class or classes similar to the class or classes of goods to which the trade mark, in respect of which an application has been made, is intended to be applied, and that such trade mark, so already entered, is habitually applied by such objecting member to such class or classes of goods ; or

(b) That the dealer to whom the said trade mark objected to belongs or will belong does not deal in goods of the said class or classes exclusively with the member who shall have applied to register the said trade mark objected to.

14. Every such objection shall be made within one month after the application to register the trade mark objected to shall have been made and shall be in writing addressed to the Secretary and signed by the objecting member or by some person duly authorized to sign on behalf of the objecting member and shall set forth the grounds of objection.

15. Any member may apply that any trade mark which has been entered in the Permanent Register on the representation that such trade mark was the property of a dealer dealing exclusively with a member in goods of the class or classes to which the said trade mark is applied shall be removed from such Register on the ground—

Applications for removal of a trade mark from the Permanent Register.

(a) That the dealer has never dealt exclusively with the said member in goods of the said class or classes ;

or

(b) That the dealer has ceased to deal exclusively with the said member in goods of the said class or classes.

16. Any member may within three calendar months from the date of his becoming a member for the first time apply that any trade mark which shall have been registered in the Permanent Register, at any time before the expiration of the said period of three months, shall be removed therefrom on the ground—

That the trade mark so already registered in the Permanent Register is an imitation colourable or otherwise of a trade mark for the registration of which such member has applied for use on goods of a class or classes similar to the class or classes of goods to which the trade mark so already registered in the Permanent Register is applied, and that such trade mark for the registration of which such newly joined member has so applied as aforesaid has been habitually applied by such newly joined member to the said class or classes of goods.

17. When any member being the owner of a mill shall have ceased to be a member for any reason, other than expulsion, and shall subsequently again become a member by virtue of the ownership of the same mill, or, when any mill, being the property of a member, shall have passed to a new owner and such new owner shall become a member by virtue of the ownership of the said mill, such member, who shall have again become a member, may at any time, within one month from the date of his having so again become a member or such new owner, who shall have become a member, may at any time within one month from the date of his becoming a member apply—

(a) That a trade mark which shall have been entered in the Permanent Register subsequent to the date on which such member shall have ceased as aforesaid to be a member but prior to the date of the application under this Rule or subsequent to the date when such mill as aforesaid passed to such new owner as aforesaid but prior to the date of the application under this Rule, as the case may be, shall be removed from the Permanent Register ;

or

(b) That if any trade mark shall have been or shall be entered in the Permanent Register in compliance with an application for the registration of the same which has been made subsequent to the date on which such member shall have ceased as aforesaid to be a member but prior to the date of the application under this Rule, or subsequent to the date when such mill as aforesaid passed to such new owner as aforesaid but prior to the date of the application under this Rule, as the case may be, the said trade mark shall be removed from the Permanent Register,

on the ground either in the case (a) or in the case (b)—

That the said trade mark is an imitation colourable or otherwise of a trade mark previously registered with the Association by the member who shall have so ceased to be a member as aforesaid or by the member who was for the time being the owner of the mill which has so passed to a new owner as aforesaid for use on goods of a class or classes similar to the class or classes of goods for use on which the trade mark so objected to shall have been registered and that a fresh application for the registration of the mark so previously registered as aforesaid has been made by the applicant.

18. Every application for removal of a trade mark from the Permanent Register shall be made in writing addressed to the Secretary and signed by the applicant or by some person duly authorised to sign on behalf of the applicant and shall set forth the grounds on which the same is made.

19. Every application under Rules 16 and 17 for removal of a trade mark from the Permanent Register shall be accompanied by twelve or such other number of copies as the Managing Committee may from time to time prescribe of the trade mark said by the applicant to have been previously registered with the Association.

20. Notwithstanding anything contained in these rules or in the form of adherence prescribed under Rule 36 of the Rules and Regulations of the Association any member who shall have become a member for the first time may send a notification in writing addressed to the Secretary with any application, made by such member, to register a trade mark, which shall be sent to the Secretary within one month from the date when such member shall become a member notifying that he is not willing to refer to arbitration any matter relating to the application with which the notification is sent; and whenever any such notification is sent as aforesaid no member shall in the matter to which the notification relates be bound by the rules relating to arbitration.

Liberty to refuse to refer to arbitration in certain cases.

21. In like manner, notwithstanding anything contained in these Rules or in the Form of Adherence in Rule 36 mentioned, if any member who shall have received notice of any application to register a trade mark, which shall have been sent to the Secretary, by a member who shall have become a member for the first time, within one month from the date when such member shall have become a member shall object, in the manner prescribed by these Rules, to the said trade mark being entered in the Permanent Register on the ground specified in Rule 13 (a) such objecting member may send with such objection, a notification in writing addressed to the Secretary notifying that he is not willing to refer to arbitration any matter relating to such objection to the application of which he shall have so received notice as aforesaid and specifying such application and objection; and whenever any such notification is sent no member shall in the matter to which such notification relates be bound by the Rules relating to Arbitration.

22. All questions in dispute between two members arising out of or incidental to any

- (a) application to register a trade mark,
- (b) application to remove a trade mark from the Suspense Register,
- (c) application to remove a trade mark from the Permanent Register,

Determination of questions relating to any application to register a trade mark or to any application to remove a trade mark from the Suspense Register or from the Permanent Register, as to which notice of refusal to refer to arbitration has not been given.

shall, if no such notice as is permitted by these Rules, of unwillingness to refer to arbitration shall have been given in connection with the same, be determined by arbitration in the manner prescribed by the following Rules.

23. Either member may give the other member notice of the appointment of an arbitrator on behalf of the member giving such notice and may call upon such other member to appoint and to notify to the member who shall give the notice of the appointment of an arbitrator within seven days from the date of the giving of the notice; and on receipt of such notice such other member must, if he should desire to appoint an arbitrator, appoint him within seven days from the receipt of such notice and notify such appointment within the same time to the member from whom he shall have received the notice to appoint an arbitrator.

24. If the member to whom such notice as in Rule 23 mentioned shall have been given fail to appoint and to notify to the member who shall have given the notice of the appointment of an arbitrator within seven days from the service of the notice upon him the matter in dispute shall stand referred to the arbitrator already appointed as sole arbitrator.

25. If a matter in dispute shall stand referred to an arbitrator as sole arbitrator he shall make his award within fourteen days from the date when the matter in dispute shall first stand referred to him.

26. If two arbitrators shall be duly appointed in accordance with these Rules, they shall within 3 days from the date when such one of them as was last appointed shall have been appointed and before proceeding with the reference appoint an umpire.

27. If two arbitrators and an umpire shall have been duly appointed the two arbitrators shall, if they can agree upon their award, make their award within fourteen days after the appointment of the umpire.

28. If two arbitrators and an umpire shall have been duly appointed but the two arbitrators shall either fail to agree upon their award or fail to make it within fourteen days from the appointment of the umpire, the matter in dispute shall stand referred to the umpire.

29. When a matter in dispute shall stand referred to an umpire he shall make his award within fourteen days from the date when the matter in dispute shall stand referred to him.

30. If

(a) a matter in dispute shall stand referred to a sole arbitrator but such arbitrator shall fail from any cause whatever to make his award within fourteen days from the date when the matter in dispute shall first stand referred to him ;

or

(b) two arbitrators shall have been duly appointed but shall fail from any cause whatever to appoint an umpire within three days from the date of the appointment of such one of the arbitrators as shall have been last appointed ;

or

(c) a matter in dispute shall stand referred to an umpire but such umpire shall fail, from any cause whatever, to make his award within fourteen days from the date when the matter in dispute shall first stand referred to him,

the matter in dispute shall in any of such cases stand referred to a referee who shall be appointed by the Managing Committee.

31. When a matter in dispute shall stand referred to a referee he shall make his award within fourteen days from the date when the matter in dispute shall first stand referred to him and it shall be deemed to stand referred to him so soon as he shall have been informed of his appointment by the Managing Committee.

32. The sole arbitrator, two arbitrators, umpire or referee, as the case may be, shall, when he or they make an award, reduce it into writing, sign it and forward it to the Managing Committee who shall file it in a separate file, in which such awards shall alone be filed.

33. Every award, whether made by a sole arbitrator, two arbitrators, an umpire or a referee, which shall be duly made under the authority of and in conformity with these Rules shall be conclusive and binding upon the parties to the arbitration in which the award was made and the Association shall give effect to it.

Fees on Arbitra-
tions.

34. The following fees on arbitrations shall be chargeable by the Association to members :—

- (a) In cases where there is a sole arbitrator, Rs. 15, which shall be paid by the member who has failed to appoint an arbitrator within the time prescribed by these rules.
- (b) In cases where each party has appointed one arbitrator, the sum of Rs. 30, whereof each member, a party to the arbitration, shall pay Rs. 15.
- (c) In cases where an umpire is appointed, Rs. 15, whereof each member, a party to the arbitration, shall pay Rs. 7-8-0.
- (d) In cases where a referee is appointed, Rs. 15, whereof each member, a party to the arbitration, shall pay Rs. 7-8-0.

The sole arbitrator, two arbitrators, umpire or referee, as the case may be, shall have power to direct by any award made by him or them under these Rules that any fee paid by any member, a party to the arbitration in which such award shall have been made, shall be refunded to him by the other member, a party to the said arbitration.

35. The Association shall, whether the fees payable under these Rules in connection with any arbitration shall have been duly paid to it or not, pay to each arbitrator, umpire and referee who shall have acted in such arbitration a fee of Rs. 15.

36. If, in any case permitted by these Rules, any member shall, in the manner prescribed by these Rules, make

(a) any application to register a trade mark,

or

(b) any objection to a trade mark being entered in the Permanent Register,

accompanied by a notification that the member is not willing to refer to arbitration any matter relating to the application or objection, as the case may be, with which the notification is sent, no steps shall be taken by the Association in the matter of the application or objection specified in such notification for a period of two months from the receipt by the Secretary of such notification.

Procedure when any application made to register a trade mark, or any objection made to register a trade mark as to which notice of refusal to refer to arbitration has been given.

37. Any member, who shall have made any such application or objection as in Rule 36 mentioned, accompanied by such a notification as in the said Rule 36 mentioned, may, at any time during the said period of two months in the said Rule 36 mentioned, institute legal proceedings either to establish the right of such member to the trade mark to which such application or objection relates or to restrain any other member from using such trade mark or to procure the punishment of such member for using the same and such proceedings may be taken either in a Civil or a Criminal Court.

38. If, in any case permitted by these Rules, any member shall in the manner prescribed by these Rules, have made any such application as in Rule 36 mentioned, accompanied by such a notification as in the said Rule 36 mentioned, and at the expiration of the said period of two months in the said Rule 36 mentioned, no such legal proceedings as in Rule 37 mentioned shall have been instituted in connection with the trade mark to which the application relates, the said application shall be rejected and the said trade mark be removed from the Suspense Register and shall not be entered in the Permanent Register.

39. If, in any case permitted by these rules, any member shall, in the manner prescribed by these Rules, have made any such objection as in Rule 36 mentioned, accompanied by such a notification as in the said Rule 36 mentioned, and at the expiration of the said period of two months in the said Rule 36 mentioned, no such legal proceedings as in Rule 37 mentioned shall have been instituted in connection with the trade mark to which the objection relates, the said objection shall be rejected, and the application to register the trade mark, to which such objection relates, shall be dealt with under these Rules, as if no such notification had been given.

40. If, within the said period of two months in Rule 36 mentioned, such legal proceedings as in Rule 37 mentioned shall have been instituted, no steps shall be taken in the matter of the application or objection concerning the trade mark to which such legal proceedings relate until such legal proceedings shall have been finally determined.

41. When such legal proceedings as in Rule 37 mentioned shall have been finally determined, if it shall have been held by the Court—

(a) That a trade mark, to register which an application shall have been made, or in respect of which an objection to the same being entered in the Permanent Register shall have been made, is an imitation colourable or otherwise of another trade mark, the trade mark so held to be an imitation colourable or otherwise shall not be registered ;

or, if it shall have been held by the Court—

(b) That a trade mark, to register which an application shall have been made, or in respect of which an objection to the same being entered in the Permanent Register shall have been made, is not an imitation colourable or otherwise of another trade mark, the same shall, if it be in the opinion of the Managing Committee a proper mark to be registered as a trade mark, be entered therein.

42. The production to the Managing Committee of a certified copy of a decree passed by a Civil Court of competent jurisdiction in British India from which no appeal lies or in respect of which the time for appealing has expired or the production of a certified copy of a judgment of a Criminal Court from which no appeal lies, or in respect of which the time for appealing has expired, shall be conclusive evidence of everything therein appearing to have been held, decided or found, and the Managing Committee shall act in accordance therewith.

All trade marks registered with the Association on or before the First day of April 1912 to be entered in the Permanent Register.

43. All trade marks which shall have been registered with the Association on or before the First day of April 1912 either under the Rules for Primary Registration or under the Rules for Secondary Registration, which were in force prior and down to the said First day of April 1912, shall be entered in the Permanent Register and shall be deemed respectively to have been entered therein as of the respective dates on which the same were originally registered with the Association.

Effect of entry of trade mark in Permanent Register.

44. Registration of a trade mark in the Permanent Register under these Rules for use on goods of the class or classes specified in the entry in such register shall, if the trade mark in question be the property of the member in whose name the same is registered *prima facie*, be held to secure to the said member an exclusive right as against all other members to the use of the said trade mark on goods of the class or classes so specified and shall, if the trade mark in question be the property of a dealer dealing exclusively with the said member in goods of the class or classes so specified *prima facie*, be held so long as the said dealer shall so deal exclusively with the said member in goods of the said class or classes so specified to secure to the said member an exclusive right as against all other members to the use of the said trade mark on goods of the class or classes so specified.

45. These Rules shall come into force on the First day of April 1912 on which date they shall supersede all other Rules relating to the Registration of Trade Marks.

**RULES FOR THE ELECTION OF A REPRESENTATIVE
OF THE BOMBAY MILLOWNERS' ASSOCIATION TO
SERVE ON THE LEGISLATIVE COUNCIL OF
H. E. THE GOVERNOR OF BOMBAY.**

1. Candidates shall be nominated in writing signed by one proposer and one seconder, who must be both members of the Association, and the nomination papers must be sent in to the Secretary seven clear days before the day fixed for the election.
2. The Secretary of the Association shall circulate the names of the applicants three clear days before the election.
3. The Committee shall appoint a day, which shall be duly advertised, upon which the balloting shall take place. The ballot-box shall be open from 10-30 A.M. till 5 P.M. on that day.
4. Votes may be given either in person or through any one duly authorized by a member of the Association, each subscribing member being entitled to one vote for every complete sum of Rs. fifty paid by him as annual subscription to the Association.
5. The Committee shall appoint two Scrutineers who, at 5 P.M. on the day of the ballot, shall open the box and declare the result.
6. The candidate, who has the largest number of votes, shall be declared duly elected.
7. In the event of an equality of votes preventing the due election of any of the candidates, the members of the Association shall vote afresh in the manner above laid down, the voting in such case to be confined to the candidates who have secured an equal number of votes.

**RULES FOR THE ELECTION OF A REPRESENTATIVE
OF THE ASSOCIATION ON THE BOARD OF THE
VICTORIA JUBILEE TECHNICAL INSTITUTE.**

1. Any member of the Association shall be eligible as Representative of the Association on the Board of the Victoria Jubilee Technical Institute.
2. The period of office of any elected Representative of the Association on the Board of the said Institute shall be one of three years. At the end of such period he shall retire but may be re-elected.
3. The appointment of the Association's Representative shall be made at a general meeting of the Association and such Representative shall *ex-officio* be a member of the Committee of the Association.
4. In the event of the disqualification of the Association's Representative under Section 9 or 10 of the Rules and Regulations of the said Institute, or in the event of the decease or resignation of such Representative, or in event of his ceasing for any reason to be a member of the Association, the Committee shall appoint a successor, who shall hold office up to that date at which the Representative whom he succeeds would, under Rule 2, have retired.
5. In the event of the absence of the Association's Representative from three or more consecutive meetings of the Board, or in the event of the Association's Representative applying for leave of absence, the Committee may, if they think fit and with the consent of the Board of the said Institute, appoint a substitute who shall hold office until the Representative whom he replaces resumes attendance or up to that date at which the Representative whom he replaces would, under Rule 2, have retired.

**RULES FOR THE ELECTION OF A REPRESENTATIVE
OF THE BOMBAY MILLOWNERS' ASSOCIATION
TO SERVE ON THE BOARD OF TRUSTEES
UNDER THE PROVISIONS OF THE CITY
OF BOMBAY IMPROVEMENT
ACT, 1898.**

1. Candidates shall be nominated in writing signed by one proposer and one seconder, who must be both members of the Association, and the nomination papers must be sent in to the Secretary ten clear days before the day fixed for the election.
2. The Secretary of the Association shall circulate the names of the applicants four clear days before the election.
3. The Committee shall appoint two days, which shall be duly advertised, upon which the balloting shall take place. The ballot-box shall be open from 10 A.M. till 6 P.M. on each day.
4. Votes may be given either in person or through any one duly authorised by a member of the Association, each subscribing member being entitled to one vote for every complete sum of Rupees fifty paid by him as annual subscription to the Association.
5. The Committee shall appoint two scrutineers who, at 6 P.M. on the second day of the ballot, shall open the box and declare the result.
6. The candidate, who has the largest number of votes, shall be declared duly elected.
7. In the event of an equality of votes preventing the due election of any of the candidates, the members of the Association shall vote afresh in the manner above laid down, the voting in such case to be confined to the candidates who have secured an equal number of votes.
8. In the event of a casual vacancy the above course shall be followed in the appointment of a substitute.
9. In the event of the temporary absence of a Representative of the Association on the Board of Trustees, necessitating the appointment of a substitute under Section 13 (2), such appointment shall be made by a majority of the votes of the Committee of the Association at a meeting called for the purpose.

**RULES FOR THE ELECTION OF A REPRESENTATIVE
OF THE BOMBAY MILLOWNERS' ASSOCIATION TO
SERVE ON THE BOARD OF TRUSTEES
OF THE PORT OF BOMBAY.**

1. Candidates shall be nominated in writing signed by one proposer and one seconder, who must be both members of the Association, and the nomination papers must be sent in to the Secretary fifteen clear days before the day fixed for the election.
2. The Secretary of the Association shall circulate the names of the applicants ten clear days before the election.
3. The Committee shall appoint a day, which shall be duly advertised, upon which the balloting shall take place. The ballot-box shall be open from 10-30 A.M. till 5 P.M. on that day.
4. Votes may be given either in person or through any one duly authorised by a member of the Association, each subscribing member being entitled to one vote for every complete sum of Rupees fifty paid by him as annual subscription to the Association.
5. The Committee shall appoint two Scrutineers, who, at 5 P.M. on the day of the ballot, shall open the box and declare the result.
6. The candidate, who has the largest number of votes, shall be declared duly elected.
7. In the event of an equality of votes preventing the due election of any of the candidates, the members of the Association shall vote afresh in the manner above laid down, the voting in such case to be confined to the candidates who have secured an equal number of votes.
8. In the event of a casual vacancy the above course shall be followed in the appointment of a substitute,
9. In the event of the temporary absence of a Representative of the Association on the Board of Trustees, necessitating the appointment of a substitute, such appointment shall be made by a majority of the votes of the Committee of the Association at a meeting called for the purpose.