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REPORT
OF THE
Indian Tariff Board
REGARDING THE
GRANT OF SUPPLEMENTARY PROTECTION
TO THE
STEEL INDUSTRY



CALCUTTA : GOVERNMENT OF INDIA
CENTRAL PUBLICATION BRANCH
1925

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	Rs.	A.	P.
(1) Salaries of members and staff	18,858	0	0
(2) Travelling allowance (including daily allowance)	4,029	14	0
(3) Printing	3,195	0	0
(4) Contingencies	313	0	6

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CHAPTER I.

Introductory.

The Indian Tariff Board were directed to make their third enquiry into the condition of the Steel Industry in the Resolution of the Government of India in the Department of Commerce No. 260-T. (37), dated the 18th June 1925, which is reproduced below :—

“ In their Resolution, No. 260-T. (15), dated the 27th November 1924, the Government of India accepted the finding of the Tariff Board that the Indian Steel Industry was at that date in need of further protection than was afforded by the duties imposed by the Steel Industry (Protection) Act, (XIV of 1924), and expressed the opinion that bounties not exceeding Rs. 50 lakhs in the aggregate should be given to the industry for one year from 1st October 1924 to 30th September 1925. The Government of India also announced at the same time that, before the period indicated expired, the whole matter would be reviewed in the light of the circumstances then prevailing in order that it might be decided before the opening of the Autumn session whether it was necessary or advisable to place fresh proposals before the Assembly. In pursuance of this Resolution, a bounty is being paid, with the sanction of the Assembly, on rolled steel manufactured in India subject to certain conditions. The Tariff Board is now requested to re-examine the whole question in accordance with the undertaking given therein. They will consider—

(1) whether in view of the conditions of the industry and of the probable level of prices of steel articles the protection afforded by the Steel Industry (Protection) Act to the manufacture of the articles enumerated therein should be supplemented beyond the 30th September 1925 ;

(2) If so, for which of those articles is further assistance required and in what form and for that period should it be given.

2. Firms or persons interested, who desire that their views should be considered by the Tariff Board, should address their representations to the Secretary, Tariff Board, 1, Council House Street, Calcutta.”

2. On the 1st July 1925 the Board published the following communiqué inviting the opinions of those firms or persons who desired to be heard in the enquiry :—

The Board's Communiqué.

“ In the Resolution of the Government of India in the Commerce Department No. 260-T. (37), dated the 18th June

1925, the Tariff Board were directed to re-examine the question of the protection required by the Steel Industry. The two points specifically referred to the Board were as follows :—

- (1) Whether in view of the conditions of the Industry and of the probable level of prices of steel articles, the protection afforded by the Steel Industry (Protection) Act to the manufacture of the articles enumerated therein should be supplemented beyond the 30th September 1925 ;
- (2) If so, for which of those articles is further assistance required and in what form and for what period should it be given.

The steel articles, which come within the scope of the Steel Industry (Protection) Act, fall under the following heads :—

Rolled steel (including beams, angles, channels, plates, bars and rods, sheets black and galvanised, rails and fishplates).

Tinplate.

Wire and wire nails.

Fabricated steel.

Railway wagons.

The present enquiry is limited to these articles, and it is not open to the Board to consider whether protection is needed by other articles which were not protected by the Act. The Board propose, however, when dealing with railway wagons to investigate simultaneously the question which has been separately referred to them, what protection, if any, should be given to the manufacture of under-frames for railway carriages.

2. When the Board last examined the circumstances of the steel industry, they were limited by their terms of reference to the question what additional duties on certain kinds of steel were needed in order that the industry might enjoy the protection intended to be given by the Steel Industry (Protection) Act. On the present occasion the question what form the additional protection should take has been left entirely open, and they are free to consider whether additional duties or bounties best meet the circumstances of the case. In framing their recommendations, however, they must be guided mainly by the decision of the Government of India and the Legislature in January 1925 to proceed by way of bounties rather than by imposing additional duties. At the same time, question may arise as to the source from which the money for the payment of the bounties is to be found, and the possibility of an increase in the duties on certain kinds of steel cannot be altogether excluded.

3. The Board propose to take the oral evidence of the Tata Iron and Steel Company and the Tinplate Company of India, during the week ending the 11th July, and the evidence of the engineering firms, who are interested in fabricated steel, during the following week. Other firms and persons, who desire to give oral evidence regarding rolled steel, tinplate, wire and wire nails or fabricated steel, should inform the Board of the fact at the earliest possible date, and their written representations should reach the Board not later than Friday, the 10th July. The Board will also be prepared to consider written representations from persons and firms who do not wish to give oral evidence, provided they are received not later than the 17th July. The oral evidence regarding wagons and under-frames will be taken during the week ending the 1st of August. All representations about wagons and under-frames should reach the Board not later than the 24th July. During this enquiry the Board will hear the oral evidence in their office at No. 1, Council House Street, Calcutta."

3. The hearing of the oral evidence commenced at Calcutta on the 6th July and was concluded on the 29th July.

The Board's procedure. The witnesses examined orally included representatives of the Tata Iron and Steel Company, the Bengal Iron Company, the Tinplate Company of India, two engineering firms, who were interested both in fabricated steel and railway wagons and under-frames (Messrs. Burn and Company and Messrs. Jessop and Company), Messrs. Parry and Company on the subject of tipping wagons and coal tubs, the Bombay Iron Merchants Association and two prominent iron merchants—Mr. Anandji Haridas and Mr. G. B. Trivedi. A list of the representations received and considered by the Board will be found in Appendix I. The Chapters of the Report were submitted to the Government of India, as they were completed, on the following dates:—

Chapter II	August 13th.
Chapters IV and V	August 24th.
Chapter VI	August 28th.
Chapter III	August 30th.
Chapters I and VII	September 1st.

4. Under the Resolution of the Government of India, reproduced in paragraph 1, we were directed to report
 Scope of the enquiry. what supplementary protection was required for the steel articles enumerated in the Steel Industry (Protection) Act, and in what form and for what period it should be given. The enquiry we were called upon to make was restricted in its scope, and it was impossible, without transgressing the limits imposed, to consider several of the proposals placed before us. Some witnesses argued that the increased revenue arising from the protective duties on steel was so large that the Government of India

would retain a substantial surplus after all the bounties had been paid, and suggested that the duties should be reduced. This proposal clearly went beyond our terms of reference, and could not in any case be justified when its financial aspect was closely examined. Two of the iron merchants who gave evidence, advocated the removal of the protective duties on wire and wire nails, on steel bars of certain shapes and sizes and on waste material such as plate and sheet cuttings, on the ground that these articles were not being manufactured in India and that there was nothing to protect. We shall refer to the subject of wire and wire nails in Chapter VII, but the reduction of the duties on these articles is not a question which comes within our scope. Other proposals made to us were of a different kind. The Hukumchand Electrical Steel Works desired that the question of protection for steel castings should be reconsidered, and suggested, that, since the bulk of the castings they produced were component parts of wagons and under-frames, they came within the scope of the enquiry. We were unable, however, to take this view. Steel castings are not among the articles enumerated in the Steel Industry (Protection) Act, and the question whether they should be protected or not does not now arise. For similar reasons we have been unable to consider the renewed application of the Baroda Bolt Manufacturing Company that protection should be extended to iron bolts, nuts, rivets and similar articles, since these are not mentioned in the Act. All these proposals may come up for consideration in the statutory enquiry, which will be held next year, but they could not be examined in this enquiry.

5. The kinds of steel covered by our recommendations, include the varieties of rolled steel manufactured at Jamshedpur by the Tata Iron and Steel Company (with the exception of tinplate bars and rails and fishplates sold under long term contracts), tinplate, fabricated steel of all kinds and railway wagons. When we were taking evidence on the subject of wagons, we found it convenient to hear simultaneously the evidence of the wagon building firms on the question of protection for railway carriage under-frames, a matter which was referred to us separately in the Resolution of the Government of India in the Commerce Department No. 38-T, dated 28th March 1925. Our recommendations on the subject of under-frames have been made in Chapter VI of this Report. We also received applications for supplementary protection for wire and wire nails, but, for reasons explained in Chapter VII, we have been compelled to postpone their consideration.

6. In the second Chapter of the Report the supplementary protection required by rolled steel is discussed; and in Chapter III the production of pig iron and steel at Jamshedpur is considered, and also the representation of the Bengal Iron Company that their position, as manufacturers of pig iron, has been prejudiced by protection for steel. Chapters IV and V deal with tinplate and fabricated steel, and Chapter VI with wagons and under-frames. Our conclusions are summarised in Chapter VII.

CHAPTER II.

Rolled Steel.

The prices of imported steel.

7. At our request, statements showing the c.i.f. prices month by month of various classes of imported steel were sent in by the Tata Iron and Steel Company, by the leading engineering firms and by importing firms both in Calcutta and Bombay. The last named also supplied us with the current prices in these two markets. The information thus obtained has been tabulated in the tables in Appendix II, in which the average monthly quotations for British and Belgian steel in the Iron and Coal Trades Review have also been included for purposes of comparison. It will be convenient briefly to review first the Continental and then the British prices.

8. In October 1924 the prices of Belgian steel had reached a very low level. The c.i.f. price of beams, angles and bars was about £6-10-0 a ton, *i.e.*, about £1-10-0 a ton below the prices adopted by the Board as the basis of the recommendations made in their first report. Early in the year 1925 a slight stiffening of prices occurred, followed by a gradual relapse to near the October level in May. In June and July, owing to the fall in the value of the French and Belgian franc, the sterling f.o.b. quotations dropped still lower, but in April the freights from Antwerp had been raised from 15 shillings to 22 shillings and 6 pence a ton, and the c.i.f. prices were not appreciably lower than in October. The c.i.f. price of Belgian plates was found to be about £7-18-0 a ton in October 1924, but subsequently rose a little and stands now at about £8-10-0 a ton, an increase of 12 shillings a ton since October. If allowance is made for the rise in the freight, the increase in the sterling price at Antwerp is about 6 shillings a ton, and this figure is confirmed by the f.o.b. quotations in the Iron and Coal Trades Review.

9. When the Board last examined this question in October 1924, they found that the sterling prices of British bars and plates were at about the same level as they had been in the latter part of 1923, or possibly a little higher, but that the prices of structural sections (beams, angles, channels, etc.) had fallen by about 10 shillings a ton. During the last nine months a marked decline has taken place in the prices of all these kinds of steel, and the extent of the fall in the price of beams and bars seems to be greater than is disclosed in the Trade Paper quotations. The following table summarises the evidence on this point:—

Decline in the price per ton of British steel.

	Beams.	Bars.	Plates.
	£ s. d.	£ s. d.	£ s. d.
Iron and Coal Trades Review . . .	0 10 0	0 15 0	0 16 3
Messrs. Jessop and Company . . .	1 0 0	1 0 0	0 12 6
„ Burn and Company . . .	1 0 6	...	0 19 0
„ Balmer Lawrie and Company . .	0 14 0	1 18 0	0 10 0
„ Richardson and Cruddas . . .	0 18 3	...	0 14 3

As regards plates the evidence suggests that the fall in price is about 17 shillings and 6 pence a ton, but there is some doubt both as to bars and beams. When we took evidence on the subject in October 1924, the difference between the f.o.b. quotations, as given in the Iron and Coal Trades Review, and the c.i.f. prices supplied by the engineering firms was approximately equal to the cost of freight and insurance, but on this occasion there is a very great discrepancy. If the c.i.f. figures now given by the engineering firms are correct, British beams can be purchased for about 10 shillings a ton less than the published quotations and bars for 15 shillings a ton less. This is by no means improbable, for at a time when trade is depressed and the pressure to sell is very great, the prices quoted in the Trade Papers are no longer a true index of the prices at which business can be done. We are prepared to accept the prices given by the engineering firms for beams, but the prices given for bars are probably too low. On the whole we think that the current prices for British steel may be taken to be as follows:—

	c. i. f. price in October 1924 as estimated by the Board.	c. i. f. price in June 1925.	Fall in price.
	£ s. d.	£ s. d.	£ s. d.
Beams	9 10 0	8 10 0	1 0 0
Bars	10 5 0	8 15 0	1 10 0
Plates	10 10 0	9 12 6	0 17 6

The nett result is that the current prices of British steel are lower than the prices adopted by the Board in their original enquiry by approximately the following amounts:—

	Per ton.
	£ s. d.
Beams and other structural sections	1 10 0
Bars	1 5 0
Plates	0 12 6

10. In the Board's Report on the increase of the duties on steel, attention was drawn to the very wide gulf which had opened out between British and Continental prices, and to the displacement of British steel which had followed. From what has been said in the last two paragraphs it will be seen that the difference is now very much smaller. The

Narrowing of the gulf
between British and Con-
tinental prices.

change which has occurred will be evident from the following table:—

Differences between the prices of British and Continental steel.

	October 1924.	June-July 1925.
	£ s. d.	£ s. d.
Beams	3 0 0	2 0 0
Bars	3 15 0	2 0 0
Plates	2 12 0	1 2 6

The result of this narrowing of the gulf has apparently been to arrest the process of substitution of Continental steel for British, but, owing to the fall in the price of British steel, the Indian manufacturer does not benefit. The only evidence we have received of further progress in this direction is that some of the Indian Railway Companies are now prepared to use Continental rails instead of British, and will not purchase Indian rails except on the basis of Continental prices. The rail contract between the Tata Iron and Steel Company and the Bengal Nagpur Railway Company expired on the 31st of March 1925. The first purchase made by the Railway Company outside the contract was for 7,494 tons of rails at Rs. 140 a ton, this price being fixed apparently on the basis of British prices. Future purchases will however be made on the basis of Continental prices, and the price fixed for the time being is Rs. 124 a ton. If allowance is made for landing charges (Rs. 5 a ton) and Customs duty (Rs. 14 a ton), this price is equivalent to £7-17-6 c.i.f. or £6-15-0 f.o.b., whereas Rs. 140 a ton is equivalent to £9-1-6 c.i.f. or £7-19-0 f.o.b. The export quotation for British rails in the Iron and Coal Trades Review was £8-10-0 a ton at the end of June 1925, and it is evident that rails (like bars and beams) can be bought at about 10 shillings a ton below the quoted price. If, in fact, the Indian Railways generally are prepared to use Continental rails, the price the Tata Iron and Steel Company can obtain for rails will be seriously affected, and even for rails sold on the basis of British prices, the price obtained will be less by about Rs. 15 a ton than the price contemplated in the protective scheme. In 1925-26 only the sales to the Bengal Nagpur Railway Company are in question, but in March 1926 the contract with the "Palmer" Railway Companies will terminate, and as their average requirements are 35,000 tons a year, the matter is of some importance to the Iron and Steel Company.

* The Bombay, Baroda and Central India Railway, the Madras and Southern Mahratta Railway, the Nizam's Guaranteed State Railway, the Bengal and North-Western Railway, the Burma Railways and the Assam Railways and Trading Company.

11. When the Board submitted their recommendations for an increase in the protective duties on steel in November 1924, they found it necessary to examine in detail the actual prices at which the Tata Iron and Steel Company were able to sell steel to various classes of purchasers during the four months (June to September) which had elapsed since the Steel Industry (Protection) Act became law. It was impossible in any other way to form an estimate of the prices which the Company were likely to realise over a period under the new conditions which had arisen. It is fortunately unnecessary to attempt the same laborious task upon this occasion. Conditions have been reasonably stable during the last eight or nine months, and the average prices actually realised for each class of steel are a sufficient indication of the prices likely to be realised in the future, so long as the acute depression in the Iron and Steel Industry throughout the world (except in North America) continues. The question may, however, be raised whether the sharp fall in the prices of British steel may not prove a disturbing factor. We are satisfied that this is not so, and we have ascertained that this is also the view of the Tata Iron and Steel Company. When the Board made their forecast of the future course of prices, they made allowance for the probable effect on Indian prices of the substitution of Continental for British steel. In this way the fall in British prices was discounted in advance, and it is not necessary in estimating the future price of bars and structural sections to make any further allowance for this factor. Plates are in a somewhat different position (see paragraph 13).

12. When the Board examined the circumstances of the steel industry in the autumn of 1924, they found that the situation was complicated by the very large importations between April and September, and the heavy stocks which had accumulated, both at Jamshedpur and at the ports. The market for steel had become thoroughly disorganised, and dealers were forced to sell at prices substantially below the cost of importation. These conditions have now passed away. During the eight months commencing in October 1924, the sales of the Tata Iron and Steel Company exceeded their output, and by May 1925 their stocks of finished steel had been brought down to a reasonable figure (see Appendix IV). In Calcutta, according to the evidence of the Company, the stocks of Continental material are below normal, and Mr. Anandji Haridas informed us that the stocks of bars, angles, plates and black sheet in Calcutta were only 50 or 60 per cent. of the stocks in August and September 1924. In Bombay the Company believe that the stocks are about normal, but Mr. Trivedi put the stock of bars in Bombay as high as 30,000 tons, at the same time remarking that the stocks of other steel sections were, if anything, below normal. Bars and angles are the sections most frequently stocked by importers, and

the imports* of these sections during the first and second halves of the last three years are compared in the following tables :—

Imports of steel bars.

—	1922-23.	1923-24.	1924-25.
	Tons.	Tons.	Tons.
April to September	89,489	51,481	104,007
October to March	98,515	104,920	79,460

Imports of steel angles.

—	1922-23.	1923-24.	1924-25.
	Tons.	Tons.	Tons.
April to September	9,355	10,781	19,087
October to March	12,451	15,543	18,395

It will be seen that the imports of bars during the latter half of 1924-25 were only about 80 per cent. of the imports during the corresponding periods of the two previous years, whereas the imports of angles were 50 per cent. above those of 1922-23 and 20 per cent. above those of 1923-24. Nevertheless the stock of angles in Bombay is reported to be only 1,000 tons, a fact which tends to show that there has been an actual increase in the consumption of this class of steel. The evidence at any rate makes it certain that the prices of steel are no longer weighed down by the pressure of accumulated stocks, and that business is now proceeding normally. This can be illustrated from figures supplied by Messrs. Anandji Haridas and Company. In October 1924 the local selling price for bars was equivalent to a c.i.f. price not higher than £5-11-0 to £6-3-0 a ton, whereas the actual c.i.f. price for the month was at least £6-6-0 a ton. In May 1925 the local selling price was equivalent to a c.i.f. price of £6-15-0 to £7-10-0 a ton against the quoted c.i.f. price of £6-15-0 a ton. The change in the conditions is very marked.

13. The detailed statements giving the average prices realised by the Tata Iron and Steel Company (f.o.r. Jamshedpur steel. Appendix V and only the most important points need be referred to here. The complications introduced into our last enquiry by the "special" sales, and by the fact that the prices at which payment was made were frequently lower than the prices at which orders were booked, have fortunately disappeared. The following table compares the prices actually realised by the

* The imports of various classes of steel into India for the last three years are given in the Tables in Appendix III

Tata Iron and Steel Company in the eight months from October 1924 to May 1925, with the prices which the Board anticipated they would be able to obtain :—

Prices realised by the Tata Iron and Steel Company for certain classes of steel.

	As forecasted by the Tariff Board.	Average October 1924 to May 1925.
	Rs. per ton.	Rs. per ton.
Bars	145 to 147	145.50
Heavy structural sections (mainly beams and channels)	...	145.08
Light structural sections (mainly angles and tees)	...	141.03
Average for all structural sections	139 to 142	143.25
Plates	135	146.77

It will be seen that the actual prices realised for bars and structural sections are extraordinarily close to the Board's forecast and they do not call for further comment. The average price of plates, however, is about Rs. 8 a ton less than the Board expected. The explanation may be found, partly in the sale during certain months of plates, not certified by the Metallurgical Inspector, to dealers in Calcutta in competition with Continental plates, but mainly in the fall that has taken place in the price of British plates. The bulk of the sales are to the engineering firms, and the price of plates so sold is determined mainly by the British price. In this case therefore the fall in the British price is an important factor.

14. We have preferred to discuss the prices of steel sheets separately from the prices of other steel sections.

The prices of sheets—black and galvanised. The manufacture of black and galvanised sheet did not commence at Jamshedpur until

October 1924, and in our previous enquiries it was not necessary to devote special attention to the prices of such sheets. The following table compares the prices of British sheets at various dates with the prices adopted by the Board as the basis of their recommendations in their first enquiry :—

	Landed duty free price adopted by the Board in their first enquiry. Re. 1 = 1s. 4d.	PRICES IN OCTOBER 1924.		PRICES IN JUNE 1925.	
		f. o. b. price in sterling.	Equivalent landed duty free price. Re 1 = 1s. 6d.	f. o. b. price in sterling.	Equivalent landed duty free price. Re. 1 = 1s. 6d.
		£ s. d.	Rs.	£ s. d.	Rs.
Black sheet	200	12 15 0	190	11 10 0	175
Galvanised sheet	200	17 19 0	280	16 5 0	240

It will be seen that the f.o.b. price of black sheet has fallen by 25 shillings a ton since October 1924, and the landed duty free price is now lower by Rs. 25 a ton than the price originally adopted by the Board, while the f.o.b. price of galvanised sheet has fallen by 35 shillings a ton since October 1924, and the landed duty free price is lower by Rs. 60 a ton than the Board's price. No quotations for Continental black sheet are given in the Iron and Coal Trades Review, but the current c.i.f. price has been given as £11-10-0 a ton by the Tata Iron and Steel Company and as £11-7-6 by Messrs. Anandji Haridas and Company. It is therefore cheaper than British sheet by at least 20 shillings a ton. The imports of galvanised sheet from the Continent are negligible. The black sheet manufactured at Jamshedpur is sold mainly in competition with Continental sheet, and the average price realised for the 8 months October 1924 to May 1925 was Rs. 186 a ton as against Rs. 230 which the 15 per cent. duty was expected to give the Indian manufacturer. The average price realised from sales to dealers (more than two-thirds of the total) was Rs. 177 a ton. The landed duty paid cost of Continental sheet amounts to about Rs. 190 a ton, and since the Company naturally endeavours to sell as much as possible of its output in the up-country markets where it has a railway freight advantage of about Rs. 20 a ton, the price actually realised is low. The explanation probably is that, during the first months of manufacture, the Company has had to accept a price for black sheet lower than would be paid for imported sheet. The average price realised for galvanised sheet, during the eight months from October 1924 to May 1925, was Rs. 297 a ton, as against Rs. 345 a ton which the Board adopted as the standard price in their first enquiry. This is the approximate selling price at an Indian port of imported sheet with the present duty and the rupee sterling exchange at 1s. 6d., when the f.o.b. quotation at a British port is £17 a ton, which is about the average price for the whole period. The Company sold almost the whole of its output of galvanised sheet in the up-country markets and thus derived full benefit from its railway freight advantage.

15. Apart from the fall in the prices of British steel, conditions

The future course of steel prices.

in the steel trade have been relatively stable for the last nine months, and the prices which an Indian manufacturer can obtain in face of British and Continental competition have been ascertained. The question is whether the existing level of prices is likely to be maintained during the next two years, or whether there are reasons for anticipating a marked change either in an upward or a downward direction. We have considered the evidence bearing on this point and our view is that conditions are not likely to vary materially during the next two years. There is, as yet, no sign of reviving prosperity in the Iron and Steel Industry of Europe, and the excess of productive capacity over consumption still dominates the situation. We can find no ground for expecting that steel prices will rise appreciably for many months. There is always the possibility, of course, that a political catastrophe or an industrial upheaval in one or more countries might produce entirely new conditions, but

in the nature of the case such changes cannot be foreseen, nor can the consequences which might result from them be calculated. We anticipate, therefore, the continuance of the present low level of steel prices during the period covered by the Steel Industry (Protection) Act. On the other hand, we do not expect to see prices go lower on the average. All the information we have as to conditions in Europe suggests that current prices leave little or no surplus over the cost of production in any steel producing country, and that sometimes they involve an actual loss. It has been suggested indeed, that a fresh relapse of the 'franc' exchanges might again bring down the price of steel in India. That would certainly be the immediate effect, but it could hardly be of long continuance once the franc was again stabilised at some lower value, because the consequent increase in the cost of living in France and Belgium would probably necessitate a higher scale of wages. We do not consider that any provision against this contingency is necessary, more especially as there are other possibilities. The financial measures of the French Government might enable them to stabilise the franc permanently at a somewhat higher value than it holds at present, and a rise in the price of galvanised sheet might occur if the British manufacturers' combination were to be revived.

16. In the following table the prices for certain kinds of steel, which the Indian manufacturer will probably realise on the average up to the 31st March 1927, are compared with the standard prices which it was expected he would receive under the operation of the Steel Industry (Protection) Act.

— —	Price likely to be realised.	Standard prices.	Differences.
	Rs. per ton.	Rs. per ton.	Rs. per ton.
Bars	145	180	35
Heavy structural sections (mainly beams and channels).	145	175	30
Light structural sections (mainly angles and tees).	141	175	34
Plates	146	180	34
Black sheet	187	230	43
Galvanised sheet	297	345	48
Rails (on the basis of British prices) .	140	155*	15
Rails (on the basis of Continental prices).	124	155*	31

* These prices would be increased by the bounty on rails to Rs. 181 in 1925-26 and to Rs. 175 in 1926-27.

We turn now to the question of the form and amount of the supplementary protection which these prices justify.

The form and amount of the supplementary protection required.

17. In the Resolution of the Government of India defining the terms of our reference, we were directed to report for which of the articles enumerated in the Steel Industry (Protection) Act further assistance is required, and, if so, in what form and for what period it should be given. The classes of rolled steel for which additional protection is necessary are bars, structural sections (*i.e.*, beams, angles, channels and similar shapes), plates, rails and fishplates (in so far as their selling price is not regulated by long term contracts entered into some years ago), and black and galvanised sheet. These are the kinds of rolled steel on which the Board recommended in November 1924 that additional duties should be unposed, and the amount of the bounty actually sanctioned for the twelve months from October 1924 to September 1925, was calculated on the estimated production of these kinds of steel, and on the differences between the prices likely to be realised and the standard prices which formed the basis of the scheme of protection. The remainder of the Iron and Steel Company's output consists of rails and fishplates sold to the Railway Board and to certain Railway Companies under long term contracts, and of tinplate bars supplied to the Tinplate Company of India. The rails and fishplates sold under contract require no additional protection, because the price paid for them is exactly what it was when the Steel Industry (Protection) Act was passed, and the tinplate bars are not in question because they have never been included in the scheme of protection. For the sake of brevity it will be convenient to describe the steel on which the additional bounty was calculated as 'bounty' steel, and the contract rails and fishplates and the tinplate bars as 'other' steel. During the 8 months from October 1924 to May 1925, the Company produced 79,000 tons of 'bounty' steel and 116,000 tons of 'other' steel, and during the 4 months from June to September 1925, it expects to produce 51,000 tons of 'bounty' steel and 51,000 tons of 'other' steel (see Appendix VI, Table 4). The additional bounty is limited to Rs. 50 lakhs, and the average amount received per ton of 'bounty' steel is Rs. 38.5. This figure is a little higher than can be justified by the output of 'bounty' steel between October 1924 and September 1925 and the actual prices realised. The average difference between the realised prices and the standard prices is about Rs. 35 a ton for the twelve months, and on that basis a total bounty of Rs. 45.5 lakhs would have sufficed. It is, however, to be remembered that during the first 3½ months after the passing of the Steel Industry (Protection) Act the prices received by the Company for all classes of steel were much below

the standard prices, and a sum of Rs. 4.5 lakhs will not go far to cover the losses incurred during that period.

18. One of the questions we have to consider is whether the additional protection required after the 1st October 1925 should be given entirely in the form of a bounty, or whether it is expedient that the duties on some kinds of steel should be increased. We have no hesitation in recommending the adoption of the former alternative. There is a financial side of this question, which is fully discussed in Annexure B and in paragraph 34, but from the outset of this enquiry our view has been that the supplementary protection necessary should be given as far as possible in the form of a bounty, and that the Customs duties should not be increased, unless it appeared that the payments in respect of bounties were likely to exceed the additional revenue derived from the protective duties. In our view, no increase in the duties is called for, and the additional protection required for rolled steel can, we think, be given entirely in the form of a bounty without imposing a burden on the ordinary taxpayer.

19. The additional bounty already sanctioned terminates on the 30th September 1925, while the Steel Industry (Protection) Act ceases to operate on the 31st March 1927. These two dates obviously set limits to the period which our recommendations can possibly cover, and the question is whether the proposals now to be made should apply to the whole of the eighteen months or to some shorter period. We are clearly of opinion that whatever measures may now be approved should extend up to the 31st March 1927. The commencement of the statutory enquiry, which must precede the expiry of the Steel Industry (Protection) Act, cannot well be deferred to a date later than July 1926 if the results are to be ready for consideration in the cold weather session of 1927. To interpose yet another enquiry into the circumstances of the steel industry would impose an almost intolerable burden upon all concerned, and would apparently serve no useful purpose. So far as can be foreseen, it is not likely that conditions will change materially, either for the better or for the worse, before the spring of 1927, and there is therefore no valid reason for planning for a shorter period than eighteen months. Our recommendation is that the measure now to be taken should extend to the 31st March 1927.

20. It follows from what has been said in paragraphs 18 and 19, that the main issue on which we have to advise is the amount of the bounty which should be paid on the manufacture of rolled steel between the 1st October 1925

Supplementary protection for rolled steel to be given by means of an additional bounty.

Additional bounty to be paid up to 31st March 1927.

Amount of the additional bounty as first calculated.

and the 31st March 1927. In estimating the amount required the primary factors are, as on the previous occasion,—

- (1) the difference between the prices likely to be received for certain kinds of steel and the standard prices underlying the protective scheme, and
- (2) the probable production in India of these kinds of steel during the period.

An estimate of the bounty calculated on this basis will be found in Appendix VI, Tables 1 to 3, and it will be found that the additional assistance needed by way of bounty is Rs. 113 lakhs in all. A small correction is, however, necessary. The tables were drawn up on the basis of the Iron and Steel Company's estimate of its future production, in which the output of fishplates is not distinguished from the output of light structural sections rolled in the same mill. But under the Steel Industry (Protection) Act bounties are paid on the production of fishplates exactly as for rails, and in so far as the fishplates are sold under the contracts, they cannot be taken into account in calculating the additional bounty. If the output of fishplates is taken as 5 per cent. of the rail production, the quantity affected is about 7,000 tons, and the bounty has been over-estimated by about Rs. 24 lakhs. The total bounty required on a strict application of the method outlined above, is therefore Rs. 110 lakhs in round figures.

21. When a system of protection by means of bounties is likely to result in the payment of very large sums to a single manufacturing concern, there are obvious reasons why the first estimate of the amount required should be closely scrutinised. The points in which the estimate may prove open to attack are:—

Necessity for making sure that the supplementary protection proposed is not excessive.

- (1) The prices which the manufacturer is likely to realise.
- (2) The total output of finished steel.
- (3) The relative proportions of the output of 'bounty' steel and 'other' steel.
- (4) The profits which the manufacturer is likely to make.
- (5) The standard prices which it is considered he should obtain if he is to be adequately protected.

On the first point we have nothing to add to what has been said in the section relating to prices, for we can find no reason for anticipating that the manufacturer will obtain, on the average, higher prices than those we have taken. The remaining points require separate discussion. There are, in our view, valid reasons why the first estimate of the additional bounty must be regarded as excessive, and we shall attempt to estimate what deductions can properly be made. But it cannot be stated too clearly at the outset, that an exact calculation of the amounts which ought to be written down

is not possible. There are forces at work which operate to the advantage of the manufacturer as well as to his disadvantage, but whereas the loss he suffers when prices fall can be ascertained with reasonable accuracy, the extent to which he may have benefited by the changed conditions can only be conjectured. We have done our best with the materials available to do justice to all aspects of the case, but the final estimate of the reductions to be made is to a large extent arbitrary. That is unavoidable in the circumstances.

22. The bounty payments for the twelve months ending on September 30th, 1925, were subject to a limit of Rs. 50 lakhs in all, and this limit has proved to be a little too high. But if the limit were fixed at the corresponding figure of Rs. 75 lakhs for the next eighteen months it is likely to be too low. The object of the additional bounties is to restore to the Indian manufacturer the protection he was intended to receive under the Steel Industry (Protection) Act, and which he would have received had prices remained at the 1923 level. Where the protection is given by means of duties, the manufacturer receives a higher price for every ton of steel he produces, and if a bounty scheme is preferred, the limit must be high enough to allow for the increase in production. Now the circumstances are such that the output of 'bounty' steel must increase while that of 'other' steel diminishes. This is so for two reasons. The proportion of the rail requirements of India already supplied by Jamshedpur is so large that the possibility of further expansion is limited, and the sale of tinplate bars cannot possibly exceed the maximum requirements of the Tinplate Company of India. But apart from that, there is the fact that the contract with the 'Palmer' Railway Companies will expire on the 31st March 1926, and a considerable output of rails and fishplates will then be transferred from the class of 'other' steel to 'bounty' steel. These rails and fishplates must be taken into account in calculating the bounty for, owing to the fall in the price of British and Continental steel, the Company will not (even when the rail bounty is added) receive the price contemplated by the scheme of protection. The nett result is that, whereas from October 1924 to September 1925 the 'bounty' steel amounted to 130,000 tons out of a total of 297,000 tons, in the succeeding eighteen months the 'bounty' steel is expected to amount to 315,000 tons out of a total of 524,000 tons (see Appendix VI, Table 4). It follows that larger payments by way of bounty are necessary in the second period than in the first.

23. The fact that the additional bounty payable up to September 1925 promises slightly to exceed the amount which can be justified by the output of 'bounty' steel for the year, naturally suggests an enquiry whether the actual production of 'bounty' steel.

steel for the next eighteen months may not fall short of the estimate. This might happen if the total output of finished steel proved substantially less than the estimated figure of 524,000 tons, but the natural safeguard against this risk is to fix the amount payable per ton at such a figure that, unless the steel is actually produced, the bounty will not be earned, and there is no need to restrict the total payments on this ground. But even if the estimated output of finished steel is obtained, there might still be a shortage of 'bounty' steel, if the production of 'other' steel exceeded the estimate. This point requires rather closer examination.

24. The steel, which cannot be taken into account in calculating the additional bounty, consists of tinplate bars, rails and fishplates. The output of tinplate bars cannot exceed the estimate, for it has been taken as equal to the full requirements of the Tinplate Company, and that company has recently obtained part of its requirements from Europe and may continue to do so. There is, however, a possibility that the quantities of rails and fishplates sold under contract may be larger than the figures taken, and the quantities sold outside the contracts smaller. The requirements of the Bengal Nagpur Railway Company and of the Palmer Railway Companies have been taken as equal to the average supplies to them in previous years, but it is not known whether they will in fact require so much. It is possible, moreover, that the Railway Board, now that the East Indian and Great Indian Peninsula Railways have been brought under their management, may take larger quantities of rails and fishplates in 1926-27 than they have done in previous years. The total quantity of rails covered by the Railway Board's contract is 300,000 tons, and it is understood that in the last of the seven years for which it operates (1926-27) the balance remaining to be taken will be large. If the Railway Board's requirements are higher than usual, the output of 'other' steel may be higher than the estimate, and if so the output of 'bounty' steel will be lower. There is another element of uncertainty here because it is not known whether the Palmer Railway Companies will purchase in 1926-27 on the basis of British prices or of Continental prices. The Bengal Nagpur Railway has definitely adopted the latter course, and in the tables the price likely to be realised for rails sold outside the contracts has been taken as equal to the price paid by that company during the current year. If some of the 'Palmer' Companies were to purchase on the basis of British prices, the bounty, as estimated, would be too high. We think that some allowance must be made for these uncertainties, but no exact calculation is possible and whatever figure is taken must be arbitrary. The estimated quantity of rails and fishplates likely to be sold outside the contracts is 53,500 tons and a reduction of one-third seems a fair allowance for over-estimating. On this basis the total assistance required will come down by Rs. 5.5 lakhs.

25. The main object of the present enquiry is to ascertain what

The cost of production as it affects the amount of the supplementary protection required.

additional assistance the steel manufacturer requires if he is to receive the protection originally intended. The need for such assistance arises from the fall in prices, and the cost of production is not directly in issue. The Board made it plain in their Report on the Grant of Protection to the Steel Industry that a substantial decrease in costs was to be expected in 1925-26 and 1926-27, and the fact that costs have actually fallen considerably and are likely to fall still further, does not in itself justify a departure from the original scheme. But if it were found that supplementary protection, calculated on the full difference between the prices likely to be realised for certain classes of steel, would probably result in unreasonably large profits to the manufacturer at the expense of the taxpayer, that would certainly be a reason for limiting the assistance to be given. This aspect of the case has been examined in a separate note (Annexure A), and only the results arrived at need be recorded here. It appears probable that, if the Iron and Steel Company received additional assistance to the extent of Rs. 110 lakhs in the eighteen months ending on the 31st March 1927, the cost of production would go down to an extent sufficient to leave a surplus over the all-in cost of production of Rs. 70 lakhs in 1925-26 and Rs. 126 lakhs in 1926-27. The sum required to give an eight per cent. return on the fair capitalisation of the works is Rs. 120 lakhs a year, and during the first three years of protection the Company would realise Rs. 200 lakhs in all, or about Rs. 67 lakhs a year. It is clear, we think, that the manufacturer's profits are not likely to be unreasonably high, and that a limitation of the bounty payments cannot be justified on that ground.

26. The question of the cost of production has another aspect

Reduction in costs and fall in steel prices partly attributable to the same cause.

which is directly relevant in this enquiry. One of the causes of the fall in Indian steel prices is the rise in the rupee sterling exchange, and it may well be that this factor has operated to reduce the cost of production also. If, in fact, this is the case, and if the supplementary protection sufficed to give the Indian manufacturer the standard prices fixed for certain classes of steel, he would be better off than he would have been, had the exchange and prices remained as in 1923. In other words, if the rise in the exchange has reduced the cost of production, the standard prices are now too high. It becomes necessary therefore to examine the question how far the rise in the exchange has tended to reduce costs in the steel industry. The higher value of the rupee would naturally be followed by a decline in the general price level, and in this way not only the cost of materials, but ultimately the cost of labour also would be reduced. Both points deserve scrutiny.

27. So far as wages and salaries are concerned there has, as yet, been no change in the conditions. The

Labour costs unaffected by the higher value of the rupee.

wholesale prices of the great staple commodities are the first to be affected by a rise or fall in the exchange, and the retail prices, on which the cost of living depends, respond much more slowly to the stimulus and do not establish themselves on a new level until some time has passed. An increase or decrease in the wages of labour may follow the change in the cost of living, but only after an interval which is likely to be a long one when circumstances call for a reduction in wages. As it happens the period, during which the exchange value of the rupee was increasing, was also a period when the world price of many staple commodities was rising, and the higher value of the rupee tended to secure the maintenance of existing prices rather than an actual decrease. In these circumstances a reduction in the cost of living could hardly have been urged in favour of a lower wage scale. It is, of course, true that, at whatever rate the exchanges may finally settle down, things must come to a level, for no country can permanently gain or lose in respect of its natural advantages for industries, by changes in the external value of its currency unit. In the case of the steel industry, moreover, it is quite possible that the re-adjustment will take place rather by an increase of wages in Europe than a reduction in India, for the wages of metal workers in the United Kingdom at any rate are rather noticeably below the level which prevails in other industries. In one way or other the adjustment is ultimately inevitable, but we can see no prospect of either change taking place before the expiry of the three years during which the Steel Industry (Protection) Act remains in force. During the period with which we are concerned, therefore, the Indian manufacturer of steel cannot set off against the lower price he receives any reduction in wages and salaries, save in so far as it may be possible, when the engagement of a covenanted hand expires, to fill his post at a lower rate of pay. The effect of any changes of this kind must be negligible for some time to come.

28. The cost of materials stands in a different position from that of labour. Where an industry uses

Effect of the rise in the exchange on the cost of primary materials.

purchased materials the price of which is regulated by the cost of importation, the reduction in costs when the exchange rises is immediate and automatic. But the only raw material of this kind used in the steel industry is the spelter required for the manufacture of galvanised sheet, the cost of which is at present about Rs. 90 per ton of sheet produced. If the exchange were at 1s. 4d. the extra cost would be Rs. 11 per ton of sheet, which is equivalent to Rs. 0.6 per ton of finished steel. The other raw materials such as iron ore, manganese and limestone are produced in the Company's own mines and quarries and their cost is mainly the cost of the labour employed in their extraction.

29. If the primary raw materials of the industry are set aside,

The cost of miscellaneous materials.

there remains a large miscellaneous class of materials, such as tools, lubricating oils, refractories for lining the furnaces and ovens, spare parts of machinery, and stores of all kinds. In so far as the cost of these materials, whether imported or not, is regulated by the cost of importation, the rise of the exchange must tend directly to bring down costs. Before the amount of the probable saving could be estimated with any approach to accuracy, a close and detailed examination of the Company's costs would be necessary, for it is not only a question of ascertaining the cost of such materials in every department of the Company's mines, quarries and works, but also of eliminating from the account those materials of local origin the cost of which is unaffected by exchange fluctuations, or by the incidental change in the level of prices. Thus for example, the materials used in repairing the machinery and buildings would be largely produced in the Company's own works, and practically all tools and appliances made of cast iron would be made in the Company's own foundries. A detailed investigation of this sort could not be attempted in this enquiry, but our examination of the Company's cost sheets leads us to believe that the cost of the miscellaneous materials in question must be less than 20 per cent. of the cost of finished steel, and that an increase in the value of the rupee from 1s. 4d. to 1s. 6d. would reduce the average cost per ton by something less than Rs. 2-8-0. The reduction also would not be immediate but gradual. All industrial companies in India are compelled to hold large stocks of imported stores, and the debits in the monthly cost sheets represent purchases made many months before. The first effect of the higher exchange would be a gradual decline in the interest on working capital owing to the lower prices paid, and the works costs would not be affected till later.

30. The most important material of all has not yet been mentioned.

The cost of coal.

The cost of coal is vital to the steel manufacturer, and in India the decline in coal prices during the last two years has been very heavy. The cost of certain miscellaneous materials and stores used by the steel manufacturer must be assumed to be lower because of the rise in the exchange, but there is no evidence that there has been a general fall in the price of such materials apart from the exchange. The case of coal is entirely different. The decline in price is known, but the part which the higher value of the rupee may have played in bringing about the fall is quite uncertain. It cannot have affected prices directly, for the great bulk of the output of the Indian collieries is not sold in competition with imported coal. It is true, of course, that in so far as the rise in the exchange has operated to restrict the sale of Indian coal in overseas markets* and thereby increased the quantity which has to be sold in the markets accessible by rail, it must apparently have contributed to the fall in the pit-head price in Bengal and Bihar, but it is a matter of pure conjecture how much higher the price would have been with the rupee at 1s. 4d.

* This phrase covers the Indian ports, such as Bombay, Madras and Rangoon, as well as Ceylon and the Straits Settlements.

No figure that might be suggested as the measure of the difference, could claim any sort of authority. The coal question, however, has wider aspects and these deserve to be considered. It is impossible to dissociate the fall in the price of Indian coal from the general depression in trade, which is largely responsible for the fall in the world price of steel. The slackening of industrial activity in one country produces reactions in others, and when industries are depressed the demand for coal declines. It would not be safe to press this argument too far, for there were other causes at work which were likely to bring about a substantial reduction in the price of Indian coal, irrespective of the course of world trade. But it would not be unreasonable, we think, to attribute a difference of Re. 1 a ton in the price of coal to factors (of which the rise in the exchange is one) that have brought about the fall in the price of Indian steel. To that extent an allowance ought, we think, to be made in determining the additional assistance which the steel industry requires. If all the coal used at Jamshedpur were purchased, the difference in the average cost of finished steel would be Rs. 4 a ton, but, in fact, a considerable part of it is raised in the Company's own collieries, and the rise in the exchange has affected such coal only in so far as the price of the stores used in the collieries has fallen. We do not think that the difference, which the higher value of the rupee may make in the cost of steel manufacture through its effect on coal prices, can safely be put higher than Rs. 2·5 a ton. It is certain, moreover, that steel costs at Jamshedpur cannot be affected by the market price of coal until 1926-27. The Iron and Steel Company pays for the coal it buys, the same price as the Railway Board is paying, or a price of 8 annas a ton higher, and the prices, which the Board will pay in 1925-26, are apparently about Rs. 3 a ton above the current market rates.

31. We are now in a position to revise the first estimate of the

Final estimate of the
additional protection re-
quired.

supplementary protection required for rolled steel. That estimate amounted to Rs. 110 lakhs (paragraph 20), which is equivalent to Rs. 35 per ton of bounty steel, or if the bounty is calculated on the total output of finished steel, Rs. 21 per ton. We have found that the lower cost of spelter and miscellaneous stores, resulting from the rise in the exchange, justifies a reduction in the standard prices of Rs. 3 per ton from October 1925 onwards; and that the lower cost of coal justifies a further reduction of Rs. 2·5 a ton in 1926-27. The estimated production of bounty steel is 83,000 tons in the latter half of 1925-26, and 232,000 tons in 1926-27, and the total reduction to be made is therefore as follows :—

	Rs. lakhs.
1925-26 ..Rs. 3 a ton on 83,000 tons	2·49
1926-27...Rs. 5·5 a ton on 232,000 tons	12·76
TOTAL	15·25

The sum required per ton of bounty steel is then reduced by about Rs. 5 to a little more than Rs. 30 a ton, or if the bounty is calculated on the whole output, the reduction is from Rs. 21 to Rs. 18 a ton, *i.e.*, Rs. 3. The total payments on account of the bounty would amount to Rs. 95 lakhs, but as a safeguard against an over-estimate of the output of bounty steel, a further reduction of about Rs. 5 lakhs is necessary.* The payments, during the eighteen months ending on the 31st March 1927, should therefore be subject to a maximum limit of Rs. 90 lakhs in all.

32. Our recommendation is that a bounty should be paid on steel

The Board's recommendations regarding rolled steel.

manufactured in India between the 1st October 1925 and the 31st March 1927, subject to the following conditions:—

- (1) The bounty should be paid only to firms or companies manufacturing, mainly from pig iron made in India from Indian ores, steel ingots suitable for rolling or forging into any of the kinds of steel articles specified in Part VII of Schedule II to the Indian Tariff Act, 1894.
- (2) The bounty should be paid on steel ingots manufactured by such firms or companies, and the bounty should be paid at the rate of Rs. 18 a ton on 70 per cent. of the total weight of the ingots manufactured in each month.
- (3) The total amount of the bounty payable under this Resolution in the 18 months ending 31st March 1927 should not exceed Rs. 90 lakhs.

Except in respect of the period, the amount payable per ton and the limit on the total payments, these conditions are identical with those contained in the Resolution of the Legislative Assembly, passed on the 26th January 1925, by which an additional bounty was sanctioned for twelve months up to the 30th September 1925. The system, by which the bounty is paid on 70 per cent. of the ingot production, seems to have worked smoothly, and we find no reason for suggesting any change in this respect. If, as we propose, the rate per ton is fixed at Rs. 18 and the limit to the total payments at Rs. 90 lakhs, the effect will be that the full bounty can be earned by an ingot production of 714,000 tons which is equivalent to 500,000 tons of finished steel. The risk that the output of 'bounty' steel may be less than the estimate is, we think, sufficiently safeguarded.

* This reduction has not been taken into account in calculating the amount required per ton. The reduction of Rs. 15 lakhs has been made because the standard prices are now too high owing to the change in circumstances; the second reduction of Rs. 5 lakhs has been made because a shortage in the output of 'bounty' steel is considered probable.

33. The payments to which the Government of India already stand committed under the Steel Industry (Protection) Act and the Resolution of the Legislative Assembly, are approximately as follows :—

	Rs. lakhs.
Bounty on rails and fishplates 1924-25	36
Estimated ditto 1925-26	32
Estimated ditto 1926-27	27
Bounty on railway wagons	21
Additional bounty on rolled steel up to 30th September 1925	50
TOTAL	166
Add additional bounty on rolled steel now proposed for the 18 months ending 31st March 1927.	90
GRAND TOTAL	256

It is necessary to ascertain whether the increase in revenue arising from the protective duties on certain kinds of steel, is sufficient to meet these charges.

34. The increase in the Customs revenue, which has resulted from the imposition of protective duties on certain kinds of steel, and which is likely to be realised up to the 31st March 1927, has been calculated in the Note in Annexure B and the attached Tables. The increase in revenue during 9½ months of 1924-25 was approximately Rs. 107 lakhs, and the increase expected in 1925-26 and 1926-27 is about Rs. 195 lakhs, the grand total being Rs. 3 crores in round figures. If an allowance is made for the increase in consumption, which might have occurred if the duties had remained at 10 per cent., the nett increase in revenue is Rs. 280 lakhs. It will be seen, therefore, that the increase in revenue is likely to exceed the payments on account of bounty by Rs. 24 lakhs during the three years during which the Steel Industry (Protection) Act remains in force. In these circumstances our view is that the additional protection required by rolled steel should be given entirely in the form of bounties, and that it is not necessary to propose any increase of the customs duties on rolled steel. It is possible, of course, that our estimate of future consumption, and consequently of the imports, may prove to be too high, but a margin of Rs. 24 lakhs would seem to be sufficient. The gross revenue from the protective duties, collected in the first four months of 1925-26, was Rs. 77

lakhs out of which at least Rs. 33 lakhs represent an increase in revenue. The increase actually realised in $13\frac{1}{2}$ months is therefore Rs. 140 lakhs, (*i.e.*, over Rs. 10 lakhs a month), and in order to reach the total increase of Rs. 3 crores by March 1927, a further increase of Rs. 160 lakhs is required in 20 months, *i.e.*, at the rate of Rs. 8 lakhs a month. We believe that our anticipations are justified, but, if the Customs collections show a marked falling off in the next six months, the matter could be reconsidered. We do not expect, however, that any increase in the duties will be found necessary.

CHAPTER III.

The production of pig iron and steel at Jamshedpur and the complaint of the Bengal Iron Company.

35. There are two questions which must be dealt with before we quit the subject of rolled steel and turn to other branches of the steel industry. The first point is the output of steel at Jamshedpur. The works of the Tata Iron and Steel Company are designed to produce 610,000 tons of pig iron and 570,000 tons of steel ingots a year; the latter figure being equivalent to 420,000 tons of finished steel. The two salient facts of the present situation are that the output of pig iron from the blast furnaces has exceeded anticipations, and that the output of steel ingots is still much below the estimate. The total output of pig iron in 1924-25 was 553,000 tons of which 351,000 tons went to the steel furnaces, 185,000 tons were sold, and the balance was used in the Company's own iron foundries or went into stock. During the five months January to May 1925, the output of four blast furnaces (one furnace is shut down) has been at the rate of 47,700 tons a month or 573,000 tons a year. If the fifth furnace was again blown in, the total output of pig iron might be as high as 680,000 tons a year. The output of finished steel, on the other hand, was only 247,000 tons in 1924-25, and the output expected in the next two years is 319,000 tons in 1925-26 and 357,000 tons in 1926-27. The position is unsatisfactory, both because of the large surplus of pig iron for which a market is difficult to find, and because the incidence of the overhead charges per ton of steel is higher than it should be, so long as the output is below the capacity of the plant. A substantial increase in the output of steel would absorb a large part of the surplus pig iron, and would at the same time reduce the cost of production.

36. The actual output of the old open hearth furnaces has fully reached expectations, and the shortage of the ingot production is entirely due to the comparatively low output of the new duplex plant. The Board anticipated that the full production of the duplex furnaces would not, at once, be attained, and for this reason they estimated in February 1924 that the output of finished steel would be 250,000 tons in 1924-25, 335,000 tons in 1925-26, and 390,000 tons in 1926-27. The actual output in 1924-25 was close to the estimate, but the output for the next two years will, it is expected, be somewhat below it. In these circumstances the Directors of the Iron and Steel Company have been considering the question whether it might not be advisable to install a third tilting furnace in the duplex plant, so as to increase the steel production substantially in the near future. The plant has been so

designed that this third furnace can be added with the minimum of fresh capital expenditure, and the consequent increase in the output of finished steel would not only lighten the burden of the overhead charges, but would tend to bring down the works costs because the rolling mills would be more fully employed.

37. The Indian Iron and Steel Company, in a representation addressed to the Board, have suggested that the supplementary protection needed for steel should be given in the form of an advance of the capital required to erect the third tilting furnace instead of by the payment of bounties.

Reasons why the Board can make no recommendation for the erection of a third steel furnace.

We were unable to entertain this suggestion for two reasons. In the first place, it would take at least a year, and probably longer, to construct the furnace, and it is most unlikely that it would add appreciably to the steel ingot production until January or February 1927, so that the benefit the Tata Iron and Steel Company could derive from it before the 31st of March 1927 would be negligible. In the second place, the problem is not quite so simple as it looks at first sight. It is necessary to make sure of an adequate supply of coke and of pig iron, and the disposal of the additional steel scrap from the rolling mills also requires consideration. If it were certain that the two tilting furnaces already installed could not produce more than 10,000 tons of ingots a month each, which is the best they have done up-to-date, the addition of the third furnace would raise the output of the duplex plant to 30,000 tons a month, and this is the output originally expected from two furnaces. But if, on the contrary, the output per furnace gradually increased to 15,000 tons a month—and it is quite possible that this figure may eventually be attained—the five blast furnaces could not keep three duplex furnaces supplied with pig iron. The open hearth furnaces use large quantities of steel scrap, and, according to the actual working from January to June 1925, require only 546 tons of pig iron for the production of 1,000 tons of ingots, but the consumption of pig iron in the duplex plant was 1,235 tons for every 1,000 tons of ingots produced. If the production of ingots in the duplex plant did not exceed 35,000 tons a month, the supply of pig iron might barely suffice, and the requirements would be approximately as follows:—

	Ingot production.	Consumption of pig iron in the steel furnaces.
	Tons.	Tons.
Open hearth furnaces	210,000	115,000
Duplex furnaces	420,000	519,000
TOTAL	630,000	634,000

There would then be a surplus of 46,000 tons of pig iron and the surplus output of the blast furnaces during periods, when one or more of the steel furnaces are out of commission for repairs, would probably not be less than this quantity. But if each of the three tilting furnaces were producing 15,000 tons of ingots a month, they could not be supplied with pig iron, without the addition of a sixth blast furnace to the plant.

38. For the reasons given in the last paragraph, we are not justified in expressing a definite view as to the advisability of erecting a third tilting furnace in the duplex plant. There are difficult technical points involved which can only be settled under expert guidance. The question is important, however, and may call for reconsideration in the statutory enquiry to be held next year. By that time, the actual output of the duplex plant in the cold weather of 1925-26 may throw a good deal of light on the production, which can reasonably be expected of it in the future. The importance of the matter to the Iron and Steel Company lies in the fact, that it would be difficult to justify a higher scale of protection from the 1st of April 1927 onwards than the amount which would suffice if the full output of the plant were secured. If the company are unable to obtain this output, they may lose part of the benefit which protection should give them. The Tata Iron and Steel Company have, as yet, made no request for an advance of capital to enable them to erect the third tilting furnace, and we are unable to express any opinion on the question whether assistance of this kind is needed in addition to the bounties we have recommended.

39. The large surplus production of pig iron at Jamshedpur has formed the subject of a representation by the Bengal Iron Company, who complain that the protective duties and the bounties on steel enable the Tata Iron and Steel Company to sell pig iron at very cheap rates, and that the price at which that Company are offering pig iron at present, is below the cost of production. The result has been that the Bengal Iron Company have been compelled to shut down four of their five blast furnaces, and to dispense with the services of 5,500 of their workmen. It would be a serious matter if the protection given to one industry resulted in grave injury to another and kindred industry, and the complaint made is entitled to careful examination. As the case was first presented there appeared to be three indispensable links in the chain of argument. It had to be shown (1) that the Tata Iron and Steel Company were in fact selling below the cost of production, (2) that the protective duties and bounties on steel enabled them to do so, and (3) that, in consequence of their action, the price of pig iron had fallen to an unremunerative level. But the oral examination of Mr. H. Fitzpatrick, who gave evidence on behalf of the Bengal Iron Company, left us in doubt whether we fully understood the case put forward, and whether we had succeeded in conveying to the witness the doubts and difficulties which we felt. After the

conclusion of his examination, therefore, we addressed a letter to the Company explaining fully the points which seemed to require further elucidation.

40. The supplementary representation of the Bengal Iron Com-

The Tata Iron and Steel Company not responsible for the present low prices of pig iron.

pany, submitted in response to our letter, makes it clear that it is no part of their case that the action of the Tata Iron and Steel Company has brought down the price of pig iron. On this point they are emphatic, as

will be seen from the following quotations—"We have not stated that the protective duties and bounties were responsible for the drop in the prices of pig iron"—and again—"We are not complaining of the present day prices. The fact that they are low must be accepted in the cycle of trade"—and again—"We have never said that the Tata Company were responsible for the fall in prices." In view of these very direct and unambiguous statements, it is a little surprising to find in another paragraph of the representation, the following passage:—

"The statement XXII will show that there has been a deliberate policy of price cutting by the Tata Company ever since 1916, and we attribute, in part, the Tata Company's financial position to this policy. We do not think there could ever have been a necessity to cut prices of iron to the extent of Rs. 28 a ton."

The reference is to a statement printed on page 139, Volume I of the Evidence, in the first Steel Enquiry. The particular entry, alluded to in this statement, is the sale of approximately 9,000 tons of pig iron annually to the North Western Railway for 10 years from the 1st January 1920 to 31st December 1929, at a price of Rs. 58 a ton f.o.r. Jamshedpur. At the time the bargain was made, the wholesale market price per ton was Rs. 85. But this entry is no evidence whatever of price cutting, for it is obvious that when a manufacturer sells his output for ten years ahead, he will have regard mainly, not to the selling price at the moment, but to the price that he can probably obtain on the average during the period. In view of the present price of pig iron the transaction should have been advantageous to the Tata Iron and Steel Company, but we understand that the railway administration no longer accepts delivery at this price.* Since the only evidence adduced to support the charge of price cutting breaks down, we are content to accept the statement of the Bengal Iron Company that the Tata Iron and Steel Company are not responsible for the present prices of pig iron.

41. Apart from the disclaimer of the Bengal Iron Company,

Reasons for the fall in the price of pig iron in India and in Japan.

there is ample reason for attributing the fall in the price of pig iron to causes other than the action of one Indian company. The three most important markets for Indian pig

* It is not suggested that the action of the railway administration was not legitimate. That aspect of the case has not been put before us.

iron are India itself, Japan and the United States of America. There is no evidence that the price has fallen in the last of these markets, but the American price has become the controlling factor in determining the Indian price, for if the manufacturers charge a lower price for export to the United States than they charge to the domestic consumer, they incur the risk of the imposition of an anti-dumping duty by the American Government. It is for this reason that the Calcutta price of pig iron (as settled by the three Indian producers working in combination), is between Rs. 41 and Rs. 43 a ton, which is little more than half what it was two or three years ago. Apart from this external influence, there has been an immense increase in recent years both in the capacity of the Indian plants and in the actual output of pig iron. The Bengal Iron Company, which had four blast furnaces (three rated at about 90 tons a day and one somewhat larger), has added since 1920 a fifth with a capacity of 150 to 250 tons a day. The full capacity of the plant is said to be 200,000 tons of pig iron a year, but the actual output has not exceeded 150,000 tons. The Indian Iron and Steel Company has erected two blast furnaces (the first of which began to produce in November 1922), designed to turn out 350 tons a day each, but their actual capacity is greater and, according to the evidence of Mr. Fairhurst in October 1923,* the eventual production of the two furnaces is expected to be 850 to 900 tons a day, i.e., over 300,000 tons a year. The actual output of this company in 1924-25 was 180,000 tons. The pig iron production at Jamshedpur has already been alluded to in paragraph 35, but it may be added that the surplus pig iron sold in 1924-25 (186,000 tons) was far in excess of the quantity placed on the market by the Tata Iron and Steel Company in any previous year. The Indian consumption of pig iron (apart from the pig iron used in the steel furnaces at Jamshedpur), is estimated by the companies to be about 150,000 tons a year, and the increase in production naturally led to larger exports. In 1924-25 the exports to the United Kingdom rose from 3,204 to 18,898 tons, those to the United States from 24,190 to 133,165 tons, those to Japan from 144,013 to 171,614 tons, and the total exports from 182,938 to 340,171 tons. It will be seen that Japan took more than half the exports, but it is not by any means a market of which India has a monopoly. The greater part of Japan's requirements are supplied by the Japanese furnaces which use imported ore, and by furnaces in China and Southern Manchuria. Two new blast furnaces were recently completed near Hankow, so that the Japanese supplies were augmented from other sources as well as from India, and a fall in the price of pig iron in Japan was naturally to be expected.

42. Another point, which becomes clear in the supplementary representation of the Bengal Iron Company, is that it is not the price of pig iron which has compelled the company to shut down part of their works at Kulti. At our request the Company sent us a statement of their

Closing of part of the works at Kulti not due to the price of pig iron.

* Evidence in the first Steel Enquiry, Volume III, page 147.

cost of production. The all-in cost of foundry pig iron is given as Rs. 30.4 a ton in the new plant, and it is added in a note that the cost of basic iron (for steel) would be at least Rs. 2 per ton lower. The price, which the Bengal Iron Company allege to be below the all-in cost of production at Jamshedpur, is Rs. 35 a ton f.o.r. works, and this price is higher by about Rs. 4.5 a ton than the cost of producing foundry pig iron at Kulti, and higher by about Rs. 6.5 a ton than the cost of basic pig iron. It is a price, therefore, at which the Bengal Iron Company could sell and make a profit. The costs in the older furnaces are said to be about Rs. 3 a ton higher, but even so there is no actual loss involved.

43. If the Tata Iron and Steel Company are not responsible for the fall in prices, and if it is not the price of pig iron which has led to the shutting down of part of the works at Kulti, an essential part of the Bengal Iron Company's case has still to be made clear. It will be convenient, however, to deal first with the other two links in the chain of argument. The price, which the Bengal Iron Company alleged to be unremunerative, is the price of pig iron exported to Japan at Rs. 39 a ton f.o.b. Calcutta which is equivalent to Rs. 35 a ton f.o.r. Jamshedpur. This price is, we think, below the all-in cost of production, at Jamshedpur, which is probably about Rs. 38 a ton. The works cost of pig iron at Jamshedpur is a little less than Rs. 30 a ton and the overhead charges amount to about Rs. 8 a ton. It is not an easy matter, when a company is manufacturing both iron and steel, to distribute the overhead charges equitably between the two products, but the figure given is the estimate at which the Board arrived in their first enquiry. In paragraph 82 of the Report on the Grant of Protection to the Steel Industry, it was said that the surplus pig iron could not be debited with more than $2\frac{1}{2}$ per cent. of the overhead charges. The total overhead was Rs. 132.4 lakhs and $2\frac{1}{2}$ per cent. of this sum is Rs. 3.31 lakhs, which on 40,000 tons is equivalent to Rs. 8.3 a ton. The depreciation allowance accounts for three-quarters of the overhead charges, and the distribution of the overhead to iron and steel was arrived at by ascertaining the comparative cost of those sections of the plant, which were necessary for the production of pig iron, and those which were exclusively devoted to the production of steel. The calculation is only approximate, but we do not think it is an under-estimate of the overhead charges on pig iron.

44. The reply of the Tata Iron and Steel Company on this point was given by Mr. Peterson in a written statement handed in on the last occasion when he gave oral evidence. The Company, he said, had never intentionally sold below the market price in any country. When exporting to America they consigned their pig iron to agents, who obtained the best market price for them. So far as India was concerned, for the past eighteen months the three companies producing pig iron had been working in agreement and quoting the same price. The price had fallen heavily, but the

Alleged sale of pig iron to Japan at unremunerative prices.

Price at which pig iron was sold to Japan not unremunerative.

initiative in these reductions had been taken by another company. As for the sale to Japan at Rs. 39 a ton f.o.b. Calcutta, they had a long term contract, fixed some years ago, with the purchasers for the sale of pig iron at Rs. 75 a ton. The Japanese firm were unable to continue purchasing at that price, and the arrangement made was for the sale of 3,000 tons a month at Rs. 39 a ton f.o.b. Calcutta, on condition that the buyers took 2,000 tons at Rs. 75 a ton under the old contract. The nett price the Tata Iron and Steel Company realised for the pig iron sold in this transaction was Rs. 54 a ton, and there could be no question that this was a remunerative price. Rs. 39 a ton f.o.b. Calcutta, with the addition of freight and other transport charges, was equal to the current market price in Japan at that time. Mr. Peterson's evidence makes it clear, we think, that the action of the Tata Iron and Steel Company in selling pig iron for export to Japan at Rs. 39 a ton f.o.b. Calcutta, cannot be called in question on the ground that it meant selling pig iron below the cost of production. The transaction was advantageous to the Company, who realised a substantial profit on the total quantity sold.

45. The second point to be established is that protection for steel

The Tata Iron and Steel Company has no motive for selling pig iron below cost. enables the Tata Iron and Steel Company to sell pig iron at unremunerative prices. It is not impossible, that a firm producing both pig iron and steel could afford, if the manufacture of steel were very profitable, to treat the pig iron as a bye-product and let it go for any price it would fetch. But, since commercial firms must make a profit on some part of their production before they deliberately sell another part below cost, it is an indispensable preliminary condition that the manufacture of steel should be profitable. The sale of pig iron to Japan, of which complaint has been made, apparently took place at the end of December 1924 or the beginning of January 1925. In the year 1924-25 there was no profit on the manufacture of steel at Jamshedpur, and the Company had no conceivable motive for selling their pig iron at any thing less than the best price they could get. Nor is it possible that, at any time before the 31st of March 1927, the interests of the shareholders could be served by reducing the price of pig iron unnecessarily. The figures worked out in Annexure A to this Report will show that the Company cannot hope by that date to earn a profit sufficient to pay off the arrear dividends on the preference shares, and so long as these conditions continue, the Tata Iron and Steel Company has every incentive to market its products, whether pig iron or steel, at the best price it can obtain.

46. It has not been established that the Tata Iron and Steel

Objection to the Tata Iron and Steel Company selling pig iron below cost. Company have sold pig iron below the cost of production, and it is clear, we think, that they can have no interest in cutting the price of pig iron unnecessarily. But it may be asked, what is to happen if the current market price in one or other of the markets accessible to them is below the all-in cost of production? The view of the Bengal Iron Company apparently is that,

because the Tata Iron and Steel Company enjoy protection on the steel they manufacture, it is unfair that they should sell pig iron when the price becomes unremunerative. If they had not received protection they could not have done so, but must have retired from the contest and left the field to their rivals. The other producers suffer, not because the price they get for the pig iron they sell is too low, but because at that price they cannot sell their output. It is this contention which completes the case of the Bengal Iron Company, and we must say something about it, though it cannot strictly be brought within the scope of this enquiry.

47. If protection for steel had been withheld it is, as certain as anything can be, that the manufacture of steel in India would have ceased, because it could not be produced except at a heavy loss. In that case the Jamshedpur works might have been shut down altogether, or the manufacture of pig iron might have been carried on for the benefit of the debenture holders. If the works were shut down, then naturally the two other companies manufacturing pig iron would have less competition to fear. In that sense it is quite true that protection for steel means increased competition in the pig iron markets. The Bengal Iron Company, however, do not admit that it would have been necessary to shut down the Jamshedpur works. They maintain that the management, acting on behalf of the debenture holders, could have carried on the production of pig iron, but in the circumstances would have been unable to sell pig iron below the all-in cost. This contention might be challenged on the ground that, when the management passes into the hands of the debenture holders, it is probable that they will continue to sell at any price which enables them to realise a part of the debenture interest, even if the depreciation allotment was suspended altogether. It may be mentioned that in the course of their Cement Enquiry, the Board found that a company, which had passed into the hands of the debenture holders before it commenced to manufacture, was selling large quantities of cement down to, and below the works cost. But even if the argument is sound, it makes little difference. The supposition is that, owing to general causes, the price of pig iron falls below the all-in cost of production at Jamshedpur, and that the management are unable to sell at this price. If so, they must obviously shut down the works, a course which is inevitable when the best price that can be got is not good enough. It all comes back to this, therefore, that if steel had not been protected, Jamshedpur pig iron would have disappeared from the market, either at once, or as soon as the price became unremunerative, and the other two companies who manufacture pig iron could then increase their sales. Whatever the merits of this contention may be, they are far beyond the scope of this enquiry. They cannot be discussed at all without raising the whole question whether steel should be protected or not, and that question is not in any way before us. It has been decided by the Legislature, and cannot now be re-opened by the Board.

48. The Bengal Iron Company propose that the grant of bounties to the Tata Iron and Steel Company

Proposed restriction of the sale of pig iron by the Tata Iron and Steel Company.

should be made conditional on the restriction of their sales of pig iron to 12,000 tons a year. The figure suggested is in any case too small, for it would be less than the surplus pig iron

inevitably produced during periods when the steel furnaces are under repair. Apart from this subsidiary point, we do not think that good reasons have been advanced for imposing the condition suggested. If it were established that the Tata Iron and Steel Company were deliberately cutting the price of pig iron, and that the profits resulting from the protection of steel were so large that they could afford to do so, then the other companies manufacturing pig iron would have reason to complain and Government interference might well be called for. The actual position, however, is quite different. The Tata Iron and Steel Company have large quantities of pig iron to sell, and they must dispose of it at the best price they can get in the markets within their reach. The position would have been exactly the same had protection been refused, unless indeed the Jamshedpur works were shut down altogether. It has always been recognised that, during the first two years of the operation of the new plant at Jamshedpur, the Tata Iron and Steel Company would have a large quantity of surplus pig iron to sell (see paragraph 94 of the Report on the Grant of Protection to the Steel Industry) but this surplus will gradually grow smaller as the steel production increases. With pig iron at its present price, it has become more profitable (so long as steel is protected) to convert pig iron into steel than to sell it as pig iron, and this point will no doubt be taken into account by the Directors of the Tata Iron and Steel Company in deciding whether a third tilting furnace should be installed in the duplex plant or not. We are unable to recommend that any restriction on the sale of surplus pig iron should be imposed on the Tata Iron and Steel Company as a condition of receiving the bounty on the production of ingot steel.

CHAPTER IV.

Tinplate.

49. An application for supplementary protection for tinplate has been put forward by the Tinplate Company of India, and the proposal made is that the duty on imported tinplate should be increased from Rs. 60 to Rs. 104 per ton, as recommended by the Board in their Report on the Increase of the Duties on Steel. In the enquiry, which preceded this recommendation, the Board had no opportunity to take evidence about tinplate, and it was tacitly assumed in the report that the reduction in the price of imported tinplate, due to the rise in the exchange, was the only factor that need be taken into account. The evidence we have taken on this occasion has satisfied us that the problem is more complex than it then appeared, and that there are other factors for which allowance must be made. The manufacture of tinplate, indeed, is a subsidiary rather than a primary industry, and in this respect it is in much the same position as the engineering industry. The Tinplate Company purchases from the Tata Iron and Steel Company steel tinplate bars and its staple material is therefore the finished (or semi-finished) product of another firm. The cost of the bars accounts for a high percentage of the cost of producing tinplate, and if the cost of tin and other imported stores is added, the total cost of materials amounts to more than half of the works costs. The prices of these materials vary with the exchange, and a higher value of the rupee reduces the Indian cost of manufacture as well as the price of imported tinplate. Due allowance has to be made for this fact. This is not the only point, however, which requires examination. The sterling prices of tinplate and of tinplate bars have fallen heavily, while the sterling price of tin has increased, and these changes affect the Indian manufacturer's costs. It is necessary clearly to ascertain how both the price of tinplate and the cost of its production have been altered before a definite recommendation can be made.

50. The relevant facts regarding the prices of tinplate and tinplate bars can best be presented in a tabular form, and the details will be found in the Tables in Appendix VII. The salient fact is that, if the fall in the exchange alone is taken into account, the nett disadvantage to the Indian manufacturer is Rs. 119 per 100 boxes, but if allowance is made also for the changes in sterling prices, the disadvantage is Rs. 169 per 100 boxes. To that extent he is actually worse off to-day than he was in 1923. But, if the prices of tinplate and of bars were to rise, Rs. 169 would be an excessive estimate of the disadvantage of the Indian manu-

facturer, and it is important, therefore, to consider whether the present low prices are likely to continue until the 31st March 1927, or whether they are likely to go up. In the Iron and Coal Trades Review tinplate was quoted at £1-3-6 per standard box as late as the 6th February 1925, so that the drop to 19s. 4½d. on the 10th July is abrupt and appears to have been due to special causes. The price of tinplate bars declined somewhat earlier and was £8-12-6 a ton on the 2nd October 1924 and £8-7-6 on the 6th February 1925, as compared with £9-2-6 on the 4th August 1923. The prices of tinplate and of tinplate bars usually move together, but in this case the changes were violent, and were not entirely synchronous. The explanation is to be found in the special circumstances of the tinplate industry.

51. The British manufacturer of tinplate* has much less to fear

Estimated disadvantage from Continental competition than other steel manufacturers, and the selling price of tinplate has often been controlled by combinations amongst the manufacturing firms.

Early in 1925 the combinations, which regulated the price of tinplate and of galvanised sheet, were dissolved, and prices dropped rapidly. The reasons for the break-up are not quite clear, but it seems probable that the low price at which sheet bar and tinplate bar could be imported from Belgium was partly responsible. If the past history of the trade is any guide, it is likely that the price of tinplate will again be brought under control, and this possibility must be kept in view. On the other hand, the keener Belgian competition in respect of tinplate bars may make it more difficult to arrive at an arrangement satisfactory both to the bar maker and the plate maker, and in that case the reorganisation of the combine may be delayed. It would not be safe, we think, to assume that the present low prices will continue until March 1927, but at the same time we cannot take it for granted that prices will go up in the near future. In these circumstances, we think the fairest course is to estimate the nett disadvantage to the manufacturer during the period of eighteen months between the 1st October 1924 and the 31st March 1927, not on the basis of the exchange alone, nor on the basis of the exchange and the present sterling price together, but at an intermediate figure. It is impossible, of course, to forecast at what level the prices of tinplate and of bars might be stabilised if a new combine came into existence, but the allowance we propose to make will be reasonable if the present prices continue until June 1926, and the higher prices fixed thereafter are so related that only the exchange need be considered. The disadvantage to the Indian manufacturer if the exchange alone is taken into account, we found to be Rs. 119 per 100 boxes, as against Rs. 169, if allowance is made also for the fall in the sterling price. In estimating the additional protection required we shall take the probable disadvantage during the period covered by our proposals as Rs. 144 per 100 boxes.

* Galvanised sheet is in much the same position

52. Amongst the raw materials of the tinplate industry tin ranks

Changes in the price of tin.

next in importance to the steel tinplate bars, and the price of tin makes a considerable difference to the cost of manufacture. Since 1923 the sterling price of tin has increased by about £60 a ton, and, though the rise in the rupee sterling exchange to some extent lightens the burden of the Indian manufacturer, the nett result to him is an increase of Rs. 39 in the cost of 100 boxes of tinplate.* The higher price of tin is, of course, due to world wide causes and is paid by manufacturers in all countries, but it would be unreasonable on that ground to exclude it from consideration in ascertaining the additional assistance which the tinplate industry needs. The amount of protection, which an industry requires, can be determined, not by a comparison of Indian and foreign costs, but only by a comparison of Indian costs and foreign prices, and an increase in foreign costs is important only if it is likely to be followed by an increase in prices. In this case the rise in the price of tin has been accompanied by a fall in the price of tinplate, and it is evident that the cost of tin is only one out of several factors, which affect the price of tinplate, and is by no means the most important. For this reason, we think that the higher cost of tin must be taken into account in determining the supplementary protection required by the tinplate industry. But the Indian manufacturer suffers under another disadvantage from which his British rival is free, for he pays Customs duty on the tin he imports. This duty, which was Rs. 375 a ton in 1923, is now Rs. 525 a ton, and the increase in cost per 100 boxes of tinplate is therefore Rs. 12·5. The present circumstances of the tin trade indicate that a period of high prices is probable, and it does not seem likely that the price of tin will be less than £250 a ton on the average during the next eighteen months. For this reason, in estimating the additional protection for tinplate, the allowance to be made on account of the increase in the cost of tin is Rs. 51 per 100 boxes.

53. The Board's original recommendation—which was embodied

in the Steel Industry (Protection) Act—was based on the Company's estimate of the costs they expected after full production (600,000 boxes a year) had been attained. After deducting the cost of the tinplate bars, the estimated gross works cost was Rs. 1,246 per 100 boxes and the estimated nett cost Rs. 1,204. The difference (Rs. 42) is the estimated credit from the sale of the steel scrap produced in the course of manufacture. If the cost of tin (price Rs. 250 plus duty Rs. 31) is deducted from the nett cost above metal, the other costs in the estimate amount to Rs. 923 per 100 boxes. During the three months January to March 1925, the plant was worked to its full capacity and the output was 168,000 boxes, which is equivalent to 672,000 boxes a year. With this

* The details of the calculation will be found in Tables 4 and 5, Appendix VII.

output, the other costs (excluding the cost of tinplate bars and of tin) amounted to Rs. 803 per 100 boxes. This result is satisfactory, for it was attained notwithstanding the fact that the credit for scrap was less than half what was expected.

54. The reduction in works costs is attributable mainly to the high output attained, but there were also other causes. Wages and salaries have not been reduced, but the cost of materials and miscellaneous stores has come down. It is possible, on the basis of a statement supplied by the Tinplate Company in the Board's original enquiry, roughly to separate those items of expenditure which are not affected, or only slightly affected by the higher value of the rupee (*e.g.* wages and salaries, and the cost of electricity and water, supplied under contract by the Tata Iron and Steel Company), from those items (chiefly the cost of materials), which are likely to fall when the exchange rises. There are certain allowances to be made, for the exchange does not affect the cost of all materials directly or to the full extent. But the figures in the statement suggest that the rise in the exchange might reduce the cost of items amounting to about Rs. 90 per 100 boxes, and the reduction in the cost is then Rs. 10 per 100 boxes. To this extent we think that a reduction in the cost of other materials can fairly be taken into account.

55. The figures given in the last three paragraphs can now be summarised—

Gain and loss to the
Indian manufacturer.

	Rs. per 100 boxes.
Nett loss to the manufacturer owing to the changes in the price of tinplate and of tinplate bars	144
Loss to the manufacturer owing to the increase in the cost of tin	51
Gross loss to the manufacturer	195
Gain to the manufacturer from the reduction in the cost of miscellaneous materials owing to the rise in the exchange	10
Nett loss to the manufacturer	185

Our proposals for the grant of supplementary protection are based on these figures. Rs. 185 per 100 boxes* is equivalent to Rs. 38 a ton.

56. At the outset of our enquiry, we had anticipated that it would be possible to give such extra assistance as the tinplate industry might need, in the form of a bounty. There are obvious advantages

Reasons against a bounty
on tinplate.

*For approximate calculations 100 boxes of tinplate can be taken as 5 tons. But the standard box contains 4 lbs. less than one cwt., and 4.82 tons per 100 boxes is a more accurate figure.

in treating tinplate on the same lines as other classes of rolled steel, and there appeared to be no practical difficulties, for the local sale of tinplate is negligible, and the despatches from Jamshedpur could have been checked by the Metallurgical Inspector. But a difficulty has come to our notice which renders it impossible for us to recommend the payment of a bounty on tinplate. Under the contract between the Tinplate Company and the Tata Iron and Steel Company, if the all-in cost of production is less than the sale price, half of the surplus is paid to the latter, and, conversely, if the cost is higher than the selling price, the Iron and Steel Company bears half the loss. Thus to take concrete figures, if at present there is a loss of Rs. 20 a ton on the manufacture and sale of tinplate, each company bears a loss of Rs. 10, but if the Customs duty were increased by Rs. 40 a ton, and the selling price were raised by the same amount, each company would receive half of the surplus. The contract makes elaborate provision as to the manner in which the cost of production is to be determined, and also as to the selling price, but naturally it does not refer to the payment of bounties. Now the bounty is not *primâ facie* part of the price paid for tinplate, nor is it properly a reduction in manufacturing costs. It would seem, therefore, that the whole of it should belong to the Tinplate Company, and that the Iron and Steel Company could make no claim to any part of it. It is by no means certain, however, that this view is correct. The contract has given rise to acute differences of opinion between the companies, and is likely to become the subject of judicial interpretation. In these circumstances it is impossible to say definitely whether the whole of the bounty would be retained by the Tinplate Company, or whether half would be passed on to the Iron and Steel Company. This point is of great importance. If an additional duty of Rs. 40 a ton gives all the protection required, the Tinplate Company only benefit to the extent of Rs. 20 a ton. It follows that, if the Tinplate Company retain the whole of the bounty, Rs. 20 a ton should suffice, but if the Iron and Steel Company take half, the amount should be increased to Rs. 40 a ton. The result is that, until it can be ascertained, who will actually benefit by the bounty, it is impossible to say what the amount should be.

57. It may appear paradoxical that the amount of protection required by an industry should depend on the question whether one manufacturer receives the benefit, or whether it is to be divided between two. But, in fact, the contract between the Tinplate Company and the Iron and Steel Company played a considerable part in determining the duty imposed upon tinplate in the Steel Industry (Protection) Act. A 15 per cent. duty would have been wholly inadequate had not the Iron and Steel Company been bound under the contract to meet half the loss incurred in the manufacture of tinplate. In effect, therefore, the Iron and Steel Company is bearing a large part of the burden, which ordinarily falls on the State,

Scale of protection affected by the contract between the Tinplate and Iron and Steel Companies.

when an industry is protected. Nor is the burden passed on to the public through the duties on rolled steel, for, in fixing these duties, the loss on the manufacture of tinplate bars was disregarded. It is these facts which make it impossible, when determining the supplementary protection for tinplate, to ignore the relations between the companies. If conditions change for the worse and half the loss incurred falls on the Iron and Steel Company, the Tinplate Company cannot claim additional protection in respect of that half. As we are unable to propose the grant of bounties on tinplate, it becomes necessary, therefore, to consider other alternatives.

58. The Tinplate Company during the enquiry raised the question of the removal of the duty on tin, which adds appreciably to their cost of production. The abolition of the duty is beyond the scope of this enquiry and would involve a considerable sacrifice of revenue. But we think that part of the assistance, which the industry needs, might be given in the form of a rebate of customs duty on the tin used in the manufacture of tinplate. The effect would be to reduce the cost of production by Rs. 9 a ton and would, to this extent, obviate the necessity for a higher customs duty on tinplate. With a consumption of 500 tons a year, the loss of revenue at the present rate of duty would be Rs. 2·63 lakhs annually. The quantity of tin, on which the rebate should be given, would depend on the consumption of tin per ton of tinplate, and a suitable ratio should be determined. The present rate is about one-sixtieth of a ton per ton of tinplate, but the Metallurgical Inspector could best advise whether this proportion is reasonable, and could satisfy himself from time to time as to the actual consumption. The administrative arrangements necessary are not likely to involve any great difficulty.

59. The present protective duty on tinplate is Rs. 60 a ton, and the additional assistance necessary we have found to be Rs. 38 a ton. If, however, the proposal made in the last paragraph is approved, it will not be necessary to raise the duty on tinplate by more than Rs. 29 a ton, *i.e.*, to Rs. 89. This duty would be at the rate of about 30 per cent. on the present c.i.f. price of tinplate.

CHAPTER V.

Fabricated Steel.

60. Much of the steel made at Jamshedpur is purchased by the engineering firms, and is subjected to further processes by them before it reaches the consumer. For bridges, steel buildings, jetties, pontoons, river steamers and flats, railway wagons and under-frames, large quantities of steel beams, angles, channels and plates are required, and unless there were an engineering industry in India, the manufacture of these sections could hardly be continued. For this reason the engineering firms are an integral part of the steel industry, and the protection given must extend to fabricated steel. The need for additional protection in this region also, has been urged by the Indian Engineering Association, and four of the principal firms have sent written representations and given oral evidence. In two respects it is claimed that the position has grown worse since the duty on fabricated steel was fixed at 25 per cent. *ad valorem*. It is admitted that, as far as the cost of material is concerned, there is no appreciable change, for the prices of British and of Continental steel have both fallen to about the same extent, and the price of steel in India is regulated by the cost of importation. But it is urged—

- (1) That the European cost of fabrication, when expressed in rupees, has fallen by about one-ninth owing to the rise in the rupee sterling exchange, and
- (2) That, owing both to the fall in the sterling price of steel and to the rise in the exchange, the average value of imported fabricated steel has fallen by about a fifth, and consequently the *ad valorem* duty has fallen to the same extent. It is on these two grounds that the claim for additional protection is based.

61. In the Board's Report on the Grant of Protection to the Steel Industry, the estimated average price at which imported fabricated steel was likely to be landed in India free of duty was Rs. 250 a ton. The fair selling price of steel fabricated in India was calculated as follows:—

	Rs.
Cost of the unfabricated steel (1 1/10 tons) without duty	160
Add duty at Rs. 30 a ton	33
Total cost of unfabricated steel	193
Cost of fabrication	117
Total cost of fabricated steel	310

On the basis of these figures the protective duty was fixed at 25 per cent. *ad valorem*, and on an average value of Rs. 250 would have amounted to Rs. 62 a ton. The cost of fabrication in Europe is not known, but if it is assumed that European and Indian Engineering firms can purchase material at the same rates apart from the Indian duty on steel,* then the cost of fabrication in Europe is Rs. 90 a ton on the average. We have estimated (paragraph 68) that the present prices of British beams, angles and channels are about 30 shillings a ton less than the standard prices adopted in the scheme of protection, and the price of British plates about 12 shillings and 6 pence less. If the fabricated steel consists of plates to the extent of one-fourth, then the average fall in the price is 26 shillings a ton. The cost of material, which is taken to be the same for both the European and the Indian engineering firms, is thus reduced from Rs. 160 to Rs. 125 a ton, and the European cost of fabrication, owing to the rise in the exchange, drops from Rs. 90 to Rs. 80 a ton. The c.i.f. value of the imported fabricated steel is then Rs. 205 a ton, and the *ad valorem* duty is Rs. 51 instead of Rs. 62. The nett result is that the Indian manufacturer is worse off to the extent of Rs. 21 a ton.† This is, in substance, the argument put forward by Messrs. Jessop and Company, Messrs. Burn and Company and Messrs. Richardson and Cruddas, though there are minor differences in the figures.

62. In the letter, which we addressed to the engineering firms at the outset of the enquiry, we drew their attention to the importance of adducing evidence to show the actual prices at which fabricated steel was being landed in India. The response to our request has been a little disappointing, for the firms stated that, when an order for railway bridgework was placed in Europe and their own tenders were unsuccessful, they were seldom able to ascertain the actual price at which the order was given. Messrs. Jessop and Company have, however, quoted two actual cases. In November 1924 they tendered to the East Indian Railway for 54 spans of 60 foot girders and obtained part of the order at Rs. 315 a ton. The lowest British tender was above Rs. 318 a ton. But in this case, for the purpose of comparing prices, the rupee was apparently taken at 1s. 4d., and the Indian firm would have had no chance at all if it had been taken at 1s. 6d. The c.i.f. price of the British material would then be Rs. 220, and the landed duty-paid price approximately Rs. 285 a ton. The second case was a tender in January 1925 for 60 foot and 40 foot span girders for the Central Indian Coalfields Railway. Messrs. Jessop and Company tendered at Rs. 340 a ton, but the order was placed in Europe at Rs. 275 a ton, which is equivalent to Rs. 212 a ton c.i.f. Messrs. Richardson and Cruddas have mentioned an

* The sea freight is treated as part of the European manufacturer's cost of material, though it is not paid till after fabrication.

† Reduction in the European cost of fabrication—Rs. 10, and reduction in the duty—Rs. 11.

order for bridgework placed in the United Kingdom at Rs. 229 a ton c.i.f. in February 1925, and a second order to a British firm for 100 steel stanchions at Rs. 193 a ton c.i.f. There are, therefore, three actual orders for bridgework placed at Rs. 220 a ton c.i.f. in November 1924, Rs. 212 a ton in January 1925, and Rs. 229 a ton in February 1925. These prices may be compared with the prices for imported bridgework, quoted on page 113 of the Report on the Grant of Protection to the Steel Industry, which were equivalent to Rs. 230, Rs. 250 and Rs. 248 a ton c.i.f. The prices of unfabricated British steel have fallen since February 1925, so that the present prices of bridgework should be still lower.

63. The evidence given by the firms can be supplemented to some extent from other sources. The average value of over 4,000 tons of fabricated beams, pillars and girders imported in the three months April to June 1925 was Rs. 186 a ton. The amount of fabrication done on this class of material would, on the average, be less than on bridgework and the price consequently lower. It is uncertain whether the imports of railway bridgework shown in the Trade Returns are actually fabricated steel, but the figures may be cited. In the three months April to June 1925, 153 tons of British material were imported with an average value of Rs. 525 a ton, and 535 tons of Continental material with an average value of Rs. 196 a ton. The value of the British material is so high that it must include some very special items, but the Continental material might very well be fabricated steel. Finally, we may refer to the prices at which orders for bridgework have been placed in Europe by the Indian Stores Department since April 1924. They are as follows:—

	Country.	Quantity.	Price per ton.		
		Tons.	£	s.	d.
April 1924	United Kingdom	370	17	0	0
July "	Ditto	440	14	5	0
September 1924	Germany	213	13	6	0
February 1925	United Kingdom	328	15	15	0
March 1925	Ditto	84	15	12	0
April "	Ditto	225	15	14	9
May "	Ditto	146	15	10	0

The low price at which an order was placed in July 1924 may be due to some special cause, but if this order and the German

one are excluded, there is a drop of about 25 shillings a ton between April 1924 and February 1925, and a further decline of 5 shillings a ton in the next three months. The prices are presumably quoted f.o.b., and a price of £15-10-0 a ton f.o.b. would be equivalent to about Rs. 222 a ton c.i.f. with the exchange at 1s. 6d., whereas £17 a ton f.o.b. would be equivalent to Rs. 272 a ton c.i.f. with the exchange at 1s. 4d.

64. We think that the evidence cited in paragraphs 62 and 63 sufficiently corroborates the contention of the engineering firms that fabricated steel can now be imported from Europe at about Rs. 205 a ton c.i.f. on the average, bridgework being rather more expensive and other kinds of fabricated steel somewhat cheaper. The average duty-paid price of imported fabricated steel is now Rs. 256 instead of Rs. 312 a ton. The fall in the cost of material, which is the same for both the Indian and the European manufacturer, is Rs. 35 a ton (including wastage), and the balance of Rs. 21 a ton is the first estimate of the additional protection required. But before this figure can be accepted as the basis of our recommendations, there are two points to be considered. In the first place, the engineering firms have raised the issue that a higher scale of protection is necessary owing to the operation of the British Trade Facilities Acts, and in the second place, it is necessary to consider whether the rise in the exchange has not tended to reduce the Indian cost of fabrication. These two points will be discussed separately.

65. It appears from the explanatory statement issued by the British Trade Facilities Act Advisory Committee that, under the Acts of 1921 and 1922, the British Government are prepared, subject to certain conditions, to guarantee the principal and interest of loans raised by Governments, public authorities or companies for the purpose of carrying out capital undertakings. Indispensable conditions, attached to the guarantee by the Act itself, are that the proceeds of the loan must be applied either on a capital undertaking in the United Kingdom, or in connection with the purchase of articles manufactured or produced in the United Kingdom, and that the application of the loan is calculated to promote employment in the United Kingdom. The advantage of the guarantee is that, with the aid of Government credit, the borrower should be able to obtain money on better terms than he would otherwise be able to do. The Act of 1924 makes further provision for a Treasury contribution of an amount not exceeding three-quarters of the interest payable in the first five years of the currency of a loan raised in the United Kingdom on behalf of a public utility undertaking in any part of the Empire. Such contributions are, however, paid through the Government of the Dominion or Colony concerned, and it is not known whether a contribution has yet been made in aid of any public utility under-

taking in India. It is the guarantee of loans under the Acts of 1921 and 1922 which the engineering firms consider affects them unfavourably, because orders can be placed more cheaply in the United Kingdom than in India. It is natural that the Acts should operate in this way, since it was to bring about such a result that they were passed. The reduction in interest effected by borrowing with the Government guarantee is equivalent to a reduction in the capital cost of a work, and of the materials purchased for its execution. The engineering firms desire that the scale of protection should be pitched high enough to off-set the advantage which the British manufacturer has in such cases, and Messrs. Jessop and Company have suggested that the duty should be fixed at 50 per cent. *ad valorem*.

66. There are several reasons why we are unable to accept the view that the scale of protection should take into account the operation of the British Trade Facilities Acts. In the first place, the conditions as regards the guarantee have not changed since the Steel Industry (Protection) Act was passed, for the first of the British Acts dates back to 1921. If the question was to be raised at all, the natural time to bring it up was in the Board's original enquiry, and not in a summary enquiry as to supplementary protection. In the second place, there is, as yet, no evidence that the Act has operated to divert orders for any considerable quantity of fabricated steel from India to the United Kingdom. The sole instance, which has been brought to our notice, is the loan raised by the Commissioners of the Port of Calcutta who placed an order for well curbs in the United Kingdom, because by borrowing under the Trade Facilities Acts they could reduce the price by more than 13 per cent. It is possible, of course, that as the advantages offered by the Trade Facilities Acts become better known in India, they may be more freely resorted to, but it does not seem possible that the price of more than a part of the fabricated steel consumed in India can be affected. There is a maximum limit to the amount of the loans the British Treasury can guarantee; there are applicants for guarantees from all parts of the Empire, and the Advisory Committee in deciding which of the applications should be granted, must naturally give preference to the loans which are likely to result in the largest amount of employment in Great Britain. It is probable, therefore, that the Indian loans guaranteed will be for large undertakings, and that the steel used by the smaller consumers will not be affected. To increase the protective duties in order to prevent important public bodies and companies from taking advantage of the Trade Facilities Acts, would be unjust to the more numerous class of consumers who are not in a position to obtain a guaranteed loan. This seems to us to be an insuperable objection to adopting the view of the engineering firms. If it were found that the Indian Iron and Steel industry was gravely prejudiced by the operation of the Trade Facilities Acts, it might be necessary to devise a remedy. But the fact of the injury has

not yet been established, and we do not think that protective duties are the appropriate cure.

67. We turn now to the question whether the rise in the exchange

Effect of the rise in the exchange on the Indian cost of fabrication.

has affected the Indian cost of fabrication as well as the price of fabricated steel. On this point the evidence is so meagre that it might almost be described as non-existent.

The system by which the costs of the engineering firms are divided into materials and labour, *plus* an additional percentage or percentages, may have its advantages for the firms' own purposes, but it is quite valueless for ours. Messrs. Jessop and Company, for example, add 10 per cent. to the material cost and 250 per cent. to the labour cost. The percentage addition to the cost of materials is so small that variations in it are negligible, and ninety per cent. of the cost of fabrication is covered by 'labour' and 'trade expenses on labour.' The result is that, so long as there is no alteration in wages, the cost of fabrication, as given by this firm, will remain practically unchanged, and it cannot (on paper) derive the smallest advantage from a reduction in the price of coal, or of tools and stores of all kinds. Messrs. Richardson and Cruddas point out that the cost of fabrication consists mainly of labour charges, and claim that costs are not lower than they were two years ago. It is quite true that wages and salaries are unaltered, but there has been a big reduction in the price of coal, and the cost of miscellaneous stores and materials must be lower with the rupee at 1s. 6d. than it would be with the rupee at 1s. 4d. Our view is that an allowance must be made for this factor, and, in the absence of any precise data, it can only be determined arbitrarily.

68. Supplementary protection for fabricated steel must, we

Increase in *ad valorem* duty on fabricated steel.

think, take the form of an increase in the Customs duties. The engineering industry is carried on by a number of firms in various parts of the country, their output

covers a wide variety of products, and a bounty scheme would be practically unworkable. In their Report on the Increase of the Duties on Steel, the Board recommended that the addition to the original duty should be specific and not *ad valorem*, because with falling values the protection given by the *ad valorem* duty steadily diminished. The reasons for adopting this course are not now so strong as they were, for the greater part of the additional duty then proposed was required to countervail the additional specific duties on unfabricated steel, and a further fall in prices seems much less probable now than it did then. The application of a specific duty to all kinds of fabricated steel is open to objection also, because of the wide range of values, and if calculated on some average value, it is apt to be excessive on the cheaper products, and too low on the more expensive. On the whole, we think that it is preferable to increase the *ad valorem* duty rather than impose an additional specific duty.

69. We have estimated the average value of imported fabricated steel to be Rs. 205 a ton at present, so

Proposed *ad valorem* duty on fabricated steel. that the 25 per cent. *ad valorem* duty is Rs. 51 a ton. The first estimate of the additional protection required was Rs. 21 a ton, which would mean an increase in the duty to 35 per cent., but, we think, it will suffice if the duty is raised to 32½ per cent. We have made this deduction of 2½ per cent. not only because, in our opinion, an allowance must be made for the reduction in the Indian cost of fabrication, but also on more general grounds. The representatives of Messrs. Burn and Company and Messrs. Jessop and Company stated in their oral evidence that, though the present position of the fabricating industry was unsatisfactory and orders were difficult to obtain, the difficulties were not so great as they had been before the Steel Industry (Protection) Act was passed. It follows that a smaller increase in the substantive protection the industry receives should suffice on this occasion. The facts can best be stated in tabular form.

	Duty on fabricated steel (1 ton).	Duty on unfabricated steel (1½ tons).	Substantive protection on fabricated steel.
	Rs.	Rs.	Rs.
With 10 per cent. duty	25	16	9
As intended in the protective scheme .	62	33	29
As at present	51	33	18
As proposed	67	33	34

It was intended that the protection actually enjoyed by the industry should be raised from Rs. 9 to Rs. 29 a ton, *i.e.*, by Rs. 20. Owing to the fall in values, the substantive protection received has dropped to Rs. 18 a ton and it is now proposed to increase it to Rs. 34 a ton, *i.e.*, by Rs. 16. Out of this sum, Rs. 11 is required to restore the substantive protection originally intended, and the balance of Rs. 5 is the allowance for the heavier reduction in the European cost of fabrication (expressed in rupees) as compared with the Indian cost.

70. There are certain classes of fabricated steel to which the duty of 32½ per cent. *ad valorem* should not be applied. The first class consists of the

Duty at 32½ per cent. *ad valorem* not applicable to parts of boats and ships.

fabricated steel in the hulls of steamers, launches and other vessels for inland and

harbour navigation. The Irrawaddy Flotilla Company and the India General Navigation and Railway Company have protested against the increase of the duty on such steel from 10 to 25 per cent. and their claim has been referred to us for enquiry in the Resolution of the Government of India in the Commerce Department No. 221-T, dated the 28th March 1925. We are not yet in a position to make recommendations on the subject, but it is not desirable, we think, that the duty on such steel should be further increased until the question has been decided. In any notification, therefore, which may be issued imposing additional duties on fabricated steel under section 2 of the Steel Industry (Protection) Act, it will be necessary to exclude the fabricated steel intended for the construction of inland vessels. The manner in which this can apparently best be done is indicated in Appendix VIII.

71. The other classes of fabricated steel, which require special treatment, are tipping wagons, coal tubs and switches and crossings for light rail tracks. The special need for additional protection in the case of these articles was brought to our notice by Messrs. Parry and Company, who have asked that the duty should be raised from 25 to 40 per cent. In the case of fabricated steel generally, the competition, which has to be faced, still comes mainly from the United Kingdom, but in the case of the light railway track material and vehicles the competition is almost entirely from the Continent. This fact of itself may justify a higher rate of duty than is appropriate to other kinds of fabricated steel. It may be added that, since the articles in question are standardised, the facts as to prices and costs can be ascertained more precisely than is usually possible.

72. Before the passing of the Steel Industry (Protection) Act, coal tubs and tipping wagons were subject to a duty of 15 per cent. *ad valorem*, and not to the 10 per cent. duty applicable to iron and steel generally. The c.i.f. price of imported wagons was about Rs. 120 in the latter part of 1923, so that the duty was Rs. 18. The duty on the steel in the wagon amounted to Rs. 7, and the protection, which the manufacturer received, was therefore Rs. 11. By the Steel Industry (Protection) Act the duty on the steel in the wagon was raised to Rs. 12, and the duty on the imported wagon to Rs. 30, so that the substantive protection on the manufacture of wagons was raised by Rs. 7 to Rs. 18. During the last eighteen months, however, the reduction in the c.i.f. price of the imported wagon has been very heavy, much greater indeed than can be explained by the fall in the price of unfabricated steel and the rise in the exchange. The current c.i.f. price is Rs. 90 and the 25 per cent. duty has therefore fallen to Rs. 18. On the other side of the account, the manufacturer can set off a fall of Rs. 14 in the cost of the steel in the wagon, and a reduction of Rs. 4 in the fabrication cost. The nett result is set

forth in the following table, which shows how the position has changed since 1923:—

	CHANGES IN THE PRICE AND COST OF TIPPING WAGONS.	
	Advantageous to the Indian manufacturer.	Disadvantageous to the Indian manufacturer.
	Rs.	Rs.
Increase in the duty on the steel in the wagon .	...	5
Increase in the duty on the wagon to 25 per cent.	12	..
Fall in the price of the imported wagon . .	...	30
Fall in the 25 per cent. duty on the imported wagon		8
Fall in the cost of the steel in the wagon .	14	...
Fall in the other costs	4	..
Total .	30	43
Nett disadvantage to the Indian manufacturer .	...	13

73. It will not be necessary to work out in detail the corresponding calculation for coal tubs and for switches and crossings. The figures for coal tubs are almost identical with those for tipping wagons, and the position in respect of switches and crossings is even less favourable. If the *ad valorem* duty on coal tubs and tipping wagons is raised from 25 to 40 per cent., the amount payable on the present c.i.f. price will go up from Rs. 22 to Rs. 36, i.e., by Rs. 14. It will be seen, therefore, that in effect the manufacturer asks that he should be restored to the position he held in 1923, and does not claim the further advantage which the Steel Industry (Protection) Act was expected to give him. It seems to us that the claim put forward has been made good, and that a lower rate of duty than 40 per cent. will not give the protection required. We recommend that the duty on tipping wagons, coal tubs and switches and crossings adapted for use with rails under 30 lbs. per yard be increased to 40 per cent. *ad valorem*.

CHAPTER VI.

Railway Wagons and Under-Frames.

74. The building of railway wagons is a branch of the fabricating industry which is of special importance. It was included in the protective scheme, but the assistance the industry required was given in the form of bounties and not by means of a protective duty. The wagon building firms have now represented that, owing to the change in conditions since the Steel Industry (Protection) Act was passed, additional protection is needed. They had also, at a somewhat earlier date, approached the Government of India with a request that the protection given to wagons should be extended to carriage under-frames, and this proposal was separately referred to the Board in the Resolution of the Government of India in the Commerce Department No. 38-T, dated the 28th March 1925. We have found it convenient to deal with both questions simultaneously, and in this section we shall consider (1) the extension of the protective scheme to include the manufacture of carriage under-frames, and (2) the additional protection needed for the manufacture of wagons.

75. Protection for the manufacture of carriage under-frames was claimed in the representations of the wagon building firms, submitted in the first enquiry regarding the Steel industry, but no recommendation for such protection was made in the Board's Report. The firms themselves had little to say about under-frames during the course of the enquiry, and Mr. Cochran, giving evidence for Messrs. Burn and Company, clearly indicated that orders for under-frames, though not for wagons, could still be obtained by the Indian firms in competition with British makers. His actual words were—

“Take the under-frames for instance. How is it that we are able to quote within the English price for the carriage under-frame and are so hopelessly out on the wagons?”

It had not been made clear, the Board thought, that under-frames needed protection, and for this reason they made no proposal. In principle, however, wagons and under-frames are indistinguishable, and if the one is a legitimate object of protection so is the other, for the work to be done in constructing an under-frame does not involve any processes that differ materially from those used in wagon building. It is unnecessary, therefore, to consider whether the building of under-frames fulfils the first and third conditions laid down by the Fiscal Commission, for it has already been decided that the wagon building industry (of which it is a branch) can legitimately be protected. The only questions that now arise are whether under-frames require protection, and if so, in what form, to what extent and for what period it should be given.

76. Mr. Cochran's statement, that the Indian firms could quote within the British price for under-frames, was correct for 1923 and 1924, but not for 1922. In 1923 Messrs. Burn and Company's tender was Rs. 35 below the British price, and in 1924 orders were placed both with Messrs. Burn and Company and with Messrs. Jessop and Company at a figure Rs. 286 below the British price, but in 1922 the lowest Indian tender had been higher than the British by Rs. 2,700. It has not been the practice of the Railway Board to call for simultaneous tenders for under-frames in England and in India, but the British price is ascertained by cable from the Director General of Stores and is compared with the Indian tenders. The British prices for 67-foot broad gauge under-frames during the last four years have been as follows:—

	Rs.
1922	10,945
1923	11,385
1924	11,536
1925	10,480

The 1925 price has been arrived at by taking the exchange at 1s. 4d., in order that direct comparison with the earlier years may be possible. Actually, however, in comparing the British price with the Indian tenders, the exchange was taken at 1s. 6d., and the British price then became Rs. 9,360.* It will be seen, therefore, that the sterling price of an under-frame dropped by Rs. 1,056 (*i.e.*, about £70) between 1924 and 1925, and the rise in the exchange meant a further fall of Rs. 1,120. So far as the price is concerned the Indian manufacturer is distinctly worse off than he was a year ago.

77. In their written statement, Messrs. Burn and Company have given the actual cost of building 106 under-frames for the Eastern Bengal and Oudh and Rohilkhand Railways. The order was placed in January 1924, and the estimates, on which the firm's tender was based, were prepared in November-December 1923, the exchange being taken at 1s. 4½d. In the following table the actual cost per under-frame is compared with the estimated cost:—

	Estimated cost.	Actual cost.
	Rs.	Rs.
Materials	6,902	6,728
Labour	1,529	1,422
Charges	2,498	2,582
Dies and special tools	75	101
TOTAL	11,004	10,833

* This is the figure given by the Railway Board. But see paragraph 78 and Appendix IX.

The price, at which the order was placed, was Rs. 11,250 so that the profit per under-frame was Rs. 417. These figures can be compared with an estimate recently prepared by the same firm, as the basis of a tender for 153 under-frames required by the East Indian Railway. The estimated cost is Rs. 9,419,† which is less by Rs. 1,414 than the actual cost of the under-frames recently completed. The charges are taken at a figure Rs. 300 less than the actuals (this may be due to the fact that the order is a larger one), and no provision is made for dies and special tools, but the main reason for the difference is a reduction of Rs. 1,000 in the cost of materials, evidently due to the rise in the exchange and the fall in the price of steel.

78. The order for the East Indian Railway under-frames has been placed with Messrs. Burn and Company, as their tender was lower than the British price. The specifications of the under-frames to be ordered varied to some extent, for some of them were to be provided with both hand brakes and lighting equipment, some with lighting equipment but not hand brakes, and the great majority with neither. Messrs. Burn and Company's tender for the last type was Rs. 8,891, but there is some doubt as to the precise figure which should be taken as the British cost of this type, and the point is discussed in a note in Appendix IX. We have taken the British cost at Rs. 9,100, and Messrs Burn and Company's tender was lower than this amount by Rs. 200 in round figures, but in order to make sure of the order, they had tendered at a price lower by Rs. 275 than their estimated cost. If, however, rolled steel were still subject to a 10 per cent. duty and not to protective duties, the loss would very nearly be wiped out. Messrs. Burn and Company estimate that the protective duties increase the Indian cost of an under-frame by Rs. 235, but, in making the calculation, they have taken the 10 per cent. duties at the 1923 rates. These duties, being *ad valorem*, would actually be lower in 1925 than in 1923 by about Rs. 2 a ton on the average, owing to the fall in the price of steel and the rise in the exchange, and this makes a difference of Rs. 30 in the cost of an under-frame. The protective duties have therefore raised the Indian manufacturer's cost by Rs. 265. Had they not been imposed, the Indian manufacturer could have obtained the order for the East Indian Railway under-frames at a price which left him a surplus of nearly Rs. 200 above his estimated cost.

79. The fall in the sterling price of a British under-frame between 1924 and 1925, is larger than can be accounted for by the reduction in the sterling price of steel, and it is evident, we think, that the competition for orders is even keener in the United Kingdom than it was a year ago. The Indian cost of construction

† This is the figure given by Messrs. Burn and Company. It includes the cost of step-irons (Rs. 253) which the British price does not.

has also come down substantially, but not to an extent sufficient to counter-balance both the fall in the British sterling price and the rise in the exchange. The position of the Indian manufacturer has, therefore, become somewhat precarious, and it does not seem probable that he will be able to obtain orders except at a price, which leaves him no margin of profit, or involves an actual loss. In these circumstances, we think that a case for State assistance has been made out.

80. Of the Indian wagon building firms only Messrs. Burn and Company and Messrs. Jessop and Company have hitherto received orders for under-frames, and between them they can produce 300 under-frames a year. The works of the Indian Standard Wagon Company are not at present equipped for the construction of under-frames, and the Peninsular Locomotive Company have only very recently commenced to build wagons. About 300 under-frames a year may, we think, be taken as the capacity of the Indian firms. The amount of the assistance needed on each under-frame can only be calculated approximately. A duty or bounty of Rs. 265 on each broad gauge under-frame would, on the basis of the current year's tenders, leave the Indian manufacturer a surplus of nearly Rs. 200 above his costs. Something more than this, however, seems to us to be required. A surplus of Rs. 200 is very small, whether it be considered as the profit which the manufacturer earns on each under-frame, or as a safeguard against more intense competition from Europe. There are now five State Railway Administrations in India instead of three, and the larger numbers involved should make the Government orders for under-frames more attractive to the foreign manufacturer. On the whole, we think that Rs. 600 on each broad gauge under-frame is a reasonable estimate of the assistance needed. Out of this sum Rs. 265 is compensating protection on account of the duties on steel, and the balance (Rs. 335) is substantive protection. The Indian manufacturer has then a margin of Rs. 535 (*i.e.*, Rs. 335 *plus* Rs. 200), and, if British prices do not fall further, his profit would be about $5\frac{1}{2}$ per cent. on the cost of the under-frame.* Messrs. Burn and Company suggested that Rs. 1,250 on each broad gauge under-frame and Rs. 750 on each metre gauge under-frame would be fair, but we do not think the facts placed before us justify these amounts. The cost figures given by Messrs. Jessop and Company are much higher than those

* If a bounty not exceeding Rs. 600 had been payable on the East Indian Railway under-frames ordered in July 1925, the figures might have been somewhat as follows:—

	Rs.
Cost of imported under-frame	9,100
Highest price at which the order would be placed with an Indian firm	9,700
Cost of the Indian under-frame	9,166
Surplus above cost to Indian manufacturer	534

of Messrs. Burn and Company, and we have not taken them into account.

81. The protection needed for under-frames, as for wagons, ought, we think, to be given by means of bounties. No reason for differential treatment has been suggested, and there are obvious inconveniences in applying two different methods of protection to similar products of a single industry. The capacity of the Indian firms is about 300 under-frames a year and, if Rs. 600 is taken as the measure of the assistance needed, the sum required for bounties on under-frames is Rs. 1.8 lakhs annually. Our view is that under-frames should be brought within the scope of the wagon bounty scheme. But it will be convenient to defer our definite recommendation until we have discussed the questions that arise in connection with wagons.

82. By section 4 of the Steel Industry (Protection) Act, the amount that may be paid annually by way of bounties on wagons is limited to Rs. 7 lakhs a year, and the first question that naturally arises is whether there have been such changes in costs and prices that this limit requires to be increased. On page 314 of Volume III of the Evidence, recorded by the Board in their first enquiry into the Steel industry, an analysis will be found of the price in rupees of an A-1 covered wagon according to the lowest British tender received in the autumn of 1922. The price of the wagon f.o.b. a British port on that occasion was £171. If the rupee cost of the same type of wagon, according to the lowest tenders received in January 1924 and January 1925, is analysed in the same way (see Appendix IX, Table I), it appears that the f.o.b. price was approximately £181 in 1924 and £179-10 in 1925. These figures afford no evidence of any reduction in the British price apart from the rise in the exchange. There is, however, one reservation to be made. The lowest tenderers in 1925 (the Metropolitan Carriage Wagon and Finance Company, Limited), offered a lump sum reduction of £15,000, provided orders were placed with them for the whole number of all types for which they had tendered. This number appears to have been between 1,700 and 1,800, and the lump sum reduction is equivalent to a lowering of the price of a wagon by £8-10 on the average. The f.o.b. price of the wagon would then be about £171-10. These figures suggest (what has always appeared probable), that the 1922 tender was a bed-rock price rendered possible by the fact that the costs at every stage had been cut down to the minimum. To all intents and purposes the fall in the price of British steel, which has occurred since 1922, had already been discounted. With the exchange at 1s. 6d., £171 f.o.b. is equivalent to a rupee price of Rs. 3,146 for a wagon erected in India and ready to run. The reduction in price, as compared with 1924, is then Rs. 517 a wagon.

The comparison is, we think, a fair one, for the number of A-1 wagons tendered for in 1924 was 1,500.

Reduction in Indian costs greater than the reduction in the price of the imported wagon.

83. The cost of a wagon made in India can conveniently be divided into:—

(a) the cost of materials, and

(b) the cost above materials.

The following table compares the cost of materials as given in 1923 and 1925 by Messrs. Burn and Company and Messrs. Jessop and Company:—

	1923.	1925.	Difference.
	Rs.	Rs.	Rs.
Messrs. Burn and Company	3,093	2,506	587
Messrs. Jessop and Company	3,083	2,528	555

It will be seen that the reduction in the cost of materials is greater than the fall in the price of the imported wagon. In addition, the rise in the exchange must have brought about some reduction in the cost above materials, but the amount is quite uncertain. In the original enquiry no definite estimate of the cost above materials could be made, and, for this reason, it is not possible to state in figures now what difference the higher value of the rupee has made. It is not necessary, however, to come to a finding on the point, for the drop in the cost of materials fully compensates for the lower price of the imported wagon. Our general conclusion is that the changes in costs and prices since 1923 do not justify any increase in the annual allotment of Rs. 7 lakhs for wagon bounties. This finding does not, however, dispose of the issue. There is another aspect of the case, and to this we now turn.

84. No orders for wagons had been placed in India as a result of the tenders submitted in January 1924,

First orders for wagons placed in India after the passing of the Steel Industry (Protection) Act.

and soon after the Steel Industry (Protection) Act had been passed, supplementary tenders for 850 A-2 covered wagons and 1,250

C-2 open wagons were called for from the

Indian firms. After the tenders had been received, the orders were placed as follows:—

Messrs. Jessop and Company 300 A-2 covered wagons.

Messrs. Burn and Company 550 A-2 covered wagons.

The Indian Standard Wagon Company. 1,250 C-2 open wagons.

The lowest Indian tenders exceed the lowest foreign tenders of the previous January by Rs. 479 and Rs. 458 for the A-2 and C-2 wagons respectively, and, ordinarily, the bounties might have been fixed at Rs. 480 and Rs. 460 on this order. If that course had been followed, the total liability incurred would have been

Rs. 9.83 lakhs. At this point, however, a difficulty arose, owing to the limitation of the payments on account of wagon bounties to Rs. 7 lakhs in any one year. It was certain that most of the wagons ordered in July or August 1924 would not be completed until after March 1925, and the greater part of the sum of Rs. 7 lakhs available for expenditure in 1924-25 was likely to lapse, while there was a danger that the allotment for 1925-26 might be exceeded. In order to obviate this difficulty as far as possible, the bounty was fixed at Rs. 800 for wagons of both types completed by the 31st March 1925, and Rs. 300 for wagons completed thereafter. As it happened only 407 wagons were completed before the 31st March 1925 and earned the bounty of Rs. 800. The total sum paid on account of bounties in 1924-25 was Rs. 2.86 lakhs; of the allotment for that year Rs. 4.14 lakhs was unspent, and a sum of Rs. 5.48 lakhs (50 wagons at Rs. 800 each and 1,693 wagons at Rs. 300 each), had to be met from the allotment for 1925-26.

85. Three more orders for wagons were placed in India before the end of the year 1924-25. In September 1924, an order for 500 A-2 wagons was placed with the Peninsular Locomotive Company at a price (as stated by the Company) of Rs. 4,400 a wagon. As the lowest British tender for the A-2 wagon in January 1924 was Rs. 3,885, this price is equivalent to the payment of a bounty of Rs. 515 per wagon. The Peninsular Locomotive Company was originally formed for the manufacture of locomotives at Jamshedpur, and applied for protection as a branch of the Steel industry in 1923. For reasons, which are fully explained in Chapter II of the Third Report on the Grant of Protection to the Steel Industry, the Board found themselves unable to recommend that locomotives should be protected, and the Company have now turned their attention to wagons. We presume that the first order placed with this Company was treated as an entirely special case, and that the decision to place the order may have been influenced by the Board's expressed opinion that the position, in which the Company had been placed, deserved the special consideration of the Government of India. The importance of this order lies in the fact that it encouraged a fourth firm to engage in the manufacture of railway wagons from Indian materials, and thereby stimulated the expansion of the wagon building industry. The two remaining orders were placed in January 1925 after simultaneous tenders by European and Indian firms. The Indian Standard Wagon Company received an order for 425 C-2 wagons with a bounty of Rs. 700 a wagon, and the Peninsular Locomotive Company an order for 480 A-2 wagons with a bounty of Rs. 475 a wagon. During the year 1924-25, orders were placed in India for 3,500 wagons in all, and bounties were sanctioned for 3,000. The total liability, incurred in respect of bounties on wagons already ordered, is Rs. 13.59 lakhs, and more than half the allotment for 1926-27 has already been earmarked.

86. In March 1924, on the basis of the lowest Indian and British tenders for the A-1 covered wagon received in January of that year, the Board estimated that a bounty payment of Rs. 850 a wagon would be required in the first year, and Rs. 700 in the second. No orders for A-1 wagons have been placed in India since then, but as the A-2 wagon costs not much more, and the C-2 wagon not much less than A-1 wagon, the bounties actually paid on these types are comparable with the estimated bounty on the A-1 wagon. The following table compares these figures with the bounties per wagon sanctioned or actually paid:—

	A-1	A-2	C-2
As estimated by the Board—	Rs.	Rs.	Rs.
1924-25	850	...	...
1925-26	700	...	...
Admissible on the tenders of July 1924	...	480	460
Actually paid on the orders given in July 1924	...	397	397
Sanctioned in January 1925	...	700	475

It will be seen that, except in the case of the order for A-2 wagons placed in January 1925, the bounty payments per wagon, sanctioned or paid, are lower than the Board's estimate. For this there is more than one explanation. No foreign tenders were called for in July 1924 and the amount of the bounty, payable on each type, was fixed by comparing the lowest Indian tender with the lowest foreign tender of the previous January. But conditions had changed between these months. The protective duties should have raised the cost of materials by about Rs. 120 per wagon, and this was taken into account in estimating that the bounties would cost Rs. 850 per wagon, but actually the rise in the exchange prevented an increase in the cost of protected materials, and reduced the cost of all non-protected materials imported from abroad. The Indian wagon builder tendered, therefore, on the basis of lower costs, but the price of the imported wagon was still converted on the basis of 1s. 4/7. to the rupee, and was therefore unaffected by the rise in the exchange. In these circumstances a smaller bounty than Rs. 850 would suffice to bring the Indian and foreign prices together. The financial complication mentioned in the last paragraph still further reduce the actual payments on the wagons ordered in July 1924. In January 1925, the bounty sanctioned for the C-2 wagon was what the Board estimated it would be, and the bounty on the A-2 wagon was less by Rs. 225. But the accepted tender for this type was sent in by a firm which had hardly commenced manufacture, and could only conjecture what its cost of production might be. It cannot safely be taken, therefore, as the measure of the protection which this class of wagon may need in future. We have thought it desirable to draw attention to these figures, because, in a scheme in which there is a maximum limit to the amounts which may be paid by way of bounty during a given period, there should be a definite relation between the estimated bounty per wagon and the number of wagons on which bounties are sanctioned. The question of numbers is indeed vital.

87. When the Board recommended in March 1924, that a limit of Rs. 7 lakhs should be placed on the

The Board's original scheme criticised as inadequate.

amount to be paid annually as wagon bounties, they also suggested that in the first year it would be reasonable to restrict the number of wagons on which the bounty would be paid to 800. This number they thought might be increased by 200 annually with a corresponding diminution of the amount payable per wagon. These numbers have been criticised in the present enquiry by the Indian Engineering Association and by the wagon building firms, on the ground that the potential output of the firms was under-estimated. There is force in this criticism for the actual output of the last six months has been much in excess of what the Board thought possible in March 1924. In the first enquiry the Railway Board drew attention to the very slow rate of delivery of wagons ordered from Indian firms after the war, and the Tariff Board had some reason for regarding the firms' own estimates of the number of wagons they could produce annually as somewhat over-sanguine. The output of wagons in India in 1922 and 1923 hardly exceeded 120 a month, which is less than half the present rate of production. But, even on the basis of the output of 1922 and 1923, it would have been impossible, if the number of wagons ranking for bounty was restricted to 800 annually, to keep the works of three firms fully employed, unless they could obtain additional orders for wagons or under-frames without the aid of bounties. In framing their proposals, the Board were bound to have regard to what at that time seemed financially possible, and the scheme suggested was designed rather to prevent the immediate disappearance of the wagon building industry, than to ensure as rapid a development as might in favourable circumstances be possible.

88. The rate at which the Indian firms have been able to carry out the orders entrusted to them has a direct

Output of wagons in India—January to June 1925.

bearing on our enquiry. Delivery of the wagons ordered in July 1924 did not apparently commence until January 1925, and only 407 were completed before the end of March, but since February a high rate of output has been attained. The average monthly production in recent months has been as follows* :—

Indian Standard Wagon Company . . .	155 wagons.
Messrs. Burn and Company . . .	83 wagons.
	9 under-frames.
Messrs. Jessop and Company . . .	34 wagons.
	12 under-frames.
TOTAL . . .	272 wagons.
	21 under-frames.

* The figures are given for the following periods :—

Messrs. Burn and Company—January to June 1925.

Messrs. Jessop and Company—February to June 1925.

Indian Standard Wagon Company—March to June 1925.

These figures are equivalent to an annual output of 3,264 wagons (excluding under-frames), and are not far short of what the firms claim as their full production. If the same rate of progress is maintained, the orders already placed will be completed by the following dates:—

Indian Standard Wagon Company .	January 1925.
Messrs. Burn and Company . .	September 1925.
Messrs. Jessop and Company . .	October 1925.

As regards the Peninsular Locomotive Company we cannot speak so definitely. That Company declined to give oral evidence, and their written statement does not indicate either what they have already done, or what they think they can do. The Railway Board, however, do not anticipate that they will complete more than 600 wagons by the 31st March 1926, and the actual output may be less than this. The capacity of the existing works may be taken as about 3,800 wagons a year in addition to 300 under-frames, and could be increased substantially without incurring any very heavy capital expenditure.

89. We have thought it necessary to state fully the orders placed for wagons in India in 1924-25, and to indicate the progress made in the execution of these orders, because our recommendations must take account of the actual situation as it exists to-day. It appears probable that the output of wagons (excluding under-frames) in India in 1925-26 will be about 2,700,* and that this output will be attained even though two firms will be without wagon orders for five or six months, and another firm for two months. The Indian production this year will be far higher than it has ever been in the past, and this is the direct result of the payment of bounties on wagons. It is impossible in the circumstances to treat the problem as if it were merely a question of costs and prices; we have to take account also of the manner in which the bounty scheme has been worked and the consequences which have followed.

90. When the payment of bounties on 2,100 wagons was sanctioned in July 1924, it may well have seemed, on the basis of the output of previous years, that the three firms to whom orders were given would be fully employed up till March 1926. The number was greatly in excess of the number suggested by the Board, but, on the other hand, the bounty payable per wagon was much less than the Board's estimate. If the construction of 2,100 wagons was spread over 16 months, the rate of output would be little more than 1,500 a year, and so long as the bounty per wagon could be kept below Rs. 500, the limit of Rs. 7 lakhs a year would not prevent the continuance of subsidies

* Out of 3,500 wagons ordered, 400 were completed by 31st March 1925, and 400 will probably not be completed until after 31st March 1926.

on about the same scale. But during the last twelve months the circumstances have changed materially. The older wagon building firms have demonstrated their capacity to produce wagons much more rapidly than the Board thought possible in March 1924; a fourth firm has entered the field to compete with the three, which were manufacturing in 1923; and additional orders have been placed in India which raise the total for the year to 3,500 wagons, of which 3,000 will rank for bounty, and 500 will be paid for at a price which practically includes a bounty. We cannot in our recommendations overlook these facts. Under existing conditions, if the limit of Rs. 7 lakhs a year is adhered to, the number of wagons ranking for bounty cannot exceed 1,500 on the average, and it is quite impossible to continue to sanction bounties at the rate of 3,000 wagons a year. The position at the moment is even more serious. As the law stands, the total amount that can be sanctioned this year for payment in 1926-27 is Rs. 3.27 lakhs, which would suffice for not more than 700 wagons at the most. The number is too small to admit of division, and only one firm out of four could receive an order and, even so, might be short of work for half the year. If the sum of Rs. 4.14 lakhs, which lapsed in 1924-25, were re-granted, it would only add about 800 wagons to the total, and the question would then arise whether it was better to concentrate on one firm, or to split the bounties between two firms, with the result that both would be shut down for part of the year. It seems to us that, in all the circumstances of the case, it is necessary not only that the law should be amended so as to permit the expenditure in 1926-27 of that portion of the allotment for 1924-25, which remained unexpended at the end of the year, but also that the limit of Rs. 21 lakhs on the expenditure of the three years covered by the Steel Industry (Protection) Act should be increased.

91. It may be argued, and with great force, that the Board's original scheme was open to precisely the objections outlined in the last paragraph. Bounties were to be paid on 800 wagons in the first year, and not until the fifth year would the number ranking for bounty rise to 1,600. Throughout the period, therefore, the orders given must have been far below the capacity of the Indian firms. But it is to be noted, that at the time the Board submitted its proposals, the Government of India were uncommitted, and could grant assistance, withhold assistance or limit the assistance given, in any manner they deemed expedient. This is no longer the case. The administration of the bounty scheme has brought about a rapid expansion of the industry, and if there is an abrupt reversion to a more limited scale of protection, part of the money already spent will have been spent in vain. If, as a result of the enforcement of the limit of Rs. 7 lakhs a year, two of the wagon building firms are squeezed out and receive no orders, the bounties already paid to them will have done

nothing to promote the development of the wagon building industry.

92. It will be convenient to indicate what we take to be the limits of this enquiry. The wagon building firms have placed before us proposals for scrapping the bounty scheme and substituting either a protective duty on imported wagons, or a guarantee that orders will be placed in India for not less than 4,000 wagons annually, at prices determined solely by competition between the Indian firms. These proposals were considered in the Board's first enquiry and were rejected, and they will again be open for consideration next year when the statutory enquiry, which must precede the expiry of the Steel Industry (Protection) Act, is held. But we cannot regard it as part of our duty to discuss them in a summary enquiry carried out under severe restrictions as to time. The scheme embodied in the Act holds the field, and our principal task is to advise how it should be modified in view of changed circumstances, and not to suggest an entirely new scheme. Our proposals must, in any case, cover the period intervening between the 1st October 1925 and the 31st March 1927, but there are practical reasons why in this case the latter date cannot be treated as an absolute limit. In the ordinary course, orders will have to be placed in January 1927 for wagons to be delivered and paid for in 1927-28. It is most unlikely that, before that date, the Government of India and the Legislature will have considered the conclusions reached in the statutory enquiry, and decided what measures are to be taken to protect the steel industry. It seems necessary, therefore, to decide now what amount can be sanctioned on wagon bounties in 1926-27 for expenditure in 1927-28. Unless this is done, there will be an interregnum of several months, during which the wagon building industry will receive no protection at all.

93. The amount of the bounty payable per wagon under the Steel Industry (Protection) Act is not a fixed amount, but is determined for each type by a comparison of the lowest Indian with the lowest foreign tender. The most up-to-date evidence as to the probable difference between the two prices, is to be found in the tenders of January 1925. We have examined the figures, and we do not think that the amount of the bounty required per wagon can safely be taken at less than Rs. 600 for wagons to be delivered in 1926-27, and Rs. 500 for wagons to be delivered in 1927-28. It is on this basis that the allotment for wagon bounties in each year should, we think, be calculated. The question of numbers remains. We have estimated that the present capacity of the Indian wagon building works is about 3,800 wagons a year, apart from under-frames, but the payment of bounties on so large a number in 1926-27 would not be necessary. If the allotment for wagon bounties were large enough to permit the payment of

bounties on 3,000 wagons, it would be possible to place orders for not far short of their full output with all of the four Indian wagon building firms* and there would be a reasonable prospect of increasing the number of wagons ranking for bounty in 1927-28. On the basis of these figures, we recommend that the allotment for wagon bounties should be Rs. 18 lakhs in each of the years 1926-27 and 1927-28.

94. We believe that, if the allotment for wagon bounties is fixed at Rs. 18 lakhs as we have proposed, it will be possible to pay bounties on not less than 3,000 wagons both in 1926-27 and in 1927-28, and this number is the smallest, which, in our view, will fully meet the requirements of the industry. The question remains whether the number 3,000 should also be treated as a maximum, and if not, in what circumstances a higher number would be justifiable. It is possible that when tenders are examined in January 1926, the difference between the lowest Indian and foreign tender for certain types will be less than we expect, so that bounties could be sanctioned on 3,600 wagons without exceeding the limit of Rs. 18 lakhs. If this were to occur, it would be necessary to decide whether the number 3,000 should be raised. It is important we think that bounties should not be sanctioned on more than 3,000 wagons in the first year of the enlarged scheme, unless there is a reasonable certainty that it will be possible to adhere in the following year to the higher number chosen. For this reason it seems advisable that, when circumstances permit the payment of bounties on a larger number of wagons than the standard number for the year, the limit of Rs. 18 lakhs should be regarded as a maximum, and not as a fixed provision, the whole of which must be allotted. If, for example, the tenders of January 1926 made it possible to sanction Rs. 500 a wagon on each of 3,600 wagons, it would be safer to limit the number to 3,300 or even less, because there would then be less danger of a relapse to a lower number in 1927-28. It is of no use to pay bounties on a very large number of wagons in one year, if there is likely to be a drastic reduction in the next.

95. It would be very regrettable, we think, if the rapid expansion of the industry during the last twelve months were followed by a period of decline, and for this reason we have recommended that the allotments for expenditure on wagon bounties in 1926-27 and 1927-28 should be Rs. 18 lakhs in each year. We believe that the interests of the country will best be served by adopting a forward policy, and, since the larger numbers will make for economical production, it may prove cheaper in the end to spend comparatively large sums on wagon

* The Peninsular Locomotive Company will probably not deliver until 1926-27 about 400 of the wagons already ordered.

bounties during a short period, than a smaller sum over a longer period. At the same time, we recognise that, if bounties are paid on as many as 3,000 wagons for two years more, it would be impossible at the end of that time to reverse the policy, and Government would be committed to the continuance of protection on the same scale for an indefinite period. In these circumstances, the Government of India may prefer to await the results of the statutory enquiry to be held in 1926-27 before coming to a final decision, and in that case a scheme of more limited scope must suffice for the next two years. With four wagon building firms in the field competing for orders, some of them must be disappointed, and if a firm, which obtained an order in one year, was unsuccessful in the next, the bounty payments would fail to secure the healthy development of the industry, because continuity, which is essential, would be sacrificed. For this reason any reduction of the allotment we have proposed would make it necessary to decide which firms should be encouraged, and in that case it seems inevitable that the two firms, which specialise in wagon building, should receive the preference. The number of wagons ranking for bounty ought at least to be sufficient to keep these two firms reasonably employed. The full output of the Indian Standard Wagon Company and the Peninsular Locomotive Company at present is not more than 2,600 wagons a year, and it would probably suffice if bounties could be paid on 2,200 wagons in 1926-27 and on a somewhat larger number for 1927-28. On that basis the allotment in each year should be Rs. 13.2 lakhs. We have given this figure as the bare minimum, which, in our view, is in any sense adequate to maintain the industry, but our recommendation is in favour of the larger allotment proposed in paragraph 93. The grounds on which we advocate it have already been stated, but we may add that the smaller allotment would make it necessary to concentrate on the specialist firms, and this course, though inevitable in the circumstances, would be something less than just to the engineering firms—Messrs. Burn and Company and Messrs. Jessop and Company—who built wagons in India before the specialist companies were established.

96. Up to this point we have dealt separately with carriage under-frames and wagons, but the recommendations made in the rest of this chapter are common to both classes of vehicle. The bounty allotments we have proposed are Rs. 1.8 lakhs for under-frames and Rs. 18 lakhs for wagons. It would probably make for elasticity of administration if the statutory limit were fixed at Rs. 20 lakhs for wagons and under-frames together. Each class of vehicles should be considered to have a prior claim on its own allotment, if the tenders for the year showed that the full amount was required, but there should be no statutory bar to a transference of funds from one allotment to the other. Wagon building and under-frame building are not separate industries, but two branches of the same industry, and can hardly be kept in watertight compartments. The transfer of funds from

One statutory limit for bounties sanctioned on wagons and under-frames.

wagons to under-frames, or *vice versa*, would, however, be justifiable only if the bounty required, as disclosed by the comparison of tenders, was unexpectedly high, and any transfers with the object of increasing the number of wagons or under-frames ranking for bounty should not be made (see paragraph 94). If the allotment for wagons is fixed at Rs. 13·2 lakhs, then the statutory limit should be Rs. 15 lakhs for both together.

97. It will be convenient to allude here to a fact, which was brought prominently to our notice during the enquiry. The wagon building firms have maintained a high rate of output during the last few months, but they were unable, until January 1925, to commence delivery of the wagons ordered in July 1924. It seems clear from the evidence that there is always delay in obtaining from the United Kingdom the imported parts, and that this is the reason why earlier delivery is not possible. In order to remove this difficulty, two of the firms suggested that tenders should be called for in July and orders placed in October, so that deliveries could commence in the following April. In that case, the whole of the wagons ordered in one year would normally be paid for in the next. So far as the bounty scheme is concerned, we do not consider it essential that the orders should be placed in one particular month, so long as due allowance is made for a six months' interval between the placing of the orders in India and the commencement of delivery. If, for example, all the wagon orders are placed in January 1926, the Indian wagons will be delivered between July 1926 and June 1927. The fact that payments will fall to be made in two financial years, instead of one, may be inconvenient from the railway point of view, but any difficulty in connection with bounties can be obviated by an amendment of the law. To this point we now turn.

98. We have alluded, in paragraph 84, to the difficulties occasioned by the statutory limit on bounty payments to Rs. 7 lakhs in any one official year. On this point the Steel Industry (Protection) Act certainly stands in need of amendment. It is not the actual payments that should be limited by statute, for the arrangement of these is merely a matter of budget procedure, but the liabilities on account of wagon bounties which Government may incur. If the Act were to continue in force for a series of years, and if it required amendment on this point only, it would probably suffice to amend section 4 by substituting for the words "pay such sum not exceeding seven lakhs of rupees in any one financial year" the words "sanction in any one financial year the payment of such sum not exceeding seven lakhs of rupees," and by adding a clause to provide that sums sanctioned in any year might be paid in that year or in any succeeding year. As things stand, however, the Act ceases to operate at the end of March 1927, and it will be necessary to provide by legislation not only for the removal of the statutory

limit on annual payments, but also for bringing under-frames within the scope of the bounty scheme, and for the larger allotments now proposed. The question how the Act should be amended to provide for all these points is not free from difficulty, and we have thought it preferable to deal with the matter in a separate note (Appendix X).

99. There are two minor points in which, we think, the administration of the bounty scheme can be improved. In the first place, it seems advisable that, as soon as an order for wagons or under-frames, accompanied by the grant of a bounty, is placed in India, the amount of the bounty sanctioned should be made public. An announcement of the bounties, sanctioned in January 1925, was actually made in the issue of the Indian Trade Journal dated 16th July 1925, but the phraseology used might, we think, be modified. "The accepted price" (for the A-2 wagon), it was said "includes a bounty of Rs. 475." But this statement is not strictly correct, for the bounty is not paid by the railway placing the order and is consequently no part of the price. The point is a very small one and would not have called for notice, but for the fact that, on a previous occasion, the price and the bounty were not clearly distinguished. When orders were placed for 2,100 wagons on bounty terms in July 1924, the firms receiving the orders were informed that the prices, including the bounty, were as follows:—

	A-2.	C-2
	Rs.	Rs.
Wagons completed before the 31st March 1925 .	4,750	4,450
Wagons completed after the 31st March 1925 .	4,200	4,000

It will be seen that the difference between the two prices is Rs. 550 for an A-2 wagon and Rs. 450 for a C-2 wagon, but the bounties actually sanctioned were Rs. 800 for wagons completed before the 31st March 1925, and Rs. 300 for wagons completed later. It follows, of course, that not only the rate of bounty, but also the price paid for the wagons, varied according to the date of completion. In this case, the failure to distinguish clearly between the price of the wagon and the bounty, resulted in a good deal of mystification.

100. The second point to which we desire to draw attention is the desirability, when simultaneous tenders for wagons and under-frames are called for in Europe and in India, of explaining clearly the conditions under which the Indian and the European prices will be compared. In every call for tenders it should be stated—

- (1) what sum will be allowed as the cost of erection in India of the component parts of a wagon or under-frame imported from abroad.

- (2) to what extent the component parts of imported wagons will be brought out to India already rivetted up, or with the rivet holes drilled; and
- (3) what rate of exchange will be taken in converting the c.i.f. price of the imported wagon into rupees.

Unless the Indian manufacturer is in possession of this information, he is at a disadvantage in tendering. During the course of the enquiry, it was suggested that, if Rs. 325 was a fair estimate of the cost of erecting in India an imported wagon (Evidence in the first Steel Enquiry, Volume III, page 312), Rs. 365 was an inadequate estimate of the cost of erecting an under-frame, because the work involved was much greater, unless the component parts reached India more completely rivetted up than was usually the case. The point is one which cannot be settled, except under technical guidance, but, we think, the matter should be investigated and the decision of the railway authorities made public. As for the rate of exchange, Messrs. Jessop and Company drew attention to the fact that, in the printed form of tender, they were required to specify the cost of the materials to be used in the construction of the wagons taking the exchange at 1s. 4d. It is quite possible that for comparative purposes it may be useful for the Railway Board to have the information in this form, but if the clause in the tender created the impression that prices were likely to be compared at 1s. 4d. to the rupee, the consequences to the wagon building firm so misled might be serious. In any case, the rate of exchange to be adopted in comparing prices is a matter on which the Indian wagon building firms are entitled to definite information before they submit their tenders.

101. If our proposals are adopted, the amount to be sanctioned by way of bounties on wagons and under-frames will be about Rs. 20 lakhs in each of the years 1925-26 and 1926-27, but the whole of this expenditure is not in excess of the limit of Rs. 21 lakhs imposed by the Steel Industry (Protection) Act on the payments for the three years ending on the 31st March 1927. Out of the allotment for 1924-25 Rs. 4.14 lakhs was unspent, and could reasonably be re-granted, and out of the allotment for 1926-27 Rs. 3.27 lakhs is still un-earmarked. The increase in expenditure, if these sums are deducted, is Rs. 32.59 lakhs, out of which Rs. 12.59 lakhs will probably be payable in 1926-27 and Rs. 20 lakhs in 1927-28. The Steel Industry (Protection) Act makes no provision for the latter year, but the continuance of assistance to the extent of Rs. 7 lakhs annually must in any case have been necessary. In effect, therefore, what we have proposed is an increase of Rs. 11 lakhs a year in the expenditure on wagon bounties, and an addition of Rs. 2 lakhs to cover bounties on under-frames. If the smaller allotment for wagons is adopted, the former figure is reduced to Rs. 6 lakhs.

102. Before we close our review of the wagon building industry, it may be useful if we refer once more to the difficulties which have been met with in the administration of the scheme. We have suggested means by which some of these difficulties may be removed, and have pointed out the necessity of establishing a close relation between the number of wagons on which bounties are sanctioned in one year, and the probable bounty which will be required per wagon in subsequent years. But it should be recognised distinctly, that most of the difficulties were inherent in the bounty scheme as recommended by the Board itself, and in the legislation passed to give effect to it. The authority administering the bounty has had to carry on its work hampered by the statutory limit to the payments in any one year, and with additional complications resulting from the date when the Act was passed, and the long interval (unforeseen by the Board), which elapses between the placing of orders with Indian firms and the date when deliveries commence. The amendments, we have proposed in the Steel Industry (Protection) Act, will, we hope, facilitate the administration of the wagon bounty scheme, but in one respect the position is unchanged. From the first, the great difficulty in devising a satisfactory scheme for the protection of the wagon building industry has been that it has not been possible to ascertain what should be taken as the reasonable cost of constructing a wagon in India, and, for this reason, the bounty payable on a particular type of wagon cannot be fixed at any definite sum. Under the system recommended by the Board, and accepted by the Government of India, the Indian wagon building firms themselves decide what the amount of the bounty is to be, for the bounties sanctioned are ordinarily equal to the differences between the lowest Indian and the lowest British tender for each type of wagon. In a scheme of this kind it becomes unnecessary to determine costs, for the wagon building firms are themselves in the best position to decide what is the lowest price which makes an order worth acceptance. The successful working of the scheme, however, is not a simple matter, and the regulation of the number of wagons on which bounties are to be paid may present a very difficult problem. A fresh complication is introduced when one of the firms is a new comer in the field and cannot estimate from actual experience what its costs are likely to be. These aspects of the scheme will naturally call for examination in the statutory enquiry to be held in 1926-27. Much more accurate data for determining the cost of conversion should then be accessible, and it may be possible to devise some scheme of protection which will throw a lighter burden on the authority charged with its administration.

CHAPTER VII.

Conclusion.

Summary of recommendations. 103. The recommendations we have made in the foregoing chapters may be summarised as follows:—

- (1) The payment of a bounty at the rate of Rs. 18 a ton on 70 per cent. of the weight of steel ingots produced in India between the 1st October 1925 and the 31st March 1927. The bounty payments to be subject to a limit of Rs. 90 lakhs (paragraph 32).
- (2) The grant to the Tinplate Company of India of a rebate of the Customs duty paid by them on tin imported for the manufacture of tinplate. The consumption of tin per ton of tinplate to be determined, and the amount of the rebate to be regulated by this ratio and by the actual output of tinplate (paragraph 58).
- (3) The increase of the protective duty on imported tinplate from Rs. 60 to Rs. 89 a ton (paragraph 59).
- (4) The increase in the protective duty on fabricated steel, other than the kinds specified under heads (5) and (6) from 25 to 32½ per cent. *ad valorem* (paragraph 69).
- (5) The protective duty on such component parts of steamers, launches and other vessels for harbour and inland navigation as are made of fabricated steel to remain at 25 per cent. *ad valorem* (paragraph 70).
- (6) The increase of the protective duties on—
 - (a) tipping wagons,
 - (b) coal tubs, and
 - (c) switches and crossings adapted for use with rails under 30 lbs. per yard
 from 25 to 40 per cent. *ad valorem* (paragraph 73).
- (7) The amendment of the Steel Industry (Protection) Act to empower the Government of India to sanction the payment of bounties on railway wagons and carriage under-frames, subject to a maximum limit of Rs. 24 lakhs in 1925-26 and Rs. 20 lakhs in 1926-27. The bounties sanctioned in either year to be payable in that year or in any succeeding year (paragraph 96 and Appendix X).
- (8) The cessation of the payment under section 4 of the Steel Industry (Protection) Act of bounties on railway wagons with effect from the 1st April 1926 (paragraph 98 and Appendix X).
- (9) A public announcement to be made of all bounties sanctioned on wagons and under-frames (paragraph 99).

- (10) The conditions under which the Indian and European prices of wagons and under-frames will be compared, to be announced at the time of calling for tenders (paragraph 100).

104. An application for supplementary protection for wire and wire nails was received from the Indian Steel Wire Products, Limited, and applications from two other firms, who manufacture wire nails from imported wire, were separately referred to us in the Resolution of the Government of India No. 38-T., dated the 28th March 1925. We are unable to make any recommendation regarding these classes of steel at present. The application from the Indian Steel Wire Products, Limited, was not received until after the date fixed by the Board for the submission of representations, and as that Company's works had been shut down for many months, and had not been re-opened when the representation was sent in, the circumstances, in our opinion, were special and called for a separate investigation. It was impossible to delay the submission of this Report until the wire question had been re-examined, and the postponement of our recommendations was inevitable. The other two applications raise an entirely new issue, namely, whether the manufacture of wire nails from imported wire deserves State assistance. The same protective duty is applicable at present both to wire and wire nails, and what the applicant firms desire is that the duty on wire nails should be higher than the duty on wire. The three applications must be considered together, and we shall hear the evidence on the subject at an early date.

105. In paragraphs 33 and 34 the additional expenditure by way of bounties on rails, fish plates, wagons and ingot steel was found to be Rs. 2·56 crores, and the probable increase of revenue, on account of the protective duties on steel, was estimated to be Rs. 2·80 crores, so that there was a margin between revenue and expenditure of Rs. 24 lakhs. That calculation, however, took no account of the proposals made in Chapters IV to VI, for the increase of the duties on tinplate and on fabricated steel, for the payment of larger sums by way of bounty on wagons and under-frames, and for a rebate of the customs duty on tin imported for the manufacture of tinplate. The financial effect of these proposals has been worked out in Appendix XI, and the nett result is to raise the increase in the Customs revenue to Rs. 2·99 crores in round figures, and the additional expenditure to Rs. 2·73 crores. The surplus of revenue over expenditure is slightly higher at Rs. 26 lakhs. All these figures relate to the period between the passing of the Steel Industry (Protection) Act and the 31st March 1927. An additional liability of Rs. 20 lakhs on account of bounties on wagon and under-frames is thrown forward into the year 1927-28. This liability is properly a charge against the protective duties, which may be imposed by the legislation which will replace the

Steel Industry (Protection) Act, but if our estimate of the increase in revenue is realised, the sum required to meet the liability will be in hand on the 1st April 1927. The figures given above do not call for any modification of the view, expressed in paragraph 34, that the supplementary protection needed for rolled steel can be given entirely in the form of a bounty, and that no increase in the duties on such steel is necessary.

106. In concluding this Report we desire to record our obligation to those who have assisted us in our enquiry. All our requests for information met with a prompt and ungrudging response from the firms who had applied for supplementary protection. Our thanks are also due to the iron merchants and the engineering firms for the evidence as to the prices of steel supplied by them, to the Railway Board for the full and detailed information given regarding wagons and under-frames and the working of the bounty scheme, and to the Bengal Iron Company for complying with our request for a fuller statement of their objection to the unrestricted sale of pig iron by the Tata Iron and Steel Company.

G. RAINY—*President.*

JOHN MATTHAI—*Member.*

C. B. B. CLEE—*Secretary.*

September 2nd, 1925.

ANNEXURE A.

Note on the cost of production of steel at Jamshedpur and on the manufacturer's profits under protection.

In their Report on the grant of protection to the steel industry (paragraphs 84 and 85), the Board found that the average works cost of finished steel at Jamshedpur was about Rs. 130 a ton in 1922-23, and they saw no prospect that, in the old plant at least, the cost could be brought appreciably below that figure until 1925-26. This figure of Rs. 130 a ton was arrived at on the assumption that the cost of the coal used would be equal to the price paid for coal, f.o.r. colliery, *plus* freight to Jamshedpur, whereas the Tata Iron and Steel Company actually charge in their cost sheets the average of the price paid for purchased coal and the raising cost of the coal produced in their own collieries, *plus* freight to Jamshedpur in both cases. The effect is to reduce the cost of finished steel by about Rs. 6 a ton, so that an average cost of Rs. 124 a ton in the Company's cost sheets would be equivalent to the Board's figure of Rs. 130 a ton. The actual average cost of all finished steel in 1924-25 was Rs. 122·5 a ton, or if sheets, tinplate bars and plates are excluded (these kinds of steel were not manufactured in 1922-23), Rs. 119 a ton. As the Board anticipated, the working of the new duplex plant gave rise to many difficulties during the first six months of the year; and until these had been overcome, the output of ingots was so low that the supply of steel to the new mills was very poor. Costs both in the new furnaces and the new mills were therefore abnormally high, but rapidly improved from October 1924 onwards. The open hearth furnaces, on the other hand, maintained a high level of output throughout the year, and costs in the old plant were lower than in 1922-23.

Financial results of the Tata Iron and Steel Company in 1924-25.

2. The financial results of the first year, during which steel was protected, are summarised in the following table:—

	Rs. lakhs.
Total surplus over works cost	124
Portion of surplus attributable to the sale of pig iron*	29
Bounty on rails and fishplates†	36
Additional bounty on ingot production from 1st October 1924 to 31st March 1925	29
Surplus over works costs resulting from the sale of steel	30

*184,530 tons of pig iron were sold at an average price of Rs. 48·81 a ton f.o.r. Tatanagar. The average works cost for the year was Rs. 32·98 a ton. The surplus was therefore Rs. 29,21,110.

†The Steel Industry (Protection) Act did not receive the assent of the Governor-General until the 13th June 1924. But the bounty on rails was made payable on the whole output from April 1924.

The output of finished steel was about 250,000 tons, so that, under the operation of the Steel Industry (Protection) Act, the surplus over works cost was approximately Rs. 26 per ton of steel, and this sum was increased to Rs. 38 a ton by the additional bounty. Had there been no protection at all the sale proceeds of the steel sold would barely have covered the works costs. The total surplus over works costs should have sufficed to meet the full overhead charges which were approximately as follows:—

	Rs. lakhs.
Interest on working capital*	20.00
Agency and head office expenses*	7.75
Depreciation*	93.75
TOTAL	121.50

But owing to the fact that the Company's fixed capital expenditure exceeds its share capital by a substantial sum, not only the whole of the debenture interest, but also part of the interest on temporary loans must be treated as return on fixed capital and not interest on working capital. The interest charges of this kind amounted to about Rs. 33 lakhs. Debenture and other interest charges have, of course, to be met before depreciation is provided for, and it was on this account the Company found themselves unable to allocate more than Rs. 61 lakhs to depreciation. The results of the first year are very much in accordance with the anticipations expressed in the following passage in the Board's first Report on Steel:—

“ On a production of 250,000 tons of finished steel, which is all that it is safe to rely on in 1924-25, the overhead charges alone would approach Rs. 50 a ton and the average selling price of Rs. 180 a ton would leave little margin for the return on capital.”

3. The costs and financial results of the year 1924-25 are not without interest, but they throw little light on the prospects of the years 1925-26 and 1926-27. A detailed examination has therefore been made of the cost sheets of the five months from January to May 1925, and the results are summarised in Table 1 where the works costs of the first five months of 1925 are compared with the costs for the whole year 1924-25 and with the estimate (prepared by the Tata Iron and Steel Company at the end of 1923) of future costs after full production has been obtained. There are two points to be borne in mind in making the comparison. In the Company's estimate coal was taken at the price prevailing in 1921-22, *i.e.*, Rs. 8 a ton for coking coal delivered at Jamshedpur, whereas in the

*The figure for agency and head office expenses is taken from the Company's Profit and Loss account for the year. The figure for interest on working capital includes an allowance for interest on the advance made by the Government of India. For the figure for depreciation see paragraph 81 of the Board's Report on the grant of protection to the Steel Industry.

cost sheets the average price at which coking coal was charged was about Rs. 9.25 in the first five months of 1925, and the average price for the whole year 1924-25 was higher still. In the second place the Company's estimate presupposed an output of finished steel approaching 35,000 tons a month, whereas the average output was less than 21,000 tons in 1924-25 and not quite 25,000 tons in the first five months of 1925. Both the higher cost of coal and the lower output would tend to raise the works costs above the estimate and this must be borne in mind.

4. The average cost of all finished steel dropped from Rs. 122.5 a ton for the whole year 1924-25 to Rs. 115 Reduction in Works Cost already secured. a ton in the first five months of 1925, but is still higher by Rs. 9 a ton than the estimate of future costs. Similarly the average cost in the rail and bar mills was less by Rs. 11 a ton than the cost in 1924-25, but higher by Rs. 9 a ton than the estimated cost. The reduction as compared with 1924-25 was due in the main to a fall in the cost of pig iron, which, of course, affects favourably the costs in all the later stages of manufacture, and to a higher output from the steel furnaces in the duplex plant. The cost of pig iron during the five months was not only less by Rs. 3.5 a ton than in 1924-25, but also less by Re. 1 a ton than the estimate of future costs, although coking coal was charged in the cost sheets at Rs. 9.25 a ton as against Rs. 8 a ton in the estimate. The reason is apparently to be found in the high output of the blast furnaces, in a gradual reduction in the cost of coal as compared with 1924-25, and in an improvement in the quality* of the coal. The output of ingots from the duplex plant averaged 18,000 tons a month for the five months, as against 13,500 tons for the year 1924-25, and 30,000 tons the estimated full output. The average works cost of duplex ingots is still Rs. 3.5 a ton above the estimate, but would have exceeded the estimate by a much larger sum had it not been for the fall in the cost of pig iron. The output of the open hearth furnaces was slightly above the estimated output of 17,500 tons a month, and the cost of open hearth ingots was less by Rs. 4.5 a ton than the estimated cost. The open hearth furnaces in the old plant are still thoroughly efficient and are giving the full output expected of them, but the obsolescence of the old rolling mills is becoming more and more apparent. Conversely, the new rolling mills are giving even better results than were anticipated, but they are held back by the inability of the duplex plant at present to keep them supplied with steel. The figures tabulated in Table 2 bring out the facts clearly. It will be seen that the costs in the three old mills exceed the estimate substantially in every case, whereas the costs in three of the four new mills are already below the estimate, although none of them had an output exceeding five-sixths of the full output and one of them was as low as a half. The inference clearly is that, in order to secure economical production,

*The quantity of coking coal used per ton of pig iron was less than 1.60 tons in the five months as against 1.66 tons in 1916-17 and 1.78 tons in 1921-22.

the fullest possible use will have to be made of the up to date and efficient rolling mills.

5. The brief review of the Iron and Steel Company's costs contained in the last three paragraphs leads up to the question, what reductions in costs can reasonably be expected in the years 1925-26 and 1926-27. There are four main causes which are likely to bring about a fall in costs. These are:—

- (1) The lower price of coal.
- (2) The increase in the output of the duplex furnaces.
- (3) The reduction of the percentage of 2nd class rails in the new rail mill.
- (4) The reduction in the labour cost of black and galvanised sheet.

The first two points are much the most important but each of them demands separate discussion.

6. Under the long term contracts made by the Tata Iron and Steel Company with certain collieries, the price paid for coal varies according to the price paid by the Railway Board, and the price paid by the Railway Board itself was fixed for the three years 1922-23 to 1924-25 by a contract which provided for an increase of 12 annas a ton in each of the two latter years. Subsequently, however, this contract was modified by arrangement between the Railway Board and the collieries. Its term was extended to cover the year 1925-26, and the prices fixed for 1924-25—1925-26 were less by 8 annas and 12 annas a ton than the price paid in 1923-24. The evidence does not make it clear how exactly the modified arrangement affects the contracts between the Tata Iron and Steel Company and its suppliers, but we infer from the figures in the cost sheets that the benefit of the reduction in price accrues to the Company mainly in 1925-26 and not in 1924-25. The average cost charged in the cost sheets for coking coal was above Rs. 9·5 a ton in the last three months of 1924-25 and fell to Rs. 8·5 a ton in May. No further reduction in the cost is expected until April 1926, and the average cost for the year 1925-26 will be lower than the average for the first five months of 1925 by Rs. 0·75* a ton. The consequent reduction in the cost of finished steel should be about Rs. 3 a ton. The prices paid by the Railway Board in 1925-26 are a great deal higher than the price at which coal can be purchased in the open market, and in the year 1926-27 the price paid by the Tata Iron and Steel Company should be closely in accord with the market rates. The data for an exact calculation are lacking, but, if the current prices are taken as about Rs. 3 a ton less than the prices paid by the Railway Board in 1925-26, and if half the coal used at Jamshedpur is assumed

*The average cost of coking coal for the five months was Rs. 9·25 a ton as against Rs. 8·5 a ton in May.

to be purchased coal, the cost of coking coal charged in the cost sheets of 1926-27 should not exceed Rs. 7 a ton, a figure which is less by Rs. 2.25 a ton than the average of the first five months of 1925. The consequent reduction in the cost of finished steel in 1926-27 would then be about Rs. 9 a ton.

7. According to the original estimate the two tilting furnaces in the duplex plant should be capable of an output of 30,000 tons of ingots a month, but up till now the actual output has exceeded 20,000 tons only in one month. The Company expect an average output from the duplex plant of a little over 20,000 tons of ingots a month in 1925-26 and 24,000 tons in 1926-27. The increase in output might be expected to reduce the cost of ingots by Re. 1 a ton in the first year and by Rs. 2 in the second. The duplex ingots will be about 53 per cent. of the total production in 1925-26 and 58 per cent. in 1926-27, so that the resulting *reduction in the average cost of finished steel would be approximately Rs. 0.75 and Rs. 1.5 a ton in the two years. According to the Company's forecast, most of the additional ingots will be rolled in the new mills, and a reduction in the rolling cost is also to be expected, but is rather more difficult to estimate. An exact calculation is hardly possible, but a comparison of the average costs for the whole five months with the costs in the months of highest output leads to the conclusion that the reduction in the costs of certain mills, producing about two-thirds of the total output, might amount to Rs. 1.5 a ton in 1925-26 and Rs. 3 a ton in 1926-27. The total reduction in costs likely to arise from the increased output of the duplex furnaces is Rs. 2 a ton in 1925-26 and Rs. 3.5 a ton in 1926-27, spread over the whole output of the works.†

8. The cost of rails in the new rail mill at Jamshedpur has been raised substantially since April 1924 by the high percentage in the output of second class rails (*i.e.*, rails which the Metallurgical Inspector will not certify). It is understood that the difficulty is due to temporary causes and that steps are being taken to set matters right. Meanwhile, however, the position is unsatisfactory. There is only a limited market in India for second class rails, and when that limit is exceeded, the production can be sold, if at all, only at a heavy loss. The result is that the credit taken for second class rails

*The consumption of ingots per ton of finished steel is about 1.43 tons.

†The details of the calculation are as follows:—

	1925-26.	1926-27.
	Rs.	Rs.
Reduction in the cost of ingots . . .	0.75	1.50
Reduction in milling costs owing to higher output	1.00	2.00
Total reduction	1.75	3.50

in the rail mill cost sheet goes down and the cost of first class rails goes up. A marked improvement may reasonably be expected in 1926-27, and the percentage of second class rails should go down sufficiently to reduce the works costs of rails by at least Rs. 3 a ton. Spread over the whole output this would mean a reduction of Re. 1 a ton in the average cost of finished steel.

9. The manufacture of black and galvanised sheet commenced at Jamshedpur in October 1924, and no estimate of the eventual cost of production can yet be made. The costs of the first few months of working are not typical for, while the imported labour staff is already at full strength, the output has been less than a third of the estimated capacity of the mills. A substantial reduction in the labour cost is, however, certain, and in 1926-27 this item should be lower by at least Rs. 20 a ton than it was in the first five months of 1925. The sheet production in that year will be about 10 per cent. of the total output, so that the reduction in the average cost of finished steel on this account should be about Rs. 2 a ton.

Amount of the probable reduction in Works Costs.

10. The reductions in the works cost of steel at Jamshedpur, which appear probable in 1925-26 and 1926-27, are summarised in the following table:—

	1925-26. Rs. per ton.	1926-27. Rs. per ton.
Reduction in the cost of coal	3.00	9.00
Higher output of duplex furnaces	1.75	3.50
Reduction in the percentage of second class rails	..	1.00
Reduction in the cost of sheet	..	2.00
TOTAL	4.75	15.50

These figures are not, we think, very wide of the mark, but they are subject to certain reservations. Owing to limitations of time we have had no opportunity of placing the figures before the representatives of the Company and obtaining their opinion on the subject. The figures taken as the reductions in cost attributable to the fall in the price of coal involve assumptions as to the price at which the Railway Board will purchase, as to the proportion of the coal used at Jamshedpur, which is purchased and not raised in the Company's own collieries, and as to the present consumption of coal per ton of finished steel at Jamshedpur. The reduction expected

from the higher output of the duplex furnaces depends, of course, entirely on whether the increase forecasted will actually be attained. Finally the five months January to May include the three months when production is always highest, and under normal conditions, the average cost for these months would always be less than for a complete year. Some allowance must be made for these factors, and we think it is safer to take the estimated reduction in costs as not more than Rs. 4 a ton in 1925-26 and Rs. 12 a ton in 1926-27.

11. Before the cost sheets had been examined in detail, four statements were drawn up with the object of ascertaining the probable financial result to the Company on the assumption—

- (1) That the protection given would be sufficient to enable the Company to realise for certain kinds of steel the standard prices adopted by the Board in 1924 as the basis of their recommendations.
- (2) That the average works costs in 1925-26 would be equal to the average of the five months January to May 1925.
- (3) That the average works costs in 1926-27 would be lower than the average of the first five months of 1925 by Rs. 5 a ton.

The figures in these statements were verified (and in some cases corrected) by the representatives of the Iron and Steel Company, who accepted the method of calculation as being accurate for its purpose. These statements are printed as Tables 3 to 6 and the final results are contained in Table 6. It will be seen that the surplus over works costs is expected to amount to Rs. 153 lakhs in 1925-26 and to Rs. 196 lakhs in 1926-27. If, however, the reductions in costs indicated in paragraph 10 are actually attained, these figures will be somewhat increased. The surplus over works costs becomes Rs. 165 lakhs in 1924-25 and Rs. 221 lakhs in 1926-27. The overhead charges on account of agency and head office expenses, interest on working capital and depreciation may be taken at the round figures of Rs. 120 lakhs, and the surplus above the all-in-cost will then be Rs. 45 lakhs in 1925-26 and Rs. 101 lakhs in 1926-27. The sale of pig iron might raise these figures by about Rs. 25 lakhs in each year, so that the final surplus would be as follows:—

	Rs. lakhs.
1924-25	4
1925-26	70
1926-27	126
TOTAL	200

The sum required to give an 8 per cent. return on Rs. 15 crores, which the Board in their original enquiry found to be the reasonable capitalisation for iron and steel works with an output equal to that of the works at Jamshedpur, is Rs. 120 lakhs a year. It will be seen, therefore, that, during the first three years of protection, the

only manufacturers of rolled steel in India, after meeting the all-in-cost of production, will have earned a profit sufficient to pay about $4\frac{1}{5}$ per cent. on the capital. The whole sum of Rs. 200 lakhs would not, however, be available for distribution to the shareholders. The interest on debenture and other loans, the proceeds of which have been used to defray fixed capital expenditure, will absorb about Rs. 33 lakhs in each year, and the balance remaining is Rs. 134 lakhs. The dividends on the first and second preference shares of the Company require Rs. 57 lakhs in each year so that balance left for the ordinary shareholders would be very small even if the second preference dividends were not three years in arrears.

ANNEXURE A.

TABLE 1.

Comparison of the actual cost of steel production at Jamshedpur during certain periods with the cost after full production has been attained as estimated by the Tata Iron and Steel Company in 1923.

	1923 estimate.	Actuals 1924-25	Actuals January to May 1925.	Actuals of best month.
	Rs. per ton.	Rs. per ton.	Rs. per ton.	Rs. per ton.
Pig iron	30 95	32 98	29 68	29 13
Open hearth ingots	60 80	61 12	56 34	55 64
Duplex ingots	57 11	71 75	61 91	60 74
Old blooming mill	72 39	77 57	74 04	71 68
New blooming mill	68 81	86 45	72 31	71 15
Old rail mill	100 91	112 65	110 01	104 80
New rail mill	93 69	114 53	98 51	95 08
Old bar mill	125 08	130 09	130 06	128 60
New bar mill	106 71	137 15	112 24	108 82
Old rail and bar mills	106 50	117 77	115 76	...
New rail and bar mills	96 30	120 51	102 70	...
All rail and bar mills	99 00	118 93	108 05	...
Plate mill	120 54	146 88	137 92	129 79
Sheet bar and billet mill	80 81	101 23	81 35	79 62
Black sheet	149 18	207 17	195 30	187 32
Galvanised sheet	194 43	360 62	347 18	332 56
All finished steel	106 46	122 39	115 26	...

ANNEXURE A.

TABLE 2.

Comparison of the actual cost above nett metal in certain rolling mills at Jamshedpur with the estimate of future costs after full production has been attained made by the Tata Iron and Steel Company in 1923.

	MONTHLY OUTPUT.		COST ABOVE NETT METAL.	
	As estimated in 1923.	Actual January to May 1925.	As estimated in 1923.	Actual January to May 1925.
	Tons.	Tons.	Rs.	Rs.
Old blooming mill	7,358	8,520	7·96	11·42
Old rail mill	5,000	5,202	21·49	25·36
Old bar mill	1,500	2,061	38·09	47·00
New blooming mill	31,738	21,610	4 38	4·60
New rail mill	14,583	7,263	14·05	13·96
Merchant bar mill	3,658	3,188	23·69	18·95
Sheet bar and billet mill	12,833	10,044	7·50	5·44

ANNEXURE A.

TABLE 3.

Calculation of the surplus over works costs likely to accrue to the Tata Iron and Steel Company from the manufacture in 1925-26 of those kinds of steel on which the additional bounty is calculated.

	Works costs January to May 1925-4	Price with additional bounty.	Difference between 1 and 2.	Quantity.	Surplus over works costs.
	1	2	3	4	5
	Rs. per ton.	Rs. per ton	Rs per ton.	Tons.	Rs.
Rails	98.51	181.00	+ 82.49	2,000	+ 1,64,980
Heavy structurals	110.30	175.00	+ 64.70	28,800	+ 18,63,360
Light structurals	131.04	175.00	+ 43.96	24,000	+ 10,55,040
Bars	112.25	180.00	+ 67.75	60,000	+ 40,65,000
Plates	137.92	180.00	+ 42.08	20,400	+ 8,58,432
Black sheet	195.73	230.00	+ 34.27	13,200	+ 4,52,364
Galvanised sheet	347.93	345.00	- 2.93	13,200	- 38,676
				161,600	+ 84,59,176
					- 38,676
					+ 84,20,500

ANNEXURE A.

TABLE 4.

Calculation of the surplus over works cost likely to accrue to the Tata Iron and Steel Company from the manufacture in 1926-27 of those kinds of steel on which the additional bounty is calculated.

	Works cost.		Price with bounty.	Difference between 1 and 2.	Estimated production.	Surplus over works cost.
	1	2	3	4	5	
	Ra. per ton	Rs per ton.	Ra. per ton.	Tons.	Ra.	
Rails	93.51	175.00	81.49	49,000	39,93,010	
Heavy structurals	105.30	175.00	69.70	36,000	25,09,200	
Light structurals	126.04	175.00	48.96	24,000	11,75,040	
Bars	107.25	180.00	72.75	71,000	51,65,250	
Plates	132.92	180.00	47.08	20,400	9,60,432	
Black sheet	190.73	230.00	39.27	18,000	7,06,860	
Galvanised sheet	312.93	345.00	2.07	18,000	37,260	
Total		..	...	236,400	1,45,47,052	

ANNEXURE A.

TABLE 5.

Calculation of the surplus over works costs likely to accrue to the Tata Iron and Steel Company from the manufacture in 1925-26 and 1926-27 of those kinds of steel on which the additional bounty is not calculated.

	Works costs.	Probable price (with bounty on rails).	Difference be- tween 1 and 2.	Estimated output.	Surplus over works costs.
	1	2	3	4	5
	Rs per ton.	Rs. per ton.	Rs. per ton.	Tons.	Rs.
1925-26.					
Palmer Rails	98.51	148.50	49.99	35,000	17,49,650
Railway Board Rails	98.51	156.00	57.49	80,600	46,33,694
Tinplate bars (contract)	81.26	81.26	...	28,000	...
Tinplate bars (other)	81.26	121.88	40.62	11,600	4,71,192
Total	...	...	...	155,200	68,54,536
1926-27.					
Railway Board Rails	98.51	150.00	56.49	81,000	45,75,690
Tinplate bars (contract)	76.26	76.26	...	28,000	...
Tinplate bars (other)	76.26	120.00	43.74	11,600	5,07,864
Total	...	...	...	120,600	50,83,074

ANNEXURE A.

TABLE 6.

Calculation of the probable surplus over works costs per ton of finished steel in 1925-26 and 1926-27.

	ESTIMATED PRODUCTION OF STEEL.			ESTIMATED SURPLUS OVER WORKS COSTS.			SURPLUS OVER WORKS COST PER TON OF OUTPUT.		
	Steel on bounty which would be calculated.	Steel outside the bounty.	TOTAL.	Bounty Steel.	Other Steel.	TOTAL.	Bounty Steel.	Other Steel.	TOTAL.
	Tons.	Tons.	Tons.	Rs lakhs.	Rs lakhs.	Rs lakhs.	Rs.	Rs.	Rs.
—	1	2	3	4	5	6	7	8	9
1925-26 . . .	161,600	155,200	316,800	84.20	68.54	152.74	52.17	44.16	48.21
1926-27 . . .	236,400	120,600	357,000	145.47	50.83	196.30	61.53	42.14	54.98

ANNEXURE B.

Note on the increase in Customs revenue derived from the protective duties on iron and steel.

The object of this note is to determine, as nearly as possible, the increase in the Customs revenue actually realised during the year 1924-25 from the protective duties on certain classes of iron and steel, and the increase in the revenue from the same source which is probable in the years 1925-26 and 1926-27. The actual collections on account of the protective duties have been obtained from the returns sent by the Collectors of Customs, but in order to ascertain the increase in the revenue, it is necessary also to determine approximately the revenue which would have been collected at the former rates of duty if the Steel Industry (Protection) Act had not been passed. In some cases this can be done with reasonable accuracy, and without much difficulty, but there are certain complications, and some explanation of how they have been dealt with must be given.

2. The natural effect of the imposition of protective duties is a reduction in imports, and this will come about in two ways. In the first place, if the price of the protected commodity is raised, it is likely that consumption will be smaller, and in the second place, as the protected industry develops, the domestic production will grow at the expense of the imports. It is necessary, therefore, to take account not only of the duty which would have been collected at the old rates on the quantities actually imported, but also of the revenue which would have accrued from larger imports. But it is not easy in any given case to estimate with confidence what the imports would have been if there had been no protection. The increase in the domestic production is known, but the effect of higher prices on the total consumption is more difficult to gauge. In the case of the steel industry, moreover, there is a peculiarity which makes the whole position somewhat paradoxical. A decline in the sterling price of steel and a rise in the rupee sterling exchange had commenced before the passing of the Steel Industry (Protection) Act and continued for some months afterwards, with the result that, four months after the passing of the Act, practically every class of steel to which protection had been given was cheaper in India—in some cases substantially cheaper—than it had been in 1923. Instead, therefore, of an increase in price which was likely to restrict consumption, protection was followed by a decline in price which was likely to stimulate consumption. Instead of a decrease in imports, the first year of protection witnessed a substantial increase in the imports of almost every class of steel affected by the protective duties. In these circumstances it is necessary to make it clear at the outset what has been taken to be the standard rate of consumption.

3. In this note, and in the tables attached to it, the consumption of the year 1923-24 has been taken as the standard, and, indeed, it was hardly possible to follow any other course. To attempt to determine for each class of steel the hypothetical quantity which would have been imported had steel not been protected, leads straight into the field of conjecture, where exact calculation becomes meaningless. Whatever allowance ought to be made on the ground of a growth in consumption, which protection has prevented, it can only be done on broad lines after the total quantities have been ascertained, and not for each class of steel separately. This point will be considered again in a later paragraph.

4. There are several other difficulties to be overcome before the increase in revenue can be estimated. Some of them can best be explained in the paragraphs, which deal with the various classes of steel, but others are of general application and should be mentioned at once. In the first place the classification of the imports in the Trade Returns does not even now exactly correspond with the divisions in the protective tariff, and it is not always easy, therefore, to combine the information obtained from these returns and from the Customs revenue statements. In particular, in order that like may be compared with like, it is necessary to ascertain approximately in the case of each class of steel what proportion of the imports of 1923-24 would have been subject to the protective duties had they been in force at that time. In some cases (*e.g.*, tinplate, wire and wire nails) it can safely be assumed that the whole of the imports shown against a particular entry in the Trade Returns would have been subject to the duties. But in other cases (*e.g.*, bars, plates and sheets) this is not so, and some process of estimating is necessary. The method actually adopted has been to ascertain from the monthly Trade Returns from July 1924 to March 1925, the percentage of the imports which was subject to the protective duties, and to apply this percentage to the imports of 1923-24. It is believed that this method of approximation will give reasonably accurate results, but there is always the possibility that in the returns of a particular year there may be some abnormality for which allowance ought to be made. The only instance of this kind, which has come to notice, is the very large importation of fabricated plates in the year 1924-25 referred to in paragraph 13 below.

5. Where both the old and the new rates of duty are *ad valorem*, the revenue, which would have been collected at the old rate on the actual imports of a particular period, can be calculated arithmetically at once, as soon as the total revenue collected at the new rate is known. But where the new duty is specific and the old rate was *ad valorem* on a tariff valuation (*i.e.*, a specific duty liable to revision annually), the case is altered. Up to the 31st December 1924 the tariff valuations fixed at the beginning of the year 1924 would have remained in force, but almost certainly these valuations must have been reduced at the beginning of the year 1925 owing to the marked fall in the price of steel. What exactly the reduc-

tions would have been can only be conjectured, and in the tables attached to this note the reductions taken into account are moderate, and do not exceed what can be justified on account either of the rise in the exchange, or of the fall in the sterling price of steel, had only one of these causes been operating. When the figures of the year 1924-25 are under examination, there is this further complication that one rate of duty would have been in force during part of the year and another rate of duty during the last three months. In such cases a weighted average valuation has been taken, determined by the quantities of steel imported during each period.

6. The actual calculation of the increase in revenue arising from the duties on each class of steel is made in the tables annexed to this note, but certain explanations are necessary in order that the tables may be understood. The paragraphs which follow contain the explanations appropriate for each class of steel.

Tinplates.

7. The quantity of tinned plate and sheet, which is not subject to the protective duties, is negligible, and for practical purposes it can be assumed that the whole of the imports under this head are protected. The tariff valuation in 1924 was Rs. 400 a ton and it has been assumed that this valuation would have been reduced to Rs. 360 a ton in 1924-25. The weighted average valuation for the 9½ months, during which the Steel Industry (Protection) Act was in force during the year, is Rs. 385 a ton. The total consumption of tinplate was 58,500 tons in 1923-24 and 60,700 tons in 1924-25. It has been assumed that the consumption will be stationary at about 60,000 tons during the next two years, but the increase of the Indian production to 30,000 tons reduces the imports to the same figure.

Galvanised Sheet.

8. The imports of galvanised sheet increased from 164,500 tons in 1923-24 to 208,500 tons in 1924-25 which is the first year after the war when the total consumption attained the pre-war level. Heavy importation continued during the first three months of 1925-26, the imports for this period being at the rate of 280,000 tons for the year. It would be idle to expect the maintenance of so high a rate of consumption, but it seems probable that the pre-war standard will quite, or very nearly, be attained. At the present time British galvanised sheet in India is about Rs. 45 a ton cheaper than it was in 1923, so that an increase in consumption as compared with 1923-24 is natural. Allowance has been made for the increase in the Indian production, and also for the set-back which will most probably follow the very heavy importations of the last six months. It has been assumed that from July 1925 to March 1926 the average imports will not exceed 13,333 tons a month, and that in 1926-27 they will amount to 15,000 tons a month. In 1924 the tariff valuation of corrugated galvanised sheet

was Rs. 300 a ton, and it has been assumed that this valuation would have been reduced to Rs. 270 a ton at the beginning of 1925. The weighted average for 9½ months of 1924-25 is Rs. 285 a ton.

Steel Bars.

9. There was a very substantial increase in the imports of steel bars during the first nine months of 1924-25, which can be ascribed, partly to the rapid fall in the sterling price of Continental bars, and partly to the desire (in many cases frustrated) to import as much as possible in anticipation of the new duties. From January onwards, however, the imports fell away rapidly, and the increase for the whole year on the imports of 1923-24 was not nearly so great as at one time seemed probable. The total consumption in 1924-25 was 206,000 tons against 178,000 tons in the year 1923-24. From April to June 1925 the monthly rate of importation dropped to less than 6,000 tons a month as compared with 13,574 tons in 1923-24. This decline is obviously due to the reaction which inevitably followed the heavy importations in 1924, but it would be as wrong to assume that the decline is permanent as it would be to expect that the imports of galvanised sheet would permanently exceed the pre-war imports by 25 per cent., because the imports for the same three months were at this rate. In spite of the protective duties bars are cheaper by Rs. 10 a ton than they were in 1923, and in these circumstances it seems reasonable to assume that the 1923-24 rate of consumption will be maintained. A considerable increase in the Indian production is expected, and the imports have been taken at 120,000 tons in 1925-26 and 110,000 tons in 1926-27. In 1924 the tariff valuation on the thicker bars was Rs. 135 a ton, and on the thinner sizes Rs. 150. The average has been taken as Rs. 140 a ton. It has been assumed that in 1925 these valuations would have been reduced by Rs. 2 a ton in each case. The weighted average for 9½ months of 1924-25 is Rs. 135 a ton.

Wire.

10. The imports of wire in 1924-25 went up from 5,600 tons to 6,600 tons. In this case also there was a marked decline in the imports from April to June 1925, and it would seem that the 1924-25 level of consumption is not likely to be maintained. The same specific rate of duty has been applied to all classes of wire, excluding fencing wire, and when the increase in revenue is calculated, it must be remembered that the imports include a certain proportion of high valued wire on which the Rs. 60 duty does not amount to more than 10 per cent. *ad valorem* on the average. It is impossible to say what this proportion may be, but the average value in the Trade Returns suggests that the quantity of such wire imported is not likely to exceed a thousand tons a year. No increase of revenue on this quantity of wire has been taken into account. The total consumption in 1925-26 and 1926-27 has been taken at the same rates as in 1923-24 and some allowance has been made for the Indian production. The old duty on wire was *ad valorem* and

it is somewhat difficult to say what the average value of the imports was in 1924-25 and what it is likely to be in 1925-26 and 1926-27. It has been taken at Rs. 240 a ton in 1924-25, and Re. 220 a ton in the next two years. These figures probably err on the high side.

Wire Nails.

11. The total consumption of wire nails in 1923-24 was 11,000 tons and 16,000 tons in 1924-25. It is not, however, clear that there has been any permanent increase in consumption, for the imports dropped during the first three months of 1925-26 to a rate equivalent to an importation of only 3,600 tons for the whole year. It has been assumed that in 1925-26 and 1926-27 the total consumption will be only slightly above the level of 1923-24. The 1924-25 tariff valuation of wire nails was Rs. 280 a ton and it has been assumed that this figure would have been reduced to Rs. 250 a ton in 1925. The weighted average for $9\frac{1}{2}$ months of 1924-25 is Rs. 370 a ton.

Plates and sheets not galvanised or tinned.

12. The defective classification of the imports in the Trade Returns creates special difficulties in the case of plates and sheets not galvanised or tinned. Up to the year 1923-24 the returns did not distinguish between plates and sheets, but from April 1924 this distinction was made, and from July 1924 the total of plates and sheets was divided into protected and not protected. Finally, from April 1925, the fabricated sheets and plates were separated from the unfabricated. But it is still impossible to distinguish in the Trade Returns between the plates that are protected and the plates that are not, or between sheets that are protected and sheets that are not. The full classification, which seems desirable, would be as follows:-

Plates and Sheets not Galvanised or Tinned.	Plates.	Fabricated.	{ Protected.
			{ Not protected.
	Sheets.	Unfabricated.	{ Protected.
			{ Not protected.
	Plates.	Fabricated.	{ Protected.
			{ Not protected.
	Sheets.	Unfabricated.	{ Protected.
			{ Not protected.

But the fabricated sheets are probably negligible, and hardly require separate entries.

13. The result of the imperfection of the data is, that only approximate calculations are possible as to the quantities of each class of steel involved, and in the estimate of the increase in revenue in 1925-26 and 1926-27 it has been found impossible to distinguish between plates and sheets. The importation of fabricated plates during the 9½ months of 1924-25 seems to have been altogether abnormal and amounted apparently to nearly 25,000 tons. These heavy imports may probably be ascribed to the execution during the year of some special works involving the use of large quantities of plates, *e.g.*, the Tansa Water main in Bombay. The quantity of fabricated plates and sheets included in the imports of 1923-24 is a matter of pure conjecture, but it has been assumed that the normal importations would not be more than half of what they were in 1924-25.

14. The estimated consumption of unfabricated sheets and plates was 84,000 tons in 1923-24 and over 96,000 tons in 1924-25. It is not yet certain whether there has been any permanent increase in consumption, for, during the first three months of 1925-26, the imports dropped to a rate equivalent to a consumption of about 63,000 tons a year. It has been assumed in the estimate that in 1925-26 and 1926-27, the total consumption will be only slightly higher than it was in 1923-24.

15. The 1924 valuation of plates was Rs. 150 a ton and it has been assumed that this valuation would have been reduced to Rs. 130 a ton in 1925. The weighted average for 9½ months of 1924-25 is Rs. 145 a ton. The 1924 valuation of black sheet was Rs. 175 a ton, but was probably rather low, and it has been assumed that this valuation would have been continued in 1925. In the estimate of the increase in revenue for 1925-26 and 1926-27 the average valuation of plates and sheets together has been taken as Rs. 150 a ton, since it was found impossible to treat them separately.

Structural sections, i.e., beams, angles and channels and similar shapes, unfabricated.

16. In this case also there are special difficulties to encounter. The unfabricated sections consist partly of angles which have always been shown separately in the Trade Returns, partly of channels which were shown separately up to June 1924, and partly of a proportion of the imports classified under the head "Beams, pillars, girders and bridgework" to which head channels were added in July of that year. Since April 1925 the imports under this head have been divided into fabricated and unfabricated, but there is no means of ascertaining precisely what the proportions of fabricated and unfabricated were in the two previous years. The values in the Trade Returns for 1923-24, however, suggest that the unfabricated sections constitute the bulk of the imports under the head "Beams, pillars, girders and bridgework" and this conclusion is confirmed by the relative proportions shown in the returns for the months of April to June 1925. For estimating purposes

it has been assumed that three-fourths of the imports under this head in 1923-24 consisted of unfabricated sections.

17. The estimated consumption of unfabricated structural sections in 1923-24 was 116,000 tons and 144,000 tons in 1924-25. In this case also there was a marked falling away of the imports during the first three months of 1925-26. This is no doubt due partly to a reaction after the heavy imports of 1924-25, but must also be due in part to the increase in the Indian production. It has been assumed that the total consumption in 1925-26 and 1926-27 will be 11,000 tons higher than in 1923-24, but less by 17,000 tons than in 1924-25. Beams and angles are at present nearly Rs. 20 a ton cheaper than in 1923 in spite of the increase in the duty.

18. The 1924 tariff valuation of angles is Rs. 150 a ton and it has been assumed that this would have fallen to Rs. 130 a ton in 1925. The duty on other sections was assessed *ad valorem*. The weighted average for 9½ months of 1924-25 has been taken at Rs. 140 a ton, and in the years 1925-26 and 1926-27 it has been assumed that the value would be Rs. 130 a ton, a figure which is probably too high.

Fabricated Steel.

19. The imports of fabricated steel appear in the Trade Returns under four different heads at least. In the first place account must be taken of some proportion of the imports under the head "Beams, pillars, girders and bridgework" and for the year 1923-24 this has been taken as one quarter. In the second place a considerable quantity of fabricated steel falls under the head "Other manufactures of iron and steel." The protected imports under this head have been shown separately since July 1924 and it appears that the percentage of protected imports is about 60. This percentage has been applied to the imports of 1923-24. In the third place nearly all the imports under the head "Railway material—bridgework" must be taken to be fabricated steel, but a deduction of 2,000 tons has been made because, even after the passing of the Steel Industry (Protection) Act, imports of about this quantity are still shown under the railway head and are not declared to be protected. It has therefore been assumed that the imports of railway bridgework from July 1924 onwards do not consist of fabricated steel, though it is not obvious what materials other than fabricated steel are likely to be imported as bridgework. In the fourth place there is a considerable quantity of fabricated plates which comes under this head. The quantity of such plates imported in 1923-24 has been taken to be 15,000 tons, due allowance having been made for the fact that the imports of such plates in 1924-25 were probably abnormal (see paragraph 13).

20. The Steel Industry (Protection) Act came into force on the 14th June 1924, whereas the classification of the imported steel into 'protected' and 'not protected' did not commence until the 1st July. In the case of fabricated steel it was found necessary to

estimate the imports during the second half of June under more than one head. Where the duty is specific the quantity of the imports can be ascertained at once, as soon as the amount of Customs revenue collected is known, but where the duty is *ad valorem* this is not possible.

21. The total quantity of fabricated steel imported during 9½ months of the year 1924-25, as nearly as can be estimated from the Trade Returns, was about 50,000 tons, and as the data are imperfect, it will be useful to test it by a comparison with the value of the imports. The duty actually collected at 25 per cent. *ad valorem* is known from the returns of the Customs Collectors, and if the estimated quantity is correct, the average value per ton was Rs. 229. This figure is not an improbable one, but is probably a little too high. In this case, indeed, nothing but an approximate calculation is possible, for there is the further complication that the 25 per cent. *ad valorem* duty is also applicable to switches and crossings, which are not shown separately but are included under the head "Railway track material" in the returns, and also to coal tubs and tipping wagons which appear in the Trade Returns under the head "Vehicles." They are separately classified but no quantities are given.

Total increase in revenue.

22. According to the returns of the Customs Collectors, the total Customs revenue collected during the 9½ months of 1924-25 at the protective rates of duty was Rs. 225·59 lakhs. The Customs revenue which has been taken into account in the tables attached to this note amounts to Rs. 215·86 lakhs. The balance of Rs. 9·72 lakhs is accounted for under the following heads:—

	Rs. lakhs.
Rails 30 lbs. and over	2·42
Rails under 30 lbs.	3·12
Dogspikes and tie bars	1·12
Plate cuttings	0·38
Fabricated sheets	0·22
Sheet cuttings	0·32
Tinplate cuttings	0·02
Wrought iron bar and rod	1·75
Wrought iron angle and tee	0·09
Not specified	0·35

No increase of revenue can be taken into account in respect of heavy rails because, although the duty on such rails was declared protective, it amounts only to Rs. 14 a ton which is the same as the former rate. For a different reason no appreciable increase in revenue can be assumed from the higher duties on wrought iron,

for the reduction in imports has been heavy enough to swallow up the increase which might otherwise have occurred. Most of the other items are negligible, and the only ones which need be taken into account are (a) light rails and (b) dogspikes and tie bars, both of which are subject to a specific duty of Rs. 40 a ton. The imports of light rails during the 9½ months amounted to 7,791 tons, and the imports of spikes and tie bars to 2,790 tons. The 10 per cent. *ad valorem* duty on these classes of steel may be taken approximately as Rs. 13 a ton for light rails and Rs. 20 for spikes and tie bars. The actual increase of revenue ascribable to these items in 1924-25 amounts to Rs. 2·74 lakhs. The importations of light rails were probably unusually high in 1924-25 and some reduction is likely in the two next years. For estimating purposes the increase of revenue from these two sources has been taken at Rs. 2 lakhs in each of the years 1925-26 and 1926-27. The data for any precise calculation are however lacking.

23. The last of the tables attached to this note shows the estimated nett increase in revenue actually realised in 1924-25, and expected in the two following years. The total for the three years amounts to Rs. 301·75 lakhs or in round figures Rs. 3 crores. So far as the year 1924-25 is concerned we think the estimate may be taken as substantially correct. The uncertainties to which attention has been drawn in the foregoing paragraphs would usually, when they give rise to errors, result in the transference of a part of the imports from fabricated to unfabricated or *vice versâ*. If the imports of fabricated steel are taken too high the increase in revenue is exaggerated, and to guard against this risk, while the total estimated consumption of fabricated steel and of unfabricated structural sections in 1925-26 and 1926-27 approaches the level of 1923-24, an increase of unfabricated imports has been taken and a decrease of fabricated imports. An increase of 106 lakhs out of a total revenue of Rs. 225 lakhs is about what was to be expected, having regard to the relative level of the old and the new duties. As regards the estimated increase of revenue in 1925-26 and 1926-27, the main question is whether the actual consumption of steel will be as high as the estimate in the tables. The estimated consumption in the four years is as follows:—

	Thousands of tons.
1923-24	679
1924-25	808
1925-26	724
1926-27	721

In view of the fact that steel is now cheaper than in 1923, it does not seem over-sanguine to assume that the consumption will be somewhat higher than in 1923-24. The increase anticipated is less than 7 per cent. both in 1925-26 and in 1926-27.

24. There remains the question how the consumption might have gone up if the duties had been left unchanged. The fall in

the Indian price of steel would then have been about twice as great as it actually has been. Three examples may be given.

	LANDED DUTY PAID PRICE.		
	1923.	Present price with protective duty.	Present price with 10 per cent. duty.
	Rs. per ton.	Rs. per ton.	Rs. per ton.
British galvanised sheet . . .	330	290	272
Continental bars . . .	151	138	109
Fabricated steel	275	250	220

The price of galvanised sheet has already fallen by Rs. 40 a ton, and the removal of the protective duty would bring it down by a further sum of Rs. 18 a ton. The price of bars, on the other hand, has only fallen by Rs. 13 a ton, and the removal of the protective duty would mean a further drop of Rs. 29 a ton. Fabricated steel has come down by Rs. 25 a ton, and, with a 10 per cent. instead of a 25 per cent. duty, would go down by Rs. 30 a ton. It hardly seems possible that the consumption in 1924-25 could have been greater than it actually was, for the rush to anticipate the new duties has swollen the figures of that year. But in each of the years 1925-26 and 1926-27 the imports might be higher by 50,000 tons if the duty were at 10 per cent. It may be said that this is an under-estimate, but, if so, then the consumption of these years under the operation of the protective duties has also been under-estimated. The effect of these duties has been to reduce by one half the fall in price. If, therefore, the first half of the fall leads to a certain increase in consumption, the removal of the duties could hardly do more than double that increase. The average value of all the classes of steel affected would not be higher than Rs. 200 a ton and the average duty at 10 per cent. would be Rs. 20. A further allowance of Rs. 20 lakhs is then a full allowance for the revenue lost owing to the consumption being lower than it would have been if the protective duties had not been imposed.

Annexure B.

TABLE 1 (i).—TINPLATE.

A. Imports July 1924 to March 1925 . . .	27,680 tons.
B. Protected imports for same period . . .	27,633 „
C. Percentage of protected imports . . .	100
D. Imports 1923-24	44,090 tons.
E. Protected imports 1923-24	44,000 „
F. Monthly rate	3,667 „
G. Revenue from protective duty on tinplate (Rs. 60 a ton) from 14th June 1924 to 31st March 1925	Rs. 17,28,376
H. Tonnage on which duty was charged . . .	28,806 tons.
I. Monthly rate	3,032 „
J. Reduction in the monthly rate of imports in 1924-25 as compared with 1923-24 . . .	635 „
K. Revenue which would have been collected at the 10 per cent. rate of duty (Rs. 38·5 a ton)	Rs. 11,09,030
L. Gross increase of revenue in 1924-25 . . .	Rs. 6,19,346
M. Reduction in imports in 1924-25 (635 tons a month for 9½ months)	6,033
N. Loss of revenue at 10 per cent. rate owing to reduction in imports (6,033 tons at Rs. 38·5 a ton)	Rs. 2,32,271
O. Nett increase of revenue in 1924-25 . . .	Rs. 3,87,075

*Annexure B.***TABLE 1 (ii).—TINPLATE.**

A. Consumption in 1923-24.		
Indian production		14,436 tons.
Imports		44,000 „
	TOTAL .	58,436 „
B. Consumption in 1924-25.		
Indian production		24,250 tons.
Imports		36,478 „
	TOTAL .	60,728 „
C. Imports April to June 1925.		
Actual		7,611 tons.
Equivalent rate for a whole year		30,444 „
D. Estimated consumption in 1925-26.		
Indian production		30,000 tons.
Imports		30,000 „
	TOTAL .	60,000 „
E. Estimated consumption in 1926-27.		
Indian production		30,000 tons.
Imports		30,000 „
	TOTAL .	60,000 „
F. Estimated revenue from protective duties (Rs. 60 a ton).		
1925-26	Rs. 18,00,000	
1926-27	Rs. 18,00,000	
	TOTAL .	Rs. 36,00,000
G. Revenue at 10 per cent, on imports equal to the imports of 1923-24 (44,000 tons at Rs. 36 a ton).		
1925-26	Rs. 15,84,000	
1926-27	Rs. 15,84,000	
	TOTAL .	Rs. 31,68,000
H. Nett increase of revenue for three years.		
1924-25	Rs. 3,87,075	
1925-26	Rs. 2,16,000	
1926-27	Rs. 2,16,000	
	TOTAL .	Rs. 8,19,075

Annexure B.

TABLE 2 (i).—GALVANISED SHEET.

A. Imports corrugated sheet July 1924 to March 1925	133,653 tons.
B. Percentage of protected imports . . .	100
C. Imports plain sheet July 1924 to March 1925	16,062 tons.
D. Protected imports of plain sheet for same period	15,586 „
E. Percentage of protected imports . . .	97
F. Imports corrugated sheets 1923-24 . . .	148,405 tons.
G. Imports plain sheet 1923-24	16,633 „
H. Protected imports of plain sheet 1923-24 (97 per cent. of G)	16,134 „
I. Total protected imports 1923-24	164,539 „
J. Monthly rate	13,712 „
K. Revenue from protective duty on galvanised sheet (Rs. 45 a ton) from 14th June 1924 to 31st March 1925	Rs. 70,23,251
L. Tonnage on which duty was charged . . .	156,072 tons.
M. Monthly rate for 9½ months	16,429 „
N. Revenue which would have been collected at 10 per cent. rate (149,406 tons at Rs. 28·5 a ton)	Rs. 44,48,052
O. Increase of revenue in 1924-25	Rs. 25,75,199

Annexure B.

TABLE 2 (ii).—GALVANISED SHEET.

A. Consumption in 1923-24.

Indian production	nil.	
Imports		164,539 tons.
	TOTAL .	164,539 „

B. Consumption in 1924-25.

Indian production		1,865 tons.
Imports		208,499 „
	TOTAL .	210,364 „

C. Imports April to June 1925

Actual for 3 months		70,777 tons.
Equivalent rate for 12 months		283,108 „

D. Estimated consumption 1925-26

Indian production		15,329 tons.
Imports		190,000 „
	TOTAL .	205,329 „

E. Estimated consumption 1926-27.

Indian production		21,000 tons.
Imports		180,000 „
	TOTAL .	201,000 „

F. Estimated revenue from protective duty (Rs. 45 a ton).

1925-26	Rs.	85,50,000
1926-27	Rs.	81,00,000
	TOTAL .	Rs. 166,50,000

G. Estimated revenue at 10 per cent. rate (Rs. 27 a ton).

1925-26	Rs.	51,30,000
1926-27	Rs.	48,60,000
	TOTAL .	Rs. 99,90,000

H. Estimated increase in revenue

1924-25	Rs.	25,75,199
1925-26	Rs.	34,20,000
1926-27	Rs.	32,40,000
	TOTAL .	Rs. 92,35,199

Annexure B.

TABLE 3 (i).—STEEL BARS.

A. Imports from July 1924 to March 1925	122,311 tons.
B. Protected imports during the same period	116,690 „
C. Percentage of protected imports	95
D. Total imports in 1923-24	166,404 tons.
E. Protected imports 1923-25 (95 per cent. of D)	158,084 „
F. Monthly rate	13,174 „
G. Revenue from protective duty on steel bars (Rs. 40 a ton) from 14th June 1924 to March 1925	Rs. 49,30,875
H. Tonnage on which duty was charged	123,272 tons.
I. Monthly rate for 9½ months	12,976 „
J. Reduction in monthly rate of imports in 1924-25 as compared with 1923-24	198 „
K. Revenue which would have been collected at the 10 per cent. rate of duty (Rs. 13·5 a ton)	Rs. 16,64,172
L. Gross increase of revenue in 1924-25	Rs. 32,66,703
M. Reduction in imports in 1924-25 (197 tons a month for 9½ months)	1,881 tons.
N. Loss of revenue at 10 per cent. rate owing to reduction in imports (1,872 tons at Rs. 13·5 a ton)	Rs. 25,394
O. Nett increase of revenue in 1924-25	Rs. 32,41,309

Annexure B.

TABLE 3 (ii).—STEEL BARS.

A. Consumption in 1923-24.

Indian production	20,000 tons.
Imports	158,084 „
TOTAL .	178,084 „

B. Consumption in 1924-25.

Indian production	31,541 tons.
Imports*	174,294 „
TOTAL .	205,835 „

C. Imports April to June 1925.

Actual for three months	17,776 tons.
Equivalent rate for twelve months	71,104 „

D. Estimated consumption in 1925-26.

Indian production	60,000 tons.
Imports	120,000 „
TOTAL .	180,000 „

E. Estimated consumption in 1926-27.

Indian production	71,000 tons.
Imports	110,000 „
TOTAL .	181,000 „

F. Estimated revenue from protective duty (Rs. 40 a ton).

1925-26	Rs. 48,00,000
1926-27	Rs. 44,00,000
TOTAL .	Rs. 92,00,000

G. Estimated revenue at 10 per cent. rate (Rs. 12 a ton) on imports equal to the imports of 1923-24 (158,084 tons).

1925-26	Rs. 18,97,008
1926-27	Rs. 18,97,008
TOTAL .	Rs. 37,94,016

H. Estimated nett increase in revenue.

1924-25	Rs. 32,41,309
1925-26	Rs. 29,02,992
1926-27	Rs. 25,02,992
TOTAL .	Rs. 86,47,293

* 95 per cent. of total imports.

Annexure B.

TABLE 4 (i).—WIRE.

A. Imports from July 1924 to March 1925	4,653 tons.
B. Protected imports above period	4,653 „
C. Percentage of protected	100
D. Total imports in 1923-24	5,565 tons.
E. Protected imports 1923-24 (100 per cent. of D)	5,565 „
F. Monthly rate	464 „
G. Revenue from protective duty on wire (Rs. 60 a ton) from 14th June 1924 to 31st March 1925	Rs. 2,86,385
H. Tonnage on which duty was charged	4,773 tons.
I. Monthly rate for 9½ months	502 „
J. Revenue which would have been collected at 10 per cent. <i>ad valorem</i> (Rs. 24 a ton)	Rs. 1,14,552
K. Increase in revenue in 1924-25	Rs. 1,71,833
L. Estimated imports of high valued wire, the 10 per cent. <i>ad valorem</i> duty on which was not less than Rs. 60 a ton on the average	1,000 tons.
M. Customs duty at 10 per cent. on the high valued wire	Rs. 36,000
N. Nett increase in revenue	Rs. 1,35,833

Annexure B.

TABLE 4 (ii).—WIRE.

A. Consumption in 1923-24.	
Indian production	Not known.
Imports	5,565 tons.
Less estimated imports of high valued wire .	1,000 „
Nett imports .	4,565 „
B. Consumption in 1924-25.	
Imports	6,588 tons.
Less estimated imports of high valued wire .	1,000 „
Nett imports .	5,588 „
C. Imports April to June 1925.	
Actual for three months	997 tons.
Less estimated imports of high valued wire .	250 „
Nett imports .	647 „
Equivalent rate for 12 months .	2,588 „
D. Estimated consumption in 1925-26.	
Indian production	500 tons.
Imports	4,000 „
TOTAL .	4,500 „
E. Estimated consumption in 1926-27.	
Indian production	1,000 tons.
Imports	3,500 „
TOTAL .	4,500 „
F. Estimated revenue from protective duty Rs. 60 a ton.	
1925-26	Rs. 2,40,000
1926-27	Rs. 2,10,000
TOTAL .	Rs. 4,50,000
G. Estimated revenue at 10 per cent. <i>ad valorem</i> (Rs. 22 a ton) on imports equal to the imports of 1923-24 (4,565 tons).	
1925-26	Rs. 1,00,430
1926-27	Rs. 1,00,430
TOTAL .	Rs. 2,00,860
H. Estimated nett increase in revenue, i.e., F minus G.	
1924-25	Rs. 1,11,833
1925-26	Rs. 1,89,570
1926-27	Rs. 1,09,570
TOTAL .	Rs. 3,60,973

Annexure B.

TABLE 5 (i).—WIRE NAILS.

A. Imports from July 1924 to March 1925 .	12,449 tons.
B. Protected imports for the same period .	12,449 „
C. Percentage of protected	100
D. Total imports in 1923-24	10,971 tons.
E. Protected imports in 1923-24 (100% of D) .	10,971 „
F. Monthly rate	914 „
G. Revenue from protective duty on wire nails (Rs. 60 a ton) from 14th June 1924 to March 1925	Rs. 7,66,216
H. Tonnage on which duty was charged . .	12,770 tons.
I. Monthly rate for 9½ months	1,344 „
J. Revenue which would have been collected at the old rate (Rs. 27 a ton)	Rs. 3,44,790
K. Increase in revenue in 1924-25	Rs. 4,21,426

Annexure B.

TABLE 5 (ii).—WIRE NAILS.

A. Consumption in 1923-24.	
Indian production	Not known.
Imports	10,971 tons.
B. Consumption in 1924-25.	
Indian production	Not known.
Imports	16,235 tons.
C. Actual imports April 1925 to June 1925 . .	
Equivalent rate for 12 months	911 tons.
	3,644 „
D. Estimated consumption in 1925-26.	
Indian production	500 tons.
Imports	11,000 „
TOTAL	11,500 „
E. Estimated consumption in 1926-27.	
Indian production	1,000 tons.
Imports	10,500 „
TOTAL	11,500 „
F. Estimated revenue from protective duties (Rs. 60 a ton).	
1925-26	Rs. 6,60,000
1926-27	Rs. 6,30,000
TOTAL	Rs. 12,90,000
G. Estimated revenue at 10 per cent. <i>ad valorem</i>	
(Rs. 25 a ton) on imports equal to the im-	
ports of 1923-24 (10,971 tons).	
1925-26	Rs. 2,74,275
1926-27	Rs. 2,74,275
TOTAL	Rs. 5,48,550
H. Estimated nett increase in revenue.	
1924-25	Rs. 4,21,426
1925-26	Rs. 3,85,725
1926-27	Rs. 3,55,725
TOTAL	Rs. 11,62,876

Annexure B.

TABLE 6 (ii).

Plates and sheets not galvanised or tinned—unfabricated.

A. Estimated consumption 1923-24.

Indian production, plates	7,267 tons
Imports	76,921 „
TOTAL .	84,188 „

B. Estimated consumption 1924-25.

(Imports taken as 85 per cent. of the total imports less 28,000 tons the estimated importations of fabricated plates and sheets).*

Indian production { Plates	18,285 tons.
Sheets	5,735 „
Imports	72,858 „
TOTAL .	96,378 „

C. Imports April to June 1925.

Actual 3 months	12,735 tons.
Equivalent rate for 12 months	50,940 „

D. Estimated consumption 1925-26.

Indian production { Plates	20,400 tons.
Sheets	11,000 „
Imports	55,000 „
TOTAL .	86,400 „

E. Estimated consumption in 1926-27.

Indian production { Plates	20,400 tons.
Sheets	15,000 „
Imports	51,000 „
TOTAL .	86,400 „

F. Estimated revenue from protective duties (Rs. 30 a ton).

1925-26	Rs. 16,50,000
1926-27	Rs. 15,30,000
TOTAL .	Rs. 31,80,000

G. Estimated revenue at 10 per cent. rate (Rs. 15 a ton) on imports equal to the imports of 1923-24 (76,921 tons).

1925-26	Rs. 11,53,815
1926-27	Rs. 11,53,815
TOTAL .	Rs. 23,07,630

H. Estimated nett increase in revenue.

1924-25	Rs. 6,60,529
1925-26	Rs. 4,96,185
1926-27	Rs. 3,76,185
TOTAL .	Rs. 15,32,899

*See table 6 (i). The imports of fabricated plates and sheets for the first 2½ months of the year has been taken at 3,000 tons.

Annexure B.

TABLE 7 (i).

Structural sections (i.e., beams, angles, channels and similar shapes)—unfabricated.

A. Imports 1923-24.	
Angles	26,327 tons.
Channels	3,933 „
Beams, pillars, girders and bridgework (three-fourths of the imports)	58,161 „
TOTAL .	88,421 „
B. Monthly rate	
	7,368 tons.
C. Revenue from protective duties on structural sections (Rs. 30 a ton) from 14th June 1924 to 31st March 1925	
	Rs. 23,29,311
D. Tonnage on which protective duties were charged	
	77,643 tons.
E. Monthly rate	
	8,173 „
F. Imports of angles.	
July 1924 to March 1925	28,182 tons.
Latter half of June (estimated)	1,500 „
TOTAL .	29,682 „
G. Imports of structural sections other than angles from 14th June 1924 to March 1925 (i.e., D minus F)*	
	47,961 tons.
H. Revenue which would have been collected at the 10 per cent. rate of duty (Rs. 14 a ton) from 14th June 1924 to 31st March 1925	
	Rs. 10,87,002
I. Increase of revenue during the period	
	Rs. 12,42,309

*See Table 8 (i) D.

Annexure B.

TABLE 7 (ii).

Structural Sections (i.e., beams, angles, channels and similar shapes)—unfabricated.

A. Estimated consumption in 1923-24.

Indian production	.	.	.	.	.	27,708 tons.
Imports	{	Angles	.	.	.	26,327 "
		Beams, channels, etc.	.	.	.	62,094 "
TOTAL						116,129 "

B. Estimated consumption in 1924-25.

Indian production	{	Heavy structurals . .	29,915 tons.
		Light structurals . .	13,986 "
Imports . .	{	Angles . .	37,482 "
		Beams, channels, etc. .	62,961 "
TOTAL .			144,344 "

C. Imports April to June 1925.

Angles	.	.	.	.	.	6,668 tons.
Beams, channels, etc.	.	.	.	.	.	11,270 "
Actual for 3 months						17,938 "
Equivalent rate for 12 months						71,752 "

D. Estimated consumption in 1925-26.

Indian production	{	Heavy structurals	.	.	28,000 tons.
		Light structurals	.	.	18,000 "
Imports	.	.	.	.	80,000 "
TOTAL					126,800 "

E. Estimated consumption in 1926-27.

Indian production	{	Heavy structurals	36,000 tons.
		Light structurals	18,000 "
Imports			73,000 "
TOTAL			127,000 ,

F. Estimated revenue from protective duty (Rs. 30 a ton).

1925-26	.	.	.	.	.	Rs. 24,00,000
1926-27	.	.	.	.	.	Rs. 21,90,000
TOTAL						Rs. 45,90,000

G. Estimated revenue at 10 per cent. rate (Rs. 13 a ton) on imports equal to the imports of 1923-24 (88,421 tons).

1925-26	.	.	.	.	.	Rs. 11,49,473
1926-27	.	.	.	.	.	Rs. 11,49,473
TOTAL						Rs. 22,98,946

H. Estimated nett increase in revenue.

1924-25	.	.	.	.	.	Rs. 12,42,309
1925-26	.	.	.	.	.	Rs. 12,50,527
1926-27	.	.	.	.	.	Rs. 10,40,527
TOTAL						Rs. 35,33,363

Annexure B.

TABLE 8 (i).—FABRICATED STEEL.

A. Imports 1923-24.

Beams, pillars, girders and bridgework (one-fourth of the imports)	19,387 tons.
Other manufactures of iron and steel (three-fifths of the imports)	9,900 „
Railway bridgework (the whole less 2,000 tons)	19,000 „
Fabricated plates and sheets*	15,000 „
TOTAL	63,287 „

B. Monthly rate 5,274 tons.**C. Imports of beams, pillars, girders and bridgework.**

From July 1924 to March 1925	56,864 tons.
Latter half of June 1924 (estimated)	3,663 „
TOTAL	60,527 „

D. Imports of unfabricated structural sections other than angles from 14th June 1924 to 31st March 1925† 47,961 tons.**E. Imports of fabricated steel recorded under the head beams, pillars, girders and bridgework for the same period (i.e., C minus D) 12,566 tons.****F. Protected imports of other manufactures of iron and steel.**

July 1924 to March 1925	11,106 tons.
Latter half of June 1924 (estimated)	600 „
TOTAL	11,706 „

G. Imports of Railway bridgework.

Latter half of June 1924 (estimated)	1,000 tons
--	------------

H. Total imports of fabricated steel from 14th June 1924 to 31st March 1925 as nearly as can be estimated from the Trade Returns.

Beams, pillars, girders, etc.	12,566 tons.
Other manufactures	11,706 „
Railway bridgework	1,000 „
Fabricated sheets and plates	24,894 „
TOTAL	50,166 „

* See Table 6 (i) J.

† See Table 7 (i) G.

f. Monthly rate of importation	5,281 tons.
J. Duty collected on fabricated steel at 25 per cent. <i>ad valorem</i> from 14th June 1924 to 31st March 1925	Rs. 28,69,255
K. Value of the steel on which the duty was collected	Rs. 1,14,77,020
L. Average value per ton of fabricated steel if the quantity estimated at H is correct	Rs. 229
M. Duty which would have been collected if the rate of duty had been 10 per cent. <i>ad valorem</i> instead of 25 per cent.	Rs. 11,47,702
N. Increase of revenue from 14th June 1924 to 31st March 1925	Rs. 17,21,553

Annexure B.

TABLE 8 (ii).—FABRICATED STEEL.

A. Estimated imports 1923-24*	63,287 tons.
B. Estimated imports 1924-25.	
Beams, pillars, girders and bridgework . . .	17,918 tons.
Other manufactures (three-fifths of the total)	14,604 „
Railway bridgework (imports April to June 1924 less 500 tons)	8,000 „
Fabricated plates and sheets	28,000 „
TOTAL	68,522 „
C. Imports April to June 1925.	
Beams, channels, girders and bridgework . . .	4,345 tons.
Plates and sheets	1,806 „
Other manufactures	4,052 „
Actual imports 3 months	10,203 „
Equivalent rate for 12 months	40,812 „
D. Estimated imports 1925-26	50,000 tons.
E. Estimated imports 1926-27	50,000 „
F. Estimated revenue at 25 per cent. <i>ad valorem</i> on an average value of Rs. 200 a ton.	
1925-26	Rs. 25,00,000
1926-27	Rs. 25,00,000
TOTAL	Rs. 50,00,000
G. Estimated revenue at 10 per cent. <i>ad valorem</i> (Rs. 20 a ton) on imports equal to the imports of 1923-24 (63,287 tons).	
1925-26	Rs. 12,65,740
1926-27	Rs. 12,65,740
H. Estimated increase in revenue.	
1924-25	Rs. 17,21,553
1925-26	Rs. 12,34,260
1926-27	Rs. 12,34,260
TOTAL	Rs. 41,90,073

* In this table the imports are treated as equivalent to the total consumption. The Indian production of fabricated steel has already been taken into account in Table 7 (i) and (ii), for its raw material is unfabricated steel, whether imported or made at Jamshedpur.

Annexure B.

TABLE 9.

Estimated net increase in revenue from the protective duties.

	1924-25.	1925-26.	1926-27.
	Rs. lakhs.	Rs. lakhs.	Rs. lakhs.
Tinplate	3·87	2·16	2·16
Galvanised sheet	25·75	34·20	32·40
Steel bars	32·41	29·03	25·03
Wire	1·35	1·40	1·10
Wire nails	4·21	3·86	3·56
Plates and sheets	6·61	4·96	3·76
Structural sections	12·42	12·51	10·41
Fabricated steel	17·22	12·34	12·34
	103·84	100·46	90·76
Light rails	2·18	1·50	1·50
Spikes and tie bars	0·56	0·50	0·50
	106·58	102·46	92·76

	Rs. lakhs.
1924-25 . . .	106·58
1925-26 . . .	102·46
1926-27 . . .	92·76
TOTAL . . .	<u>301·80</u>

Annexure B.

TABLE 10.

Estimated consumption of steel in certain years.

	1923-24	1924-25		DIFFERENCE FROM 1923-24.		1925-26	DIFFERENCE FROM 1923-24.		1926-27	DIFFERENCE FROM 1923-24.	
		Tons.	Tons.	Plus.	Minus.		Plus.	Minus.		Plus.	Minus.
Tinplate . . .	57,500	60,700	3,200	...	...	60,000	2,500	...	60,000	2,500	...
Galvanised sheet . .	164,500	210,400	45,900	..	..	205,300	40,800	...	201,000	36,500	...
Steel bars . . .	178,100	205,800	27,700	...	...	180,000	1,900	...	181,000	2,900	...
Plates and sheets . .	84,200	96,400	12,200	...	...	86,400	2,200	...	86,400	2,200	...
Structural sections . .	116,100	144,300	28,200	..	..	126,800	10,700	...	127,000	10,900	...
Wire . . .	4,600	5,600	1,000	..	..	4,500	...	100	4,500	...	100
Wire Nails . . .	11,000	16,200	5,200	...	...	11,500	500	...	11,500	500	...
Fabricated steel . . .	63,300	68,500	5,200	..	..	50,000	...	13,300	50,000	...	13,300
Total .	678,300	805,900	128,600	...	...	724,500	58,600	13,400	721,400	55,500	13,400

APPENDIX I.

List of witnesses who submitted representations regarding the Steel Industry to the Board, or supplied information at the Board's request, showing dates of their oral examination (if any).

No.	Name of firm or individual witness.	Date of representation or letter.	Date of oral examination.
1	The Tata Iron and Steel Company, Limited.	9th/10th June 1925.* 2nd July 1925. †	6th, 7th and 18th July 1925.
2	The Tinplate Company of India, Limited.	16th May 1924. * 27th June 1925.†	8th July 1925.
3	The Bengal Iron Company, Limited .	1st May 1925. * 9th July 1925. †	10th July 1925.
4	The Indian Iron and Steel Company, Limited.	17th July 1925	
5	Parry and Company	8th July 1925	15th July 1925.
6	Indian Engineering Association . .	2nd January 1925.*	
7	Bombay Iron Merchants Association.	7th July 1925	17th July 1925.
8	Jessop and Company, Limited . .	28th May 1925 and 6th July 1925.	13th July 1925.
9	Balmer, Lawrie and Company, Limited	26th May 1925.	
10	Richardson and Cruddas	15th June 1925 and 9th July 1925.	
11	Geo. Service and Company	29th June 1925.	
12	Burn and Company, Limited . . .	23rd June 1925 and 10th July 1925.	14th July 1925.
13	Anandji Haridas and Company . .	20th June 1925	8th July 1925.
14	G. B. Trivedi, Esqr.	25th June 1925	17th July 1925.
15	Seth and Brothers	17th July 1925	
16	Lachhmandass Ramchand	24th August 1925 .	
17	The Planters' Stores and Agency Company, Limited	15th July 1925.	

* Date of representation to the Government of India.

† " " " " to the Tariff Board.

APPENDIX I.

List of witnesses who submitted representations regarding Railway wagon and underframe construction to the Board or supplied information at the Board's request, showing dates of their oral examination (if any).

No.	Name of firm or individual witness	Date of representation or letter.	Date of oral examination.
1	Indian Engineering Association . .	23rd Dec. 1924.*	
2	Jessop and Company, Limited . .	24th July 1925 .	28th July 1925.
3	Burn and Company, Limited . .	2nd April 1925* and 25th July 1925	29th July 1925.
4	Indian Standard Wagon Company .	25th July 1925 .	29th July 1925.
5	The Peninsular Locomotive Company Limited.	8th Aug 1925	
6	Railway Board	21st July 1925.	

* Date of representation to the Government of India.

APPENDIX II.

Price of imported steel October 1924 to May 1925.

TABLE A.—BRITISH BRAMS.

Month.	Iron and Coal Trades Review.	Tata Iron and Steel Company without duty and landing charges.	Balmer Lawrie and Company.	Richardson and Cruddas.	Burn and Company.	Anandji Haridas and Company.	Jessop and Company.
	f. o. b. £ s. d.	c i. f. £ s. d.	c. i. f. £ s. d.	c. i. f. £ s. d.	c. i. f. £ s. d.	c. i. f. £ s. d.	c. i. f. £ s. d.
1924							
October	8 7 6	9 12 6	9 5 0	9 7 6	9 3 0	9 15 0	9 0 0
November	8 7 6	9 5 0	9 2 6	9 7 6	9 2 0	9 5 0	9 0 0
December	8 7 6	9 5 0	10 7 6	9 7 6	9 2 0	9 5 6	9 0 0
1925							
January	8 7 6	9 5 0	8 18 9	9 7 6	8 19 9	9 5 0	9 0 0
February	8 7 6	9 0 0	8 15 0	9 4 6	8 17 0	9 0 0	8 15 0
March	8 6 10	9 0 0	8 15 0	9 2 6	8 16 6	9 0 0	8 12 0
April	8 2 0	9 0 0	8 12 6	9 2 0	8 14 6	9 0 0	8 12 0
May	7 17 6	9 0 0	8 10 0	8 11 9	8 12 0	9 0 0	8 8 0

APPENDIX II.

TABLE B.—CONTINENTAL BRAMS.

Month.	Iron and Coal Trades Review. f. o. b.	Tata Iron and Steel Company. c. i. f.	Geo. Service and Company c. i. f.	Balmer Lawrie and Company. c. i. f.	Richardson and Cruddas. c. i. f.	Burn and Company. c. i. f.	ANANDJI HARIDAS AND COMPANY		Jesop and Company. c. i. f.	MR. TRIVEDI.	
							c. i. f.	Calcutta market price.		c. i. f.	Bombay market price.
1924.											
October	£ s. d. 5 10 2	£ s. d. 6 11 0	£ s. d. 6 13 0	£ s. d. 6 10 0	£ s. d. 6 13 3	£ s. d. 6 7 8	£ s. d. 6 7 8	Rs. 130	£ s. d. ...	£ s. d. 6 10 0	Rs. ...
November	5 10 4	6 10 0	6 14 0	6 5 0	6 13 9	6 7 3	6 7 6	129	...	6 11 0	135
December	5 13 5	6 8 6	6 12 6	6 10 0	6 12 6	6 5 0	6 7 6	129	6 5 0	6 9 0	130
1925.											
January	5 12 4	6 12 0	6 15 0	6 10 0	6 14 6	6 6 6	6 14 0	125	6 15 0	6 15 0	130
February	5 11 0	6 12 0	6 17 6	6 17 6	6 17 6	6 6 6	6 12 6	125	6 10 0	6 15 0	130
March	5 8 11	6 12 6	6 15 0	6 15 0	6 15 3	6 3 6	6 12 6	130	6 10 0	6 12 6	132
April	5 10 1	6 9 9	6 15 0	6 15 0	6 15 0	6 4 0	6 10 0	130	6 10 0	6 10 0	135
May	5 8 0	6 9 0	6 15 0	6 15 0	6 15 0	6 0 9	..	134	6 8 0	6 12 6	140

APPENDIX II.
TABLE C.—BRITISH ANGLES.

Month.	Tata Iron and Steel Company c.i.f.		Balmer Lawrie and Company c.i.f.		Richardson and Cruddas c.i.f.		Burn and Company c.i.f.		Anandji Haridas and Company c.i.f.		Jesop and Company c.i.f.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
1924.												
October	.	.	9 12 6	9 5 6	9 7 6	9 3 0	9 15 0	9 2 6				
November	.	.	9 5 0	9 2 6	9 7 6	9 2 0	9 15 0	9 0 0				
December	.	.	9 5 0	9 0 0	9 7 6	9 2 0	9 15 0	9 0 0				
1925.												
January	.	.	9 5 0	9 0 0	9 7 6	8 19 9	9 15 0	9 0 0				
February	.	.	9 0 0	8 15 0	9 4 6	8 17 0	9 12 6	8 15 0				
March	.	.	9 0 0	8 15 0	9 2 6	8 16 6	9 12 6	8 12 0				
April	.	.	9 0 0	8 12 6	9 2 0	8 14 6	9 12 6	8 12 0				
May	.	.	9 0 0	9 2 6	8 11 9	8 12 0	9 12 6	8 8 0				

APPENDIX II.

TABLE D.—CONTINENTAL ANGLES.

Month	Tata Iron and Steel Company cif	Geo Service Company c.i.f.	Balmer Iawrie and Company c.i.f.	Richardson and Crundas cif	Burn and Company c.i.f.	Anandji Haridas and Company c.i.f.	Jesop and Company c.i.f.	MR. TRIVEDI	
								cif.	Bombay market price.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	Rs. a. p.
1924.									
October	6 8 6	6 15 6	6 10 0	6 15 9	6 9 0	6 6 0	6 5 0	6 12 0	...
November	6 17 6	6 16 6	6 5 0	6 16 3	6 12 0	6 7 6	6 12 0	6 16 0	140 0 0
December	6 14 6	6 17 6	6 10 0	6 17 6	6 10 6	6 12 6	6 10 0	6 12 0	140 0 0
1925.									
January	6 19 0	7 0 0	6 10 0	7 0 0	6 12 9	6 17 6	6 15 0	6 17 6	140 0 0
February	6 17 6	7 5 0	6 17 6	7 5 0	6 13 3	6 17 6	6 15 0	6 17 6	140 0 0
March	6 16 6	7 2 0	6 15 0	7 1 6	6 9 3	6 15 0	6 12 0	6 15 0	135 0 0
April	6 15 6	7 1 3	6 15 0	7 1 3	6 10 0	6 15 0	6 12 0	6 15 0	135 0 0
May	6 15 0	7 1 3	6 15 0	7 0 6	6 7 6	6 15 0	6 15 0	6 17 6	140 0 0

APPENDIX II.

TABLE E.—BRITISH BARS.

Month.	Iron and Steel Trades Review. f. o. b.	Tata Iron and Steel Company. c. i. f.	Balmer Lawrie and Company. c. i. f.	Richardson and Cruddas. c. i. f.	Burn and Company. c. i. f.	Anandji Haridas and Company. c. i. f.	Jessop and Company. c. i. f.
1924.	£ s d.	£ s d.	£ s d.	£ s d.	£ s d.	£ s d.	£ s d.
October . . .	9 0 0	10 2 6	10 12 6	9 18 9	10 2 7	9 15 0	9 2 6
November . . .	9 0 0	9 15 0	10 12 6	9 18 9	10 2 0	9 15 0	9 0 0
December . . .	9 0 0	10 15 0	10 7 6	9 18 9	10 0 3	9 15 0	9 0 0
1925.							
January . . .	8 18 6	9 15 0	10 7 6	9 18 9	9 13 10	9 15 0	9 0 0
February . . .	8 17 6	9 12 6	9 10 0	8 15 9	9 11 1	9 12 6	8 15 0
March . . .	8 15 7	9 12 6	9 10 0	9 13 9	9 16 9	9 12 6	8 12 0
April . . .	8 8 0	9 12 6	9 5 0	9 9 3	9 15 9	9 12 6	8 12 0
May . . .	8 5 0	9 12 6	8 10 0	9 3 1	9 15 9	9 12 6	8 8 0

APPENDIX II.

TABLE F.—CONTINENTAL BARS.

Month.	Iron and Coal Trades Review.	Tata Iron and Steel Company.	Geo Service and Com- pany.	Balmer Lawrie and Company.	Richardson and Crutcher	Burn and Company	ANANDJI HARIDAS AND COMPANY.		Jesop and Com- pany.	MR. TRIVEDI.	
		f.o.b.	c.i.f.	c.i.f.e.	c.i.f.	c.i.f.	c.i.f.	Calcutta market prices.		c.i.f.	Bombay market prices.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	R.	£ s. d.	£ s. d.	Rs.
1924.											
October	5 11 2	6 8 6	6 15 6	6 10 0	6 15 9	6 9 0	6 6 0	130	6 5 0	6 10 0	...
November	5 14 8	6 17 6	6 16 6	6 5 0	6 16 3	6 12 3	6 7 6	130	6 12 0	6 14 0	135
December	5 18 7	6 14 6	6 17 6	6 10 0	6 17 6	6 10 6	6 12 6	134	6 10 0	6 10 0	135
1925.											
January	5 19 2	6 18 0	7 0 0	6 10 0	7 0 0	6 12 9	6 17 6	134	6 15 0	6 17 6	130
February	5 18 1	6 17 6	7 5 0	6 17 6	7 5 0	6 13 3	6 17 6	134	6 15 0	6 11 6	130
March	5 14 10	6 16 6	7 2 0	6 15 0	7 1 6	6 9 3	6 15 0	139	6 12 0	6 12 6	125
April	5 14 3	6 15 6	7 1 3	6 15 0	7 1 3	6 10 0	6 15 0	140	6 12 0	6 12 6	130
May	5 12 8	6 15 0	7 1 3	6 15 0	7 0 6	6 7 6	6 15 0	145	6 15 0	6 15 0	135

APPENDIX II.
TABLE G.—BRITISH PLATES.

Month.	Iron and Coal Trades Review. f o b.	Balmer, Lawrie & Company. c i f.	Richardson and Cruddas c i f	BUEN AND COMPANY.			Jessop and Company. c i f.
				Ship plates. c i f.	Plates, $\frac{1}{8}$ ". c i f.	Plates, $\frac{1}{4}$ ". c i f.	
1924.		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
October . . .	9 7 6	10 2 6	10 8 0	10 5 0	12 4 3	10 2 6	10 2 6
November . . .	9 7 6	10 2 5	10 7 6	10 2 0	12 2 3	10 0 0	10 0 0
December . . .	9 7 6	10 0 0	10 7 6	10 2 0	12 2 3	10 0 0	10 0 0
1925.							
January . . .	9 7 0	10 0 0	10 7 6	10 2 0	12 2 3	10 0 0	10 0 0
February . . .	9 5 0	9 15 0	10 4 6	9 18 6	12 2 3	10 0 0	10 0 0
March . . .	8 19 4	9 15 0	10 2 6	9 16 6	12 1 0	10 0 0	10 0 0
April . . .	8 16 0	9 15 0	9 19 6	9 14 0	11 17 3	9 10 0	9 10 0
May . . .	8 18 1	9 12 6	9 13 9	9 12 0	11 12 3	9 10 0	9 10 0

APPENDIX II.

TABLE H.—CONTINENTAL PLATES.

Month.	Iron and Coal Trades Review.	Tata Iron and Steel Com-pany and up.	Geo. Service and Com-pany	Balmer, Lawrie and Com-pany.	Rich-ardson and Crud-das.	BURN AND COM-PANY.				ANANDJI HAREIDAS AND Co.				Mr. TEIVED.			
						Ship-plates.	Plates.	Plates.	up.	Calcutta market prices.		Jeasop and Com-pany.	18" up.	18" and up.	18" and up.	18" and up.	Bombay market prices.
										18"	18" up.						
	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.	c. i. f.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	Rs.	Rs.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	Rs.	Rs.
1924.																	
October .	6 10 11	7 15 0	7 17 6	7 12 6	7 18 6	7 19 0	8 3 0	7 17 6	7 12 6	159	152	7 8 0	8 5 0	7 15 0	...	...	...
November	6 16 2	8 0 0	7 18 6	7 12 6	7 18 9	8 1 0	8 5 6	7 17 6	7 12 6	155	150	7 15 0	8 10 0	8 0 0	170	155	155
December.	6 19 5	7 17 6	8 0 0	7 15 0	8 0 0	8 3 0	8 3 9	8 5 0	7 15 0	146	151	7 15 0	8 5 0	7 15 0	165	155	155
1925.																	
January .	7 0 9	8 1 6	8 2 6	7 15 0	8 2 3	8 4 0	8 6 0	8 7 6	7 15 0	147	148	8 0 0	8 10 0	8 2 6	160	145	145
February .	7 3 1	8 4 6	8 6 3	9 15 0	8 6 3	8 1 6	8 8 6	8 12 6	8 2 6	148	147	8 0 0	8 10 0	8 0 0	150	145	145
March .	6 19 7	8 0 0	8 5 0	8 0 0	8 5 3	8 3 0	8 5 3	8 12 6	8 0 0	147	145	7 18 0	8 7 6	7 15 0	145	140	140
April .	7 0 0	8 0 0	8 5 0	8 0 0	8 5 0	8 4 0	8 5 9	8 10 0	8 0 0	148	146	7 15 0	8 7 6	8 2 0	155	145	145
May .	6 16 11	8 0 0	8 5 0	8 0 0	8 5 0	7 19 6	8 1 3	8 10 0	8 0 0	151	150	7 15 0	8 5 0	8 2 0	160	150	150

APPENDIX II.

TABLE I.—BRITISH BLACK SHEET.

Month.	Iron and Coal Trades Review. f.o.b.	Tata Iron and Steel Company.* c.i.f.	Balmer Lawrie and Company. c.i.f.	Jessop and Company. c.i.f.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1924.				
October	12 15 0	14 11 3	13 17 6	14 0 0
November	12 15 0	14 10 0	13 16 8	...
December	12 15 0	13 17 6	13 17 6	...
1925.				
January	12 10 6	13 10 0	13 17 6	...
February	12 7 6	13 5 7	12 17 6	...
March	12 4 4	13 0 6	12 17 6	..
April	11 15 0	13 0 0	12 17 6	..
May	11 15 0	13 0 0	12 17 6	...

* 6', 7', 8' x 3' x 24' gauge.

APPENDIX II.
TABLE J.—CONTINENTAL BLACK SHEET.

Month.	Tata Iron and Steel Company.* c.i.f.	Balmor Lawrie and Company. c.i.f.	ANANDJI HARIDAS AND COMPANY.		MR. TRIVEDI.					
			c.i.f.	Calcutta market prices.	c.i.f.	c.i.f.	Bombay market price.			
			£ s. d.	Rs.			£ s. d.	Rs.	Rs.	Rs.
1924.										
October . .	—	13 10 0	11 7 6	196	9 17 6	11 2 6	—	—	—	—
November . .	12 1 3	13 10 0	11 10 0	188	10 10 0	11 15 0	160	200	190	190
December . .	12 15 0	13 2 6	10 15 0	180	10 5 0	11 10 0	160	195	185	185
1925.										
January . .	12 3 9	13 2 6	10 15 0	180	10 5 0	11 10 0	155	195	170	170
February . .	11 15 7	11 10 0	11 10 0	182	9 17 6	11 12 6	150	195	175	175
March . .	11 12 6	13 17 6	11 10 0	180	9 15 0	11 10 0	150	120	165	165
April . .	11 12 6	13 17 6	11 10 0	180	9 12 6	11 6 0	150	120	160	160
May . .	11 10 0	11 15 0	11 7 6	180	9 10 0	11 0 0	150	130	180	180

* Size of sheets :—

6×2×19 to 20 gauge×112 lbs.

6×2×14 to 18 gauge×122 lbs.

APPENDIX II.

TABLE K.—BRITISH GALVANISED SHEET.

Month.	IRON AND COAL TRADES REVIEW.		TATA IRON AND STEEL COMPANY.		BALMER LAWRIE AND COMPANY.		RICHARDSON AND CREDDAS.		BUEN AND COMPANY.		ANANDJI HAPIDAS AND COMPANY.		JESSOP AND COMPANY.	
	(Corrugated.) f.o.b.	(Corrugated.) c.i.f.	(Corrugated.) c.i.f.	(Plain) c.i.f.	(Corrugated.) c.i.f.	(Corrugated.) c.i.f.	(Corrugated.) c.i.f.	(Corrugated.) c.i.f.	(Corrugated.) c.i.f.	(Corrugated.) c.i.f.	Calcutta market price.	(Corrugated.) c.i.f.		
1924.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	Rs.	£ s. d.		
October .	. 17 19 0	19 2 6	20 3 1	19 2 6	19 2 6	19 8 9	19 7 6	309	18 15 0					
November .	. 17 11 3	18 15 0	19 5 0	18 7 6	18 13 9	18 13 9	18 10 0	315	18 5 0					
December .	. 17 10 7	18 15 0	19 5 0	18 7 6	18 12 6	18 16 3	18 7 0	310	18 5 0					
1925.														
January .	. 17 7 6	18 11 3	19 2 6	18 7 6	18 12 6	18 15 6	18 10 0	306	18 0 0					
February .	. 17 0 0	18 6 3	18 18 9	17 17 6	18 7 6	18 10 0	18 5 0	302	17 5 0					
March .	. 16 8 1	17 12 6	18 5 0	17 7 6	17 15 0	18 5 0	17 12 6	295	17 5 0					
April .	. 16 10 0	17 15 0	18 5 0	17 12 6	17 13 6	17 17 6	17 10 0	292	17 5 0					
May .	. 16 9 4	17 15 0	18 5 0	17 12 6	17 12 6	17 12 6	17 12 0	299	17 5 0					

APPENDIX III.

TABLE A.--STEEL BARS.

Imports into India during the latter half of the years 1922-23, 1923-24 and 1924-25.

(Quantities in tons.)

Month.	From United Kingdom.			From Belgium.			Total, all countries.			Protected.	Not protected.
	1922-23.	1923-24.	1924-25.	1922-23.	1923-24.	1924-25.	1922-23.	1923-24.	1924-25.		
October	2,518	903	1,121	10,762	9,759	12,200	16,393	13,554	16,771	16,556	215
November	1,847	1,193	1,281	8,163	11,827	12,325	12,015	16,373	16,538	16,037	501
December	1,854	1,213	1,392	8,027	11,660	10,781	12,336	18,457	14,354	13,913	441
January	1,352	1,452	466	15,929	13,006	11,253	22,414	20,017	14,205	13,478	727
February	1,064	1,535	631	12,166	10,662	8,026	20,441	16,024	9,655	8,610	1,045
March	1,033	1,633	1,692	8,494	12,626	5,103	14,916	20,495	7,937	7,030	907
TOTAL	9,668	7,929	6,583	63,541	69,540	59,683	98,515	104,920	79,460	75,624	3,336
TOTAL FIRST HALF OF THE YEAR	9,547	7,496	7,999	49,327	40,550	67,850	89,489	61,484	104,007	41,094	1,757
GRAND TOTAL FOR THE YEAR	19,215	15,425	14,582	112,868	110,090	127,533	188,004	166,404	183,467	116,718	5,593

APPENDIX III.

TABLE B.—STEEL ANGLES AND TEES.

Imports into India during the latter half of the years 1922-23, 1923-24 and 1924-25.

(Quantities in tons.)

Month.	Total, all countries.			Protected.	Not protected.
	1922-23.	1923-24.	1924-25.	1924-25.	1924-25.
October	1,952	1,977	3,603	3,603	..
November	1,384	2,507	3,826	3,823	3
December	1,832	1,648	3,804	3,796	8
January	2,484	3,722	4,126	4,126	..
February	2,032	2,972	1,374	1,374	..
March	2,567	2,717	1,662	1,655	7
Total	12,451	15,343	18,395	18,377	18
TOTAL FIRST HALF OF THE YEAR	9,355	10,784	19,087	9,805	20
GRAND TOTAL FOR THE YEAR	21,806	26,327	37,482	28,182	38

APPENDIX III

TABLE C.—BEAMS, CHANNELS, PILLARS, GIRDERS AND BRIDGEWORK (IRON AND STEEL).
Imports into India during the latter half of the years 1922-23, 1923-24 and 1924-25.

(Quantities in tons.)

Month.	From United Kingdom.			From Belgium.			Total, all countries.			Protected.	Not protected.
	1922-23.	1923-24.	1924-25.	1922-23.	1923-24.	1924-25.	1922-23.	1923-24.	1924-25.	1924-25.	1924-25.
October	1,589	3,749	2,176	1,895	3,470	3,380	3,716	7,336	6,332	6,052	280
November	1,946	3,623	2,819	2,703	3,872	4,018	5,070	7,685	7,343	7,343	..
December	2,334	3,975	3,912	2,752	4,365	4,500	5,413	8,652	9,001	9,001	..
January	2,951	3,597	3,056	4,511	6,336	3,192	7,741	10,388	6,940	6,940	..
February	3,042	3,451	1,404	2,952	3,926	1,771	6,214	8,187	3,747	3,747	..
March	4,236	2,526	1,735	3,951	3,707	2,985	8,450	6,703	5,719	5,719	..
TOTAL	16,148	20,921	15,102	18,764	25,676	19,996	36,604	48,851	39,082	38,802	280
TOTAL FIRST HALF OF THE YEAR	18,253	17,843	17,635	11,972	13,174	18,547	33,671	32,630	41,043	16,728	264
GRAND TOTAL FOR THE YEAR	34,401	38,764	33,737	30,736	38,850	38,543	70,275	81,481	81,025	55,530	544

APPENDIX III.

TABLE D.—PLATES AND SHEETS NOT GALVANISED OR TINNED (IRON AND STEEL).
Imports into India during the latter half of the years 1922-23, 1923-24 and 1924-25.
 (Quantities in tons.)

Month.	From United Kingdom.			From Belgium.			Total, all countries.				1924-25.			
	1922-23.	1923-24.	1924-25.	1922-23.	1923-24.	1924-25.	1922-23.	1923-24.	1924-25.		Plates.	Sheets.	Protected.	Not protected.
October . .	2,926	8,997	14,853	4,540	1,782	2,179	9,396	11,148	20,774		15,394	3,892	17,222	3,552
November . .	5,015	7,129	8,304	2,295	2,469	2,293	9,332	10,896	15,148		8,491	5,438	12,707	2,441
December . .	4,043	3,370	2,397	2,742	1,942	2,725	8,899	6,409	8,122		2,517	4,328	7,522	900
January . .	3,794	5,453	5,970	3,016	2,884	3,540	9,510	10,369	11,654		5,234	4,782	7,915	3,739
February . .	2,399	3,997	2,253	2,355	2,404	3,213	7,853	9,294	6,757		2,249	3,486	5,801	936
March . .	2,460	6,071	2,381	2,506	2,773	3,202	7,400	11,430	6,216		1,733	3,269	5,174	1,042
TOTAL .	20,637	34,922	36,143	17,454	14,254	17,152	52,390	59,746	68,651		35,618	25,185	56,341	12,310
TOTAL FIRST HALF OF THE YEAR.	13,850	32,913	16,301	12,051	8,710	20,493	44,232	48,396	49,294		19,206	27,552	23,594	1,943
GRAND TOTAL OF THE YEAR.	39,487	67,835	52,444	29,505	22,964	37,645	96,622	108,142	117,945		54,824	52,737	79,865	14,253

APPENDIX III.

TABLE E.—GALVANISED SHEETS AND PLATES.
Imports into India during the years 1922-23, 1923-24 and 1924-25.

	1922-23.				1923-24.			1924-25.					
	Corru- ga- ted.	Plain.	Total.	From U. K.	Corru- ga- ted.	Plain.	Total.	From U. K.	PLAIN.		Total.	From U. K.	
									Protected.	Not protected.			
													Protected.
	1	2	3	4	5	6	7	8	9	10	11	12	13
April . . .	17,922	1,066	18,988	18,259	19,463	2,026	21,489	19,474	21,181	..	..	22,875	22,672
May . . .	14,555	1,112	15,667	14,935	13,031	2,502	16,183	13,999	22,465	..	..	24,736	24,658
June . . .	4,454	639	5,093	4,655	10,008	1,025	11,033	10,177	10,208	..	..	11,822	11,778
July . . .	3,918	541	4,459	3,566	4,741	566	5,807	5,243	10,111	1,587	12	11,710	11,313
August . . .	3,428	1,284	4,712	4,079	5,141	876	5,817	5,762	9,409	1,408	212	11,029	10,828
September . . .	5,011	1,002	6,013	5,958	10,948	730	11,678	11,656	12,073	1,666	96	13,835	13,527
October . . .	8,185	1,392	9,577	9,483	14,928	1,171	16,099	16,018	12,678	2,459	20	15,157	14,697
November . . .	7,443	916	8,359	8,119	11,044	1,869	12,913	12,795	13,419	1,561	37	15,017	14,440
December . . .	8,077	1,381	9,458	8,368	10,693	1,065	11,758	11,715	10,127	1,343	46	11,516	11,279
January . . .	11,398	1,227	12,625	12,253	15,352	1,635	16,987	16,818	18,879	1,853	16	20,748	19,764
February . . .	12,019	1,353	13,372	12,228	16,190	1,378	18,168	18,032	18,490	1,642	31	20,163	19,934
March . . .	12,468	1,087	14,150	12,714	16,210	1,390	17,406	17,445	28,467	2,057	6	30,530	30,408
TOTAL . . .	108,873	13,600	122,473	114,517	148,405	16,633	165,038	159,134	187,507	15,576	476	209,138	205,298

APPENDIX IV.

Sale and production of steel at Jamshedpur and reduction of stocks.

(Quantities in tons.)

Class of steel.	ORDERS BOOKED.		PRODUCTION.		STOCKS.	
	October 1924 to May 1925.	Monthly rate.	October 1924 to May 1925.	Monthly rate.	30th September 1924.	31st May 1925. Increase + or Decrease —
Heavy rails, 1st class	105,630	13,204	94,120	11,765	1,985	1,852 —133
Heavy rails, 2nd class	10,436	1,304	15,191	1,899	12,914	15,866 +2,952
Heavy structurals	19,546	2,443	14,454	1,807	7,612	4,699 —2,943
Light structurals	12,247	1,531	7,998	1,000	3,709	1,979 —1,730
Bars	33,661	4,208	24,747	3,093	10,233	7,607 —2,626
Plates	11,815	1,479	10,920	1,365	3,765	2,556 —1,209
Fish plate**	3,771	471	4,290	536	1,382	1,158 —224
Light rails	2,356	294	2,788	348	298	713 +475
Tinplate bars	25,348	3,168	25,348	3,168	2,331	1,933 —1,298
Black sheet	5,892	736	10,810	1,351	82	2,027 +1,945
Galvanized sheet	5,813*	835	3,919*	560	...	499 +499
TOTAL	236,545	29,673	214,585	26,892	44,281	39,989 —4,292

* Galvanized sheet 7 months only.

APPENDIX V.

Average prices realised by the Tata Iron and Steel Company for certain classes of steel during the eight months October 1924 to May 1925.

MONTH.	BARS.		LIGHT STRUCTURALS.		HEAVY STRUCTURALS.		RECTANGULAR PLATES.		CIRCULAR PLATES.				LIGHT RAILS.		BLACK SHEET.		GALVANISED SHEET.	
	Quantity.	Average price.	Quantity.	Average price.	Quantity.	Average price.	Quantity.	Average price.	Quantity.	Average price.	Quantity.	Average price.	Quantity.	Average price.	Quantity.	Average price.	Quantity.	Average price.
	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1924																		
October	2,645	150·15	503	151·18	1,053	158·83	656	157·75	51	175·49	85	202·82	212	147·72	46	177·45	—	—
November	2,643	148·51	992	149·14	2,032	151·16	672	153·46	—	—	54	201·48	245	146·74	205	174·74	223	305·96
December	4,007	141·44	1,442	138·69	1,097	153·21	868	154·33	—	—	204	200·04	69	133·22	321	177·81	294	294·00
1925																		
January	2,877	141·27	947	146·44	1,985	151·16	1,877	146·48	—	—	49	200·00	116	130·60	1,243	189·00	565	308·95
February	3,003	142·84	1,298	138·48	1,629	147·01	1,327	142·67	—	—	34	204·08	664	131·81	770	181·27	549	312·41
March	4,642	147·88	2,391	149·99	3,912	141·92	1,890	146·15	18	135·00	—	—	223	131·09	1,283	200·90	1,081	300·10
April	8,669	148·44	2,471	137·48	6,322	140·60	2,704	144·37	29	135·00	—	—	279	130·74	948	178·99	1,259	294·59
May	5,175	141·59	2,203	130·59	1,516	141·78	935	141·83	362	135·00	—	—	548	130·24	1,076	176·75	1,872	289·69
Total for the eight months	33,661	145·50	12,247	141·03	19,546	145·08	10,929	146·77	460	139·49	426	201·23	2,356	134·22	5,892	186·59	5,843	297·45

APPENDIX VI.

Table 1.—Calculation of the additional bounty required during the period from October 1925 to March 1926.

ESTIMATED PRODUCTION.		Estimated average price.	Standard price as fixed by Tariff Board.	Difference between 3 and 4.	Amount of bounty required (2 multiplied by 5).
1925-26.	October 1925 to March 1926 (52.67 % of 1).				
1	2	3	4	5	6
Tons.	Tons.	Rs.	Rs.	Rs.	Rs.
Heavy structurals	28,800	145	175	30	4,55,070
Light structurals	24,000	141	175	34	4,29,760
Bars	60,000	145	180	35	11,06,070
Plates	20,400	146	180	34	3,65,296
Black sheet	13,200	187	230	43	2,91,936
Galvanised sheet	13,200	207	345	48	3,33,696
Total	159,600	...	..	...	29,88,828
Rails (not sold under contract)	2,000	150	151	31	62,000
GRAND TOTAL	161,600	.	..	...	30,50,828

APPENDIX VI.

Table 2.—*Calculation of the additional bounty required during 1926-27.*

	Estimated production.	Estimated average price.	Standard price as fixed by Tariff Board.	Difference between 2 and 3.	Amount of bounty required (4 multiplied by 1).
	1	2	3	4	5
	Tons.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Heavy structurals	36,000	145 0 0	175 0 0	30 0 0	10,80,000 0 0
Light structurals	24,000	141 0 0	175 0 0	34 0 0	8,16,000 0 0
Bars	71,000	145 0 0	180 0 0	35 0 0	24,85,000 0 0
Plates	20,400	146 0 0	180 0 0	34 0 0	6,93,600 0 0
Black sheet	18,000	187 0 0	230 0 0	43 0 0	7,74,000 0 0
Galvanised sheet	18,000	297 0 0	345 0 0	48 0 0	8,64,000 0 0
Total	187,400	...	...	...	67,12,600 0 0
Rails (not sold under contract)	49,000	144 0 0	175 0 0	31 0 0	15,19,000 0 0
GRAND TOTAL	236,400	...	...	...	82,31,600 0 0

APPENDIX VI.

Table 3.—*Calculation of the additional bounty required per ton of finished steel.*

	Estimated output of finished steel.	TOTAL BOUNTY REQUIRED. (See TABLES 1 AND 2.)		BOUNTY REQUIRED PER TON OF FINISHED STEEL.	
		Without rails.	With rails.	Without rails.	With rails.
	Tons.	Rs.	Rs.	Rs.	Rs.
October 1925 to March 1926	168,123	29,88,828	30,50,828	17-77	18-14
1926-27	357,000	67,12,600	82,31,600	18-80	23-05
Total 18 months	525,123	97,01,428	112,82,428	18-47	21-46

APPENDIX VI.

Table 4.—*Estimate of the production of 'bounty' steel and 'other' steel for certain periods.*

	Actual production. October 1924 to May 1925.	Estimated production. June to September 1925	Total pro- duction October 1924 to September 1925	ESTIMATED PRODUCTION.		
				October 1925 to March 1926.	April 1926 to March 1927.	October 1925 to March 1927.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Heavy structural sections	14,454	9,010	23,464	15,169	36,000	51,169
Light structural sections	10,755	5,697	16,452	9,543	17,500	27,043
Bars	24,747	20,874	45,621	31,692	71,000	102,692
Plates	10,920	6,401	17,321	10,711	20,400	31,144
Sheet	10,810	8,620	19,430	13,901	36,000	49,901
Rails (not under contract)	7,494	...	7,494	2,000	49,000	51,000
Fishplates (not under contract)	..	...	..	100	2,450	2,550
Total 'bounty' steel	79,211	50,512	129,723	83,062	232,350	315,412
Rails (under contract)	56,626	40,358	126,984	59,940	81,000	140,940
Fishplates (under contract)	4,200	2,018	6,208	2,987	4,050	7,047
Finplate bars	25,348	9,004	34,352	20,557	39,000	60,457
Total 'other' steel	116,264	51,380	167,644	83,794	134,650	208,444
Total finished steel	195,475	101,892	297,367	166,856	367,000	523,856

APPENDIX VII.

TABLE 1.

Variations in the price of imported tinplate.

	F. o. b. price per box Swansea.			Rate of exchange per rupee.		Landed duty-free price per 100 boxes Calcutta.
	£	s.	d.	s.	d.	Rs.
4th August 1923	1	3	1½	1	4	1,916
	1	3	1½	1	6	1,706
10th July 1925	0	19	4½	1	4	1,635
	0	19	4½	1	6	1,456

Differences between the prices of tinplate on the 4th August 1923 and the 10th July 1925.

	Difference in price per 100 boxes.
	Rs.
If the exchange only had altered	210
If the sterling price only had altered	281
Actual difference when both the sterling price and the exchange are altered	460

In order to arrive at the landed duty-free price of imported tinplate, it is necessary to add 2s. 1d. per box for freight and insurance and Rs. 0.25 for landing charges.

APPENDIX VII.

TABLE 2.

Variations in the price of tinplate bars.

	F. o. b. price per ton at British port.	Rate of exchange per rupee.	Cost of 6 tons of tinplate bars to Tinplate Company.
	£ s. d.	s. d.	Rs.
4th August 1923	9 2 6	1 4	821
	9 2 6	1 6	730
10th July 1925	6 12 6	1 4	596
	6 12 6	1 6	530

Differences between the cost of tinplate bars on the 4th August 1923 and on the 10th July 1925.

	Difference in cost per 100 boxes.
	Rs.
If the sterling price only had altered	225
If the exchange alone had altered	91
Actual difference when both the exchange and the sterling price have altered	291

Six tons of bars are required to make 100 boxes of tinplate. Under the contract between the Tinplate Company and the Iron and Steel Company, the price paid for bars is equal to the current price f. o. r. Swansea, so that, in this case, there is no allowance for freight and landing charges.

APPENDIX VII.

TABLE 3.

Variations in the price of tinsplate and of tinsplate bars between the 4th August 1923 and the 10th July 1925.

	Fall in the price of tinsplate.	Fall in the cost of tinsplate bars.	Nett disadvantage to the Tinsplate Company.
	Rs.	Rs.	Rs.
Sterling price alone altered . . .	281	225	56
Exchange alone altered . . .	210	91	119
Both sterling price and exchange altered	460	291	169

APPENDIX VII.

TABLE 4.

Variations in the price of tin.

—		Sterling price of tin per ton.	Rate of Exchange.		Cost of tin per 100 boxes of tinplate without duty.
		£	s.	d.	Rs.
1923		200	1	4	250
		200	1	6	222
1925		260	1	4	325
		260	1	6	289

Differences between the price of tin in 1923 and 1925.

	Differences in the cost of tin per 100 boxes Rs.
If the sterling price alone had altered	+75
If the exchange alone had altered	-28
Actual difference when both the sterling price and the exchange have altered	+39

The quantity of tin required to make 100 boxes of tinplate at Jamshedpur is one-twelfth of a ton approximately.

APPENDIX VII.

TABLE 5.

Variations in the duty on tin.

	Duty per ton of tin.	Incidence of the duty per 100 boxes of tinplate.
	Rs.	Rs.
1923	375	31·25
1925	525	43·75

Rs.

Increase in the incidence of the duty on tin per
100 boxes of tinplate 12·5

APPENDIX VIII.

Proposed sections of the Tariff Schedules embodying the Board's recommendations regarding Fabricated Steel.

No.	Names of articles.	Unit or method of assessment.	Rate of additional duty.
142	Coal trucks, tipping wagons and the like conveyances designed for use on light rail track, if adapted to be worked by manual or animal labour and if made mainly of iron or steel, and component parts thereof made of iron or steel	<i>Ad valorem</i>	15 per cent.
146	Iron or steel pipes and tubes and fittings therefor, if rivetted or otherwise built up of plates or sheets	<i>Ad valorem</i>	7½ per cent.
147	Iron or steel plates not under ¼-inch thick including sheets ¼-inch thick or over— (b) fabricated, all qualities, except the component parts of ships and other vessels as defined in No. 64	<i>Ad valorem</i>	7½ per cent.
148	Iron or steel sheets under ¼-inch thick— (b) fabricated, all qualities, except the component parts of ships and other vessels as defined in No. 64	<i>Ad valorem</i>	7½ per cent.
150	Steel, angle and tee, not galvanised, tinned or lead coated and beam, channel, zed, trough plate, piling and other structural sections— (a) fabricated but not including component parts of ships and other vessels as defined in No. 64	<i>Ad valorem</i>	7½ per cent.
152	Steel Railway track material— (d) Switches, crossings and the like material not made of alloy steel, but not including switches and crossings adapted for use with rails under 30 lbs. per yard (c) Switches and crossings and the like material not made of alloy steel if adapted for use with rails under 30 lbs. per yard	<i>Ad valorem</i>	7½ per cent.
153	Steel structures, fabricated partially or wholly, not otherwise specified, if made mainly or wholly of steel bars, sections, plates or sheets, for the construction of buildings, bridges, tanks, well curbs, trestles, towers and similar structures or for parts therefor, but not including builders' hardware (<i>see</i> No. 90) or articles specified in Nos. 51, 51A, 64 or 87, or the component parts of ships and other vessels as defined in No. 64	<i>Ad valorem</i>	15 per cent.
154	Steel— (a) Tinplates and tinned sheets, including tin taggers	Ton	Rs. 29.

APPENDIX IX.

Note on the cost of an imported under-frame.

Tenders for 153 carriage under-frames were recently called for by the East Indian Railway and the order was placed in July 1925. The under-frames were to be of three types—

	Number.
(a) Without lighting equipment and hand brakes	119
(b) With lighting equipment but without hand brakes	18
(c) With both lighting equipment and hand brakes	13

Messrs. Burn and Company's tenders were as follows:—

- (a) Rs. 8,891.
- (b) ,, 9,097.
- (c) ,, 9,455.

The British price given for purposes of comparison by the Railway Board is Rs. 9,360, but it is not stated with which of the three Indian prices it should be compared, and, in fact, it is not strictly comparable with any of them, for it is apparently the price of an under-frame with hand brakes and without lighting equipment, and no tenders for this type had been called for.

2. The great bulk of the wagons were to be without lighting equipment and hand brakes and these may be taken as representative. The f.o.b. British price of this type is given by Messrs. Burn and Company as £548 and this figure appears to be correct. If this price is substituted for £561 in the analysis supplied by the Railway Board, the figures work out as follows:—

	£	s.	d.
F.o.b. price	548	0	0
Freight	40	0	0
Freight brokerage	0	12	0
Insurance	1	4	0
Interest	7	10	0
C.i.f. price	597	6	0

	Rs.
C.i.f. price in rupees at 1s. 6d.	7,964
Customs duty at 10 per cent.	796
Landing charges	45
Estimated cost of erection	365
TOTAL	9,170

3. Messrs. Burn and Company give the cost of this type of imported under-frame as follows:—

	£	s.	d.
F.o.b. price	548	0	0
Freight, etc.	32	0	0
C.i.f. price	580	0	0
	Rs.		
C.i.f. price in rupees at 1s. 6d.	7,714*		
Duty	771		
Landing (say)	75		
Erection (say)	350		
TOTAL	8,910		

The main difference here is in the figure taken for freight and other transit charges. The cost of freight, as given by the Railway Board (£40), seems to be in accordance with the rate of £2-10-0 a ton given by the Chief Commissioner for Railways in his evidence about wagons in the first Steel Enquiry (Evidence, Vol. III, p. 313). Insurance and interest were then taken at the rate of 15s. 6d. per £100, but, in the analysis given by the Railway Board in this enquiry, the figures for interest and insurance assume a rate of £1-11-0 per £100, *i.e.*, exactly double. If the rate of 15s. 6d. per £100 is correct, it makes a difference of £4-7-0 to the c.i.f. sterling price, and reduces the final rupee cost of the imported under-frame from Rs. 9,170 to Rs. 9,107. In a comparison with Indian prices the round figure of Rs. 9,100 can conveniently be taken. It then appears that Messrs. Burn and Company's tender (Rs. 8,891) was less than the cost of the imported wagon by about Rs. 200.

* This figure should apparently be Rs. 7,733 and the duty Rs. 773. The erection and landing charges also required small corrections, but the mistakes on the whole balance each other.

APPENDIX IX.

TABLE 1.

Analysis of the rupee cost of an imported A-1 broad gauge wagon at various dates.

	Autumn 1922.	January 1924.	January 1925.
	£ s. d.	£ s. d.	£ s. d.
Cost of wagon f. o. b. British port .	171 0 0	181 4 3	179 12 3
Freight and Insurance	19 3 9	19 3 9	19 3 9
Cost of wagon c. i. f. Indian port .	190 3 9	200 8 0	199 16 0
	Rs.	Rs.	Rs.
Equivalent in rupees	2,853	3,006	2,664
Customs duty	285	301	266
Landing, etc.	31	31	31
Erection	325	325	325
	3,194	3,663	3,286

The c.i.f. price of the imported wagon has been converted at 1s. 4d. in 1922 and 1924, and at 1s. 6d. in 1925.

APPENDIX X.

Note on the amendment of the Steel Industry (Protection) Act to carry out the Board's recommendations regarding wagons and under-frames.

The payment of bounties on railway wagons to the extent of Rs. 7 lakhs in each of the financial years 1924-25, 1925-26 and 1926-27, is authorised in section 4 of the Steel Industry (Protection) Act. In order to carry out the Board's recommendations regarding wagons and under-frames, it will be necessary to amend the Act in the following points:—

- (1) The payment of bounties on under-frames as well as on wagons must be authorised.
- (2) The payments made in any one financial year should no longer be subject to a statutory limit, but the liabilities incurred by the sanctions given in any one year should be limited by the Act.
- (3) Provision must be made authorising the Government of India to incur, in each of the financial years 1925-26 and 1926-27, liabilities on account of bounties on wagons and under-frames not exceeding Rs. 20 lakhs, and to pay the amounts sanctioned in the same year or in any subsequent year.

A subsidiary question also arises as to the exact method by which the payment of liabilities already incurred should be adjusted, when they cannot be met by payments under section 4 on any date prior to the 1st April 1926.

2. In order to provide for the points mentioned in paragraph 1, it is suggested that the Act might be amended on the following lines:—

In section 4 (1) of the Act the word and figures “ and 1926 ” should be repealed. •

The following section should be inserted as section 4-A of the Act:—

“ 4A. (1) In addition to the payments authorised in section 4 the Governor General in Council may, in each of the financial years commencing on the 1st day of April 1925 and 1926, sanction the payment of such sum as he thinks fit by way of bounties upon iron or steel wagons, in respect of each of which he is satisfied that the conditions specified in clauses (a) and (b) of sub-section (1) of section 1 are fulfilled, or upon iron or steel under-frames in respect of each of which he is satisfied—

- (a) that the under-frame is suitable for the erection thereon of a public carriage for the conveyance of passengers on a railway in India, and
- (b) that a substantial portion of the component parts thereof has been manufactured in British India;

provided that the payments sanctioned in the financial year commencing on the 1st of April 1925 shall not exceed twenty-four lakhs of rupees, and the payments sanctioned in the financial year 1926-27 shall not exceed twenty lakhs of rupees.

(2) Payments sanctioned under sub-section (1) may be made in the financial year in which sanction was given or in any subsequent financial year."

3. A good deal of difficulty was found in devising suitable amendments. Sanction has already been given to the payment of bounties amounting to Rs. 13.59 lakhs and the account stands thus:—

	Lakhs of rupees.
Payments in 1924-25	2.86
Probable payments in 1925-26	7.00
Payments already sanctioned which cannot legally be made until 1926-27	3.73
Liabilities already incurred	13.59
Un-spent balance of 1924-25	4.14
Not yet sanctioned out of the payments admissible in 1926-27	3.27
TOTAL	21.00

Ordinarily, when bounties are sanctioned on wagons, payment will be made in the year following that in which sanction was given, but liabilities were incurred by the sanctions given in January 1925, which cannot legally be discharged in full until after the 31st March 1926. This throwing forward of payments into the year 1926-27 seriously complicates the problem. Out of the sum of Rs. 7 lakhs payable on wagon bounties in 1926-27 under section 4 of the Act, only Rs. 3.27 lakhs are available to meet fresh liabilities. This sum, moreover, can be spent only on bounties on wagons and not on bounties on under-frames, and it would be inconvenient to have the payment of wagon bounties regulated by two distinct sections throughout 1926-27.

4. On the whole, it seems best to leave section 4 to its operation, so far as the years 1924-25 and 1925-26 are concerned, and to make a fresh start as regards payments from the 1st April 1926. It is proposed, therefore, to excise the reference to the financial year 1926-27 from section 4. It then becomes necessary to empower the Government of India to incur additional liabilities on account of bounties on wagons and under-frames to the extent of Rs. 20 lakhs in each of the financial years 1925-26 and 1926-27, and also to provide for the payment of the liabilities already incurred, in so far as they are not covered by payments made, or to be made, in 1924-25 and 1925-26. This is done in the draft of the new section 4-A. The limit to the sanctions which may be given in 1925-26 has been put at Rs. 24 lakhs (*i.e.*, Rs. 20 lakhs *plus* Rs. 4 lakhs),

although the liabilities which cannot be met by payments under section 4 amount only to Rs. 3·73 lakhs, because it seemed preferable that the sum sanctioned by the Act should not involve a fraction of a lakh. If the Act is amended in the form proposed it will be necessary to accord formal sanction in 1925-26 to all payments, which cannot be met out of the Rs. 7 lakhs payable in that year under section 4, and it will be possible to make the actual payment in 1925-26 if the wagons are completed before the 31st of March. Ordinarily payments sanctioned in one year will be made in the next, but occasionally it may be impossible to make the payment—owing to the fact that all the wagons may not be completed—until the third year. For this reason it is proposed to authorise payment in any succeeding year. The sums thrown forward in this way are not likely to be large.

APPENDIX XI.

Note on the financial effect of the Board's recommendations in Chapters IV to VI of the Report.

In Annexure B the estimated increase in the Customs revenue up to the 31st March 1927 on account of the protective duties on steel was found to be Rs. 3 crores, or if allowance is made for the increase in consumption, which might have occurred if the duties had remained at 10 per cent., Rs. 2.80 crores. In paragraph 33 of the Report the total liabilities on account of the bounties on rails and fishplates, on wagons and on ingot steel was ascertained to be Rs. 2.56 crores, so that the estimated excess of revenue over expenditure was Rs. 24 lakhs. This calculation did not, however, include the proposals made in Chapters IV to VI, and these also must be brought into the account. On the debit side allowance must be made for the larger bounties to be paid on wagons and under-frames and for the rebate of the duty on tin, and on the credit side for the higher duties on tinplate and on fabricated steel.

2. The following table explains the position as regards the increase in expenditure:—

	Rs lakhs.
A. Liabilities on account of bounties on wagons as given in paragraph 33 of the Report	21.00
B. Payments on account of bounties on wagons in 1924-25	2.86
C. Estimated payments on account of bounties on wagons in 1925-26	7.00
D. Total payments on account of bounties on wagons up to the 31st March 1926 (B plus C)	9.86
E. Balance of the sum of Rs. 21 lakhs which should be deducted from the additional expenditure on account of bounties on wagons and under-frames (A minus D)	11.14
F. Bounties on wagons and under-frames to be sanctioned in 1925-26 and likely to be paid before the 31st March 1927	24.00
G. Nett increase of expenditure on account of bounties on wagons and under-frames up to the 31st March 1927 (F minus E)	12.86
H. Rebate of the duty on tin imported for the manufacture of tinplate (Rs. 2.63 lakhs a year for 1½ years)	3.95

	Rs. lakhs.
I. Total additional expenditure up to the 31st March 1927 (G <i>plus</i> H) . . .	16·81
J. Bounties on wagons and under-frames to be sanctioned in 1926-27 and likely to be paid after the 31st of March 1927	20·00
K. Total additional expenditure (I <i>plus</i> J)	36·81

It will be seen that the additional expenditure up to the 31st March 1927 is Rs. 16·81 lakhs.

3. The following tables give the estimated increase of revenue from the higher duties on tinplate and fabricated steel:—

Tinplate.

A. Estimated imports of tinplate from the 1st October 1925 to the 31st March 1927 (Annexure B, Table 1 (i)) . . .	45,000 tons.
B. Gross increase of revenue for the same period (45,000 tons at Rs. 29 a ton)	Rs. 13·05 tons.
C. Estimated decline in consumption owing to the increase in the duty (6 per cent. of 90,000 tons)	5,400 tons.
D. Loss of revenue occasioned by the decline in consumption (5,400 tons at Rs. 60 a ton)	Rs. 3·24 lakhs.
E. Nett increase of revenue from the higher duty on tinplate between the 1st October 1925 and the 31st March 1927 (B <i>minus</i> D)	Rs. 9·81 lakhs.

Fabricated Steel.

A. Estimated imports of fabricated steel from the 1st October 1925 to the 31st March 1927 (Annexure B, Table 8 (ii)) . . .	75,000 tons.
B. Gross increase of revenue for the same period (75,000 tons at Rs. 15 a ton)	Rs. 11·25 lakhs.
C. Estimated decline in consumption owing to the increase in the duty (6 per cent. of 75,000 tons)	4,500 tons

D. Loss of revenue occasioned by the decline in consumption (4,500 tons at Rs. 50 a ton)	Rs. 2.25 lakhs.
E. Nett increase of revenue from the higher duties on fabricated steel (B <i>minus</i> D)	Rs. 9.00 lakhs.

The nett increase of revenue from the higher duties on tinplate and rolled steel is Rs. 18.81 lakhs. In estimating the loss of revenue owing to the probable drop in consumption, the duties have been taken at the present protective rates, because the estimate of the increase in revenue given in paragraph 34 (Rs. 280 lakhs) includes duty collected at these rates on the quantities of steel by which the consumption is expected to decline. The 6 per cent. decline of consumption was arrived at on the basis of the figures given in paragraph 24 of Annexure B. It was there estimated that the removal of the protective duties might result in an increase of the consumption by 50,000 tons, *i.e.*, from 720,000 tons to 770,000 tons. The imposition of the protective duties has therefore reduced consumption to this extent, *i.e.*, by about 6½ per cent. The additional duty on fabricated steel is equal to half the difference between the protective duty and a 10 per cent. duty, while the additional duty on tinplate is somewhat greater than this difference, and a reduction of 6 per cent. in the consumption seems a reasonable allowance.

4. The increase in revenue as estimated in paragraph 3 exceeds the additional expenditure (up to the 31st March 1927) ascertained in paragraph 2 by Rs. 2 lakhs. The final statement of the account is as follows:—

	Rs lakhs.
A. Increase in the Customs revenue on account of the protective duties up to the 31st March 1927, as estimated in paragraph 34 of the Report	280.00
B. Estimated increase in the Customs revenue on account of the higher duties now proposed on tinplate and on fabricated steel	18.81
C. Total increase in revenue (A <i>plus</i> B)	298.81
D. Expenditure on account of bounties on rails, fishplates, wagons and ingot steel up to the 31st March 1927 as estimated in paragraph 33 of the Report	256.00

Rs. lakhs.

E. Estimated additional expenditure up to the 31st March 1927 on account of the larger bounties now proposed on wagons and under-frames and the rebate of the duty on imported tin	16.81
F. Total additional expenditure (D <i>plus</i> E)	272.81
G. Excess of the increase in re- venue over the additional expenditure (C <i>minus</i> F) . .	26.00

