

REPORT
OF THE
Indian Tariff Board
REGARDING THE
REMOVAL OF THE DUTY ON SPELTER
AND
THE ENHANCEMENT OF THE DUTY ON
IMPORTED GALVANIZED HARDWARE
(Including the Evidence recorded during the Enquiry)



X9(F182):53.2
F6
009723

GOVERNMENT OF INDIA
CENTRAL PUBLICATION BRANCH
1928

Price As. 6 or 8d.

REPORT
OF THE
Indian Tariff Board
REGARDING THE
REMOVAL OF THE DUTY ON SPELTER
AND
THE ENHANCEMENT OF THE DUTY ON
IMPORTED GALVANIZED HARDWARE
(Including the Evidence recorded during the Enquiry)



CALCUTTA : GOVERNMENT OF INDIA
CENTRAL PUBLICATION BRANCH
1928

**Government of India Publications are obtainable from
the Government of India Central Publication Branch,
8, Hastings Street, Calcutta, and from the following Agents :—**

EUROPE.

OFFICE OF THE HIGH COMMISSIONER FOR INDIA,
42, GROSVENOR GARDENS, LONDON, S.W. 1.

And at all Booksellers.

INDIA AND CEYLON.

Provincial Book Depôts :

MADRAS :—Office of the Superintendent, Government Press, Mount Road, Madras.
POMBAY :—Superintendent, Government Book Depôt, Town Hall, Bombay.
SIND :—Library attached to the Office of the Commissioner in Sind, Karachi.
BENGAL :—Office of the Bengal Secretariat Book Depôt, Writers' Buildings, Room No. I, Ground Floor, Calcutta.
UNITED PROVINCES OF AGRA AND OUDH :—Office of the Superintendent of Government Press, United Provinces of Agra and Oudh, Allahabad.
PUNJAB :—Office of the Superintendent, Government Printing, Punjab Lahore.
BURMA :—Office of the Superintendent, Government Printing, Burma, Rangoon.
CENTRAL PROVINCES AND BERAR :—Office of the Central Provinces Secretariat, Nagpur.
ASSAM :—Office of the Superintendent, Assam Secretariat Press.
BIHAR AND ORISSA :—Office of the Superintendent, Government Printing, Bihar and Orissa, P. O. Gulsarbagh, Patna.
COORG :—Office of the Chief Commissioner of Coorg, Bangalore.
NORTH-WEST FRONTIER PROVINCE :—Office of the Manager, Government Printing and Stationery, Peshawar.

Thacker, Spink & Co., Calcutta and Simla.
W. Newman & Co., Ltd., Calcutta.
B. Cambray & Co., Calcutta.
S. K. Lahiri & Co., Calcutta.
The Indian School Supply Depôt, 309, Bow Bazar Street, Calcutta, and 226, Nawabpur, Dacca.
Butterworth & Co. (India), Ltd., Calcutta.
Rai M. C. Saroar Bahadur & Sons, 90/2A, Harrison Road, Calcutta.
The Weldon Library, 17, Park Street, Calcutta.
Standard Literature Company, Limited, Calcutta.
Association Press, Calcutta.
Chukerverty, Chatterjee & Co., Ltd., 13, College Square, Calcutta.
The Book Company, Calcutta.
James Murray & Co., 12, Government Place, Calcutta. (For Meteorological Publications only).
Higginbotham & Co., Madras.
V. Kalyanaram Iyer & Co., Madras.
F. R. Rama Iyer & Co., Madras.
Rochouse and Sons, Madras.
G. A. Nateson & Co., Publishers, George Town, Madras.
The Modern Stores, Salem, Madras.
Bright & Co., Trivandrum.
The Booklover's Resort, Talikad, Trivandrum, South India.
V. S. Swaminathan, Bookseller, West Tower Street, Madras.
Thacker & Co., Ltd., Bombay.
D. B. Taraporevala, Sons & Co., Bombay.
Sunder Pandurang, Bombay.
Ran Chandra Govind & Sons, Kalbadevi, Bombay.
N. M. Tripathi & Co., Booksellers, Princess Street, Kalbadevi Road, Bombay.
R. B. Umadikar & Co., The Bharat Book Depôt, Dharwar.
Proprietor, New Kitabkhana, Poona.
The Manager, Oriental Book Supplying Agency, 15, Shukrawar, Poona City.
R. S. Gondhalekar's Book Depôt, Publisher and Bookseller, Budhwar Chawh, Poona City.
Managing Director, Co-operative Bookstall, Booksellers and Publishers, Poona City.
The Standard Bookstall, Karachi and Rawalpindi.
J. Ray & Sons, 43 K. & L, Edwards Road, Rawalpindi.
The Standard Book Depôt, Lahore, Lucknow, Nainital, Mussoorie, Dalhousie and Amballa Cantonment.
Karsandas Narandas & Sons, Surat.

Mangaldas & Sons, Booksellers and Publishers, Bhaga Talao, Surat.
Mrs. Radhabai Atmaram Sagoo, Kalbadevi Road, Bombay.
A. H. Wheeler & Co., Allahabad, Calcutta and Bombay.
N. B. Mathur, Supdt., Nasir Kanun Hind Press, Allahabad.
The North India Christian Tract and Book Society, 18, Clive Road, Allahabad.
Ram Dayal Agarwala, 184, Katra, Allahabad.
Manager, Newal Kishore Press, Lucknow.
The Upper India Publishing House, Ltd., 41, Aminabad Park, Lucknow.
Munshi Seeta Ram, Managing Proprietor, Indian Army Book Depôt, Juhl, Cawnpore.
Rai Sahib M. Gulab Singh & Sons, Mufid-Am Press, Lahore and Allahabad.
Rama Krishna & Sons, Booksellers, Anarkali, Lahore.
Puri Brothers, Booksellers and Publishers, Katcheri Road, Lahore.
The Tilak School Bookshop, Lahore.
The Standard Bookstall, Lahore.
Manager of the Imperial Book Depôt, 63, Chandney Chowk Street, Delhi.
Oxford Book and Stationery Company, Delhi.
Supdt., American Baptist Mission Press, Rangoon.
Proprietor, Rangoon Times Press, Rangoon.
The Modern Publishing House, Ltd., 30, Phayre Street, Rangoon.
The International Buddhist Book Depôt, Post Box No. 971, Rangoon.
Burma Book Club, Ltd., Rangoon.
Manager, the "Hitavada," Nagpur.
S. C. Talukdar, Proprietor, Students & Co., Cooch Behar.
Times of Ceylon Co., Ltd.
The Manager, Ceylon Observer, Colombo.
The Manager, The Indian Book Shop, Benares City.
B. C. Basak, Esq., Proprietor, Albert Library, Dacca.
Raghunath Prasad & Sons, Patna City.
The Srivilliputtur Co-operative Trading Union Ltd., Srivilliputtur (Satur S. I. R.).
Banwari Lal, Esq., Pakariya Street, Pilibhit, United Provinces.
Manager, Educational Book Depôt, Jubbulpore.
The Standard Bookstall, Quetta.

NOTE.

The estimated cost of the Tariff Board during their enquiry into the question of the removal of the duty on spelter is as follows :—

	Rs.	A.
(1) Salaries of members and staff	9,255	4
(2) Travelling allowance (including daily allowance)	1,532	1
(3) Printing	385	0
(4) Contingencies	181	14

TABLE OF CONTENTS.

PARA.	Report.	Page.
1.	Scope of the Report	1
SECTION I.—REMOVAL OF THE DUTY ON SPELTER.		
2.	The uses of spelter and the form in which it is manufactured	1
3.	The imports of spelter	2
4.	Process of manufacture described	3
5.	The duty on spelter inconsistent with the policy of discriminating protection	4
6.	Burden imposed on the galvanizing industry by the duty on spelter	4
7.	The effect of the duty on spelter on the cost of galvanized sheet	5
8.	Industries which will benefit from the removal of the duty	5
9.	Financial result of the removal of the duty	6
SECTION II.—PROPOSAL TO ENHANCE THE DUTY ON IMPORTED GALVANIZED HARDWARE.		
10.	The claim of the Indian Galvanizing Company	7
11.	The Company's claim primarily for equality of tariff treatment	7
12.	Analysis of the Company's costs	8
13.	Case for substantive protection	9
14.	Extent of the Home market for galvanized hardware—buckets	9
15.	Extent of the Home market for galvanized hardware—other articles	10
16.	Industry does not fulfil conditions laid down by the Fiscal Commission	10
17.	Recommendation	11
APPENDIX I		12

Evidence.

1.	Government of India, Department of Commerce, Resolution No. 38-T. (2), dated the 28th March 1925	15
2.	Press Communiqué issued by the Tariff Board on the 19th September 1925	16
3.	Questionnaire issued by the Tariff Board—	
	(1) for the Galvanizing firms	16
	(2) for the Indian Galvanizing Company	17
4.	Evidence tendered by—	
	(1) The Indian Galvanizing Company, Limited—	
	Written	20
	Oral	26
	(2) The Tata Iron and Steel Company, Limited—	
	Written	43
	Oral	53
	(3) Burma Corporation, Limited—	
	Written	60

Report.

Report of the Indian Tariff Board on the removal of the import duty on spelter and the enhancement of the duty on imported galvanized hardware.

In the Resolution of the Government of India in the Commerce Department, No. 38-T. (2), dated the 28th March 1925, a number of applications were referred to the Tariff Board from firms who complained that the Customs duties on the finished articles manufactured by them were lower than the duties on the raw materials which they had to import. One of these applications was presented by the Indian Galvanizing Company, Limited, who put forward three specific requests:—

- (1) That the 15 per cent. duty on imported spelter should be abolished.
- (2) That the 15 per cent. duty on imported galvanized hardware should be increased to at least 20 per cent.; and
- (3) That the duty on all kinds of imported poles used for transmission lines, which are at present classed as machinery at $2\frac{1}{2}$ per cent., should be raised to 25 per cent., the rate applicable to fabricated steel.

The third of these proposals is one of several which make it necessary to consider how far the advantage to industries generally of cheap machinery may be outweighed by the importance of assisting a particular industry. Suggestions of this kind can best be examined simultaneously, and we have therefore deferred consideration of the proposal to increase the duty on transmission poles. In this Report we shall deal only with the removal of the duty on spelter and the increase of the duty on galvanized hardware.

SECTION I.

Removal of the duty on Spelter.

2. The industrial importance of zinc lies chiefly in its use in conjunction with other metals, such as copper and aluminium, for the formation of brass and other alloys, and in the galvanizing process by which sheets of steel or iron are coated with zinc and thereby protected from corrosion. The former use is of great antiquity in India, and has hitherto absorbed most of the country's requirements of zinc, but the development of the galvanizing industry is likely to lead to a substantial increase in consumption. Both in the production of alloys and in galvanizing the zinc must be melted before it can be used, and is commonly supplied to manufacturers in plates or slabs of a shape and size

The uses of spelter and the form in which it is manufactured.

convenient for transport. Sometimes, it is true, the zinc may be given a particular form or shape to adapt it for a particular purpose, *e.g.*, the zinc sheets from which tanks are sometimes made, or the zinc boiler tiles used to protect boilers from corrosion. Zinc can also be obtained in powdered forms such as the zinc dross and zinc ashes which are recovered from galvanizing baths, and the zinc dust which is inevitably produced in the process of distillation. Cakes, slabs, plates and tiles, however, constitute much the largest portion of the imports.

3. Commercial zinc (commonly known as spelter) is not manufactured in India though considerable quantities of zinc ore are produced from the mines of the Burma Corporation in the Upper Shan States. The ores, which contain silver and lead as well as zinc, after treatment in a concentrating plant to reduce their bulk, are exported to Europe and refined there. The Corporation have informed us that they do not at the moment contemplate the manufacture of commercial spelter in India, and it is probable that, for a number of years, India will import (as she does at present) the whole of her supplies from abroad. The imports of zinc during the last four years and the Customs duties collected have been as follows:—

	Imports.	Value.	Duty.*
	Quantity.	Rs.	Rs.
	Tons.	Lakhs.	Lakhs.
1921-22	4,494	23-95	3-02
1922-23	4,725	25-23	3-95
1923-24	5,650	30-15	4-28
1924-25	5,322	26-59	4-05
1st April to 31st December 1925	5,113	27-22	3-94

In the Trade Returns the imports are classified as “wrought,” “unwrought” and “other sorts.” The imports under the last head are negligible in amount (58 tons in 1924-25), and consist chiefly of broken zinc and zinc ores. The imports of wrought zinc should properly be restricted to those kinds of zinc which have been given a particular form in order to adapt them to a particular purpose, *e.g.*, zinc sheet, boiler, tiles and tubes, and tubing, and the unwrought zinc would then comprise zinc of all kinds imported in such forms as are most convenient for transport, *e.g.*, slabs, tiles and plates such as are used by galvanizers, cakes and ingots of crude

* Excluding the amount levied on Government stores.

zinc which contain a lower percentage of the metal than the spelter commonly used by galvanizers and brass foundries, and powdered zinc such as zinc dust and zinc ashes. This is in fact the basis of the classification in the Returns, but in practice the distinction between "wrought" and "unwrought" zinc is not accurately drawn, for zinc slabs are classed as "unwrought" and zinc tiles and plates as "wrought." Slabs, plates and tiles are assessed to Customs duty on the same tariff valuation—a procedure which could not be justified if the quality, and consequently the value, of the slabs were substantially lower than that of the plates and tiles—and all three should be classed as "unwrought." The following table gives the Customs duty collected on zinc slabs, tiles and plates since 1922-23:—

	Customs duty on zinc slabs, tiles and plates.	Tariff valuation.	Quantities of zinc on which the duty was paid.
	Rs.	Rs. per ton.	Tons.
1922-23	2,66,869	560	3,177
1923-24	2,65,205	500	3,536
1924-25	2,94,437	500	3,926
1st April to 31st December 1925 . . .	2,70,390	500	3,605
Monthly rate	30,043	...	401
Equivalent for 12 months	3,60,516	...	4,812

A comparison with the table given earlier in this paragraph will show that, on the average, slabs, tiles and plates amount to more than two-thirds of the zinc imported into India, and account for more than two-thirds of the Customs duty on this metal.

4. The production of commercial spelter is the result of an elaborate process of treatment. In the first instance, the zinc minerals are subjected to a mechanical process of concentration in order to get rid, as far as possible, of the impurities with which they are mechanically associated, but the chemically combined impurities cannot be removed in this way. The essential process of zinc smelting is the reduction of oxide of zinc by means of carbon in a distillation furnace, in which the zinc ores are charged mixed with coal or charcoal. The oxide is reduced at a high temperature by the carbon and carbon monoxide present in the furnace, and the metallic zinc is vaporised and eventually recovered in a liquid form in the cooling chambers to which it passes. In the United States of America the zinc ores, after concentration, can usually be charged direct into the furnace, and the product of distillation requires no

further treatment, but European ores must usually be subjected both to a preliminary and to a final process. One class of ore—calamine (*i.e.*, carbonate or silicate of zinc)—is calcined before distillation in order to remove the carbonic acid and water, or water only, which the ore contains. Another class of ore—blende (*i.e.*, sulphide of zinc)—is roasted in order to convert the sulphide as completely as possible into oxide. After distillation, unless the ore is of exceptional purity, the zinc produced by distillation undergoes a final refining process in order to get rid of the impurities still present, chiefly lead and iron.

5. The Fiscal Commission recommended that raw materials should ordinarily be admitted free of duty, pointing out that this was an obvious principle of general acceptance in protectionist countries. As regards partly finished goods, the Commission observed that the whole question was essentially a practical one, and that no definite principles could be laid down. The ideal from the point of view of industrial development would be to leave partly finished as well as raw materials free, unless the materials themselves required protection. In that case a conflict of interests would arise which might require careful adjustment. It is fortunate that our consideration of the proposal to remove the duty on spelter is not complicated by any conflict of interests such as the Commission apprehended. The Burma Corporation are at present the only firm in India who might conceivably undertake the manufacture of spelter, and they have no objection to the removal of the duty. The object, which protection seeks to attain, is the development of industries, and duties, which are likely to hinder development and do not benefit any domestic industry, are inconsistent with the protective policy. When the imported article is in fact used as a raw material of Indian industries and has no other use, it makes no difference whether strictly it should be classed as "a raw material" or amongst the partly manufactured goods, for the burden imposed on industries by the duty is precisely the same. The duty on spelter is clearly one of those which cannot be justified in principle, and ought to be abolished.

6. The original application for the removal of the duty on spelter was put forward by the Indian Galvanizing Company. This Company imports about 70 tons of spelter annually at present, and if their works were fully employed, would use from 150 to 200 tons a year. The duty being Rs. 75 a ton (15 per cent. on a tariff valuation of Rs. 500 a ton) the Company pays more than Rs. 5,000 a year as duty at present, and when working to capacity would pay from Rs. 11,000 to Rs. 15,000. The Company estimates that the cost of galvanizing is about 30 per cent. of the all-in cost of the articles they manufacture, and the cost of the spelter is about two-thirds of this percentage. The duty on spelter therefore represents about 3 per cent. of the cost of their finished goods. It

is clear that the duty adds appreciably to the cost of production. The Indian Galvanizing Company named four other firms who had made galvanized hardware in India, but was unable to say whether any of them was manufacturing at present. None of them has addressed the Board on the subject, and evidence in support of the application was tendered by one firm only, the Tata Iron and Steel Company, to whom the cost of spelter is important in their manufacture of galvanized sheet.

7. The Tata Iron and Steel Company commenced the manufacture of galvanized sheet in November 1924 and the output up to the end of March 1925 was 2,437 tons. For the period from April to August 1925, the Company have given detailed figures which can best be summarised in tabular form (see Appendix I). During the five months, the consumption of spelter amounted to 347 lbs. per ton of sheet and the duty on spelter increased the cost of galvanized sheet by Rs. 11-6 a ton which is 3-5 per cent. of the works cost of corrugated sheet. In this case also it is clear that the duty on spelter is a perceptible addition to the cost of production, and handicaps the manufacturer. The Company estimate that, when the full output of the sheet mills is attained, they will require 2,500 tons of spelter annually and the duty on this quantity would be Rs. 1-88 lakhs, but it seems likely that the estimate will be exceeded. The full output of the sheet mills is 36,000 tons but its distribution between black sheet and galvanized sheet depends on the state of the market. If half the output is taken as galvanized and only 2,500 tons of spelter are used, the gross consumption of spelter per ton of sheet would not exceed 311 lbs. as against 347 lbs. at present. This reduction may be quite feasible, for the consumption in the first months of manufacture was likely to be too high. But it is possible that the output of galvanized sheet may reach 21,000 tons, and in that case the consumption of spelter could not be much less than 3,000 tons involving payments of duty to the extent of Rs. 2-25 lakhs annually.

8. Galvanized sheet is a protected manufacture, and there are special reasons in such cases for removing the duties on materials in order that the protective duties may be kept as low as possible. Industries which will benefit from the removal of the duty. The Tata Iron and Steel Company is by far the largest single consumer of spelter in India and has most to gain from the removal of the duty. For reasons which are explained in the second section of this Report no great development of the galvanizing industry (apart from the manufacture of galvanized sheet) seems possible, and the quantities of zinc imported for the manufacture of galvanized hardware will be inconsiderable. The other consumers, who are likely to benefit from the removal of the duty, are the manufacturers of brass and other alloys containing zinc. When the Board commenced this enquiry, a communiqué was published inviting representations from those interested in the matter, but

none was received and we are unable, therefore, to examine this aspect of the case in detail. The reason for this abstention lies, we think, in the fact that manufactures of this sort have yet to be established in India on a large scale. The engineering firms make small quantities of brass and other alloys to meet their requirements; thus for example, the Tata Iron and Steel Company use zinc in making Babbitt's metal for bearings. Brass manufacture is also carried on in a small way by a number of Indian firms in many different places. It is probable, therefore, that the removal of the duty on spelter would affect a large number of manufacturers, but the benefit accruing to any one firm would not be considerable, and for this reason they may have refrained from approaching the Board. The small Indian brass makers, moreover, are unorganized and may not have realized the importance of making their wishes known. Yet the demand for zinc in brass manufacture is substantial, as is shown by the ready sale to the brass makers of the zinc dross recovered from the galvanizing baths by the Tata Iron and Steel Company and the Indian Galvanizing Company. In the immediate future it is the small users of the metal who would benefit, but the eventual establishment of a large scale brass industry is a possibility that cannot be ignored, and projects with that end in view have already been mooted by important British firms. Whether these projects merit State encouragement is a question we shall have to consider when the representations of these firms (already referred to the Board) are examined. But it is clearly desirable that Customs duties, which militate against the establishment of brass manufacture on a large scale, should be removed and the duty on spelter is one of these.

9. Our recommendation is that the duty on spelter should be removed at the earliest opportunity. It will result in a reduction of between 3 and 4 per cent. in the cost of galvanized sheet and of about 3 per cent. in the cost of galvanized hardware. In addition it will benefit a number of small manufacturers of brass and other alloys, and it might assist the establishment of brass manufacture on a large scale. The loss of revenue occasioned by the removal of the duty would be about Rs. 5 lakhs at the present rate of consumption, or if allowance be made for the larger consumption of spelter at Jamshedpur when the sheet mills reach their full output, Rs. 6 lakhs. We have considered whether the duty should be retained on those imports where the zinc has been given a special shape, such as zinc sheet, rolled zinc, boiler tiles and zinc tubes and tubing, about which no special representation has been made, but we do not consider this course is advisable. The imports of this sort are apparently small in quantity, the revenue derived from the retention of the duty would be trifling, and difficulties might arise in the Customs when it was necessary to discriminate between zinc which was dutiable and zinc which was not. For this reason we propose that all kinds of zinc, which are at present subject to duty under entry No. 98 in the statutory Tariff Schedule, should be admitted free.

SECTION II.

Proposal to enhance the duty on imported galvanized hardware.

10. The Indian Galvanizing Company was established in 1913 and commenced manufacture two years later. The claim of the Indian Galvanizing Company. Its products are made from steel sheet which is galvanized (i.e., coated with zinc) in the Company's works. During the war and for two or three years afterwards the Company was chiefly concerned in the manufacture of buckets, for which there was then a considerable demand, but latterly it has been found impossible to compete with the cheap bazar bucket made chiefly of galvanized sheet and touched up with aluminium paint. Compelled to turn its attention in other directions, the Company erected a plant for the manufacture of Hamilton Poles such as are used by the Government Telegraph Department, and also pushed the production of other galvanized articles, e.g., bath tubs, kneading troughs, tanks, drums and kegs. For the reason given in paragraph 1 we have not considered in this enquiry the question of the Hamilton Poles, which are classed as machinery and pay duty at $2\frac{1}{2}$ per cent. on importation, but only the claim for a higher duty on galvanized hardware which is subject at present to a 15 per cent. duty. The Company justify their claim by pointing out that the Steel Industry (Protection) Act has imposed a higher duty on steel sheet and that the competition of imported galvanized hardware has become more and more severe. It was also urged in support of the application that galvanizing firms deserve encouragement, because their plant was essential to all engineers, particularly shipbuilders and ship repairers, although the work of this kind at any one centre was not sufficient to keep a galvanizing firm fully employed. The specific proposal made was that the duty on galvanized hardware should be raised to at least 20 per cent.

11. It was not clear from the application whether the Company asked for substantive protection or merely a re-adjustment of the duty to compensate for the increase in costs occasioned by the protective duty on steel sheet, and the Board drew special attention to this point in their questionnaire. The questions and answers on this point were as follows:—

The Company's claim primarily for equality of tariff treatment.

Q. 18.—Do you propose that the duty on imported galvanized hardware should be increased merely to the extent necessary to compensate for the duties on spelter and steel sheet, or do you also claim substantive protection for the galvanizing industry?

A.—Yes, to the extent necessary to compensate for the duties on steel, spelter and other materials.

Q. 25.—Do you consider that the industry will eventually be able to dispense with protection and face world competition unaided?

...—Yes, given fair conditions, i.e., if all duties on raw materials were removed or equivalent protection given.

Q. 26.—If your answer to Question 25 is in the affirmative, what are the reasons why protection is required now?

A.—On account of the handicap we are working under owing to the heavy steel duties now in force; also duty on spelter now imported.

It is clear from the answers that the claim, as formulated by the Company itself, is primarily for the equality of tariff treatment rather than for substantive protection, and this aspect of the case will be examined first.

12. As the Company's output consists of a number of products of varying weight and cost we did not attempt to analyse the cost of individual products but obtained from the Company an estimate of what their total cost would be if their works were fully employed, when their annual requirements would be 1,000 tons of sheet and from 150 to 200 tons of spelter. The analysis is as follows:—

	Rs. Lakhs.
Cost of steel sheet without duty	1.70
Cost of spelter without duty	0.64
Other manufacturing costs	2.23
Total cost other than Customs duty on materials	4.57
<i>Duty on materials—</i>	
Duty on steel sheet	0.30
Duty on spelter	0.11
Duty on other materials	0.02
Total amount paid as duty on materials	0.43
Total works costs	5.00
Depreciation	0.25
Interest on working capital	0.15
Agency and head office charges	0.33
Return on fixed capital of Rs. 4.6 lakhs at 8 per cent.	0.37
Total overhead and profit	1.10
All-in cost including profit	6.10

It will be seen that the Company pays in Customs duty on materials Rs. 43,000 to produce goods valued at about Rs. 6 lakhs, and the incidence of the charge is about 7 per cent. Imported goods of the same value would have paid about Rs. 80,000 in duty, and even if it be assumed that the value of the imported goods is 20 per cent. less than the cost of similar goods made in India, the duty paid on them would not be less than Rs. 64,000. It is evident, therefore, that the galvanizing industry is not in any way handicapped by the

operation of the present tariff, but, on the contrary, enjoys substantive protection of about 5 per cent. which the removal of the duty on spelter would increase to about $7\frac{1}{2}$ per cent. The protective duty on steel sheets adds about Rs. 15,000 a year to the Company's costs when working to capacity and as the duty on spelter costs at least Rs. 11,000, after its removal the industry will be little if at all worse off than it was before the Steel Industry (Protection) Act was passed. No case for the re-adjustment of the duties in order to secure equality of tariff treatment has been made out.

13. It became evident in the course of the oral evidence that the Company desired an increase in the duty on galvanized hardware whether it could be justified on the grounds put forward in the answers to the questionnaire or not, and Mr. Bishop, the Company's representative, expressed grave doubt whether the manufacture could be continued if the assistance given were limited to the removal of the duty on spelter. It is necessary, therefore, to review the claim in the light of the conditions laid down by the Fiscal Commission. It can fairly be urged, we think, that the industry has considerable natural advantages. Its principal material—steel sheet—is produced in India and is itself a protected manufacture, so that galvanizing has some claim to encouragement as a branch of the steel industry, notwithstanding the fact that for the present spelter must be imported. The industry does not require the use of unusually expensive and complicated machinery, or the employment of imported and consequently expensive labour, and Indian workmen can be trained to do all that is necessary under the guidance of one or two skilled supervisors. The Company put the case fairly when they say that there are no conditions as regards labour or climate or material which should prevent the industry being successfully carried on in India. To this extent there is a case for protection. But in other respects the case is defective. The Indian market for galvanized hardware is a very small one leaving little scope for development, it has not been shown that the second condition laid down by the Fiscal Commission is satisfied, and no serious attempt has been made to deal with the third condition and to show that the industry can eventually dispense with protection.

14. The imports of galvanized hardware are not shown separately in the Trade Returns, so that the extent of the market can only be estimated approximately. Admittedly, however, the demand for buckets is larger than for any other galvanized article, and indeed there is apparently no bazar demand for any other articles of this class. The value of the imports of buckets galvanized or tinned ("tinned" must be negligible) during the five years 1919-20 to 1923-24 was Rs. 7.29 lakhs or an average of Rs. 1.46 lakhs, and the imports of 1924-25 were slightly below the average at Rs. 1.42 lakhs. The share of Calcutta was Rs. 1.09 lakhs for the five years, or an average of Rs. 0.22 lakh a year. A galvanizing factory at Calcutta can hardly expect to sell its products except in the area commercially commanded by that port, so that

Case for substantive protection.

Extent of the Home market for galvanized hardware—buckets.

the additional market for buckets, which protection might give the industry in this area, would be very small. It is evident that neither the imported bucket nor the product of Indian galvanizing works can displace the cheap bazar bucket made of galvanized sheet and protection is powerless to assist the galvanizing industry to meet competition of the latter kind.

15. Apart from buckets the most important articles the Company manufacture are baths, tanks, kneading troughs, telegraph poles, and drums and kegs. The following table gives the percentages in value of certain articles in the Company's output for the three years 1922 to 1924:—

	Percentages.		
	1922.	1923.	1924.
Galvanizing works done for other parties, <i>e.g.</i> , engineering firms	7.5	7.2	4.5
Buckets	46.1	12.4	6.3
Drums and Kegs	38.2	14.4	10.4
Baths, tanks, and kneading troughs	3.0	20.6	36.0
Telegraph poles	2.2	17.3	15.9
Miscellaneous articles	3.1	28.0	20.9

The significant features in the table are the decline in the sale of buckets and drums and kegs from 84 to 17 per cent. and the increase in the sale of other galvanized articles from 6 to 57 per cent. The drums and kegs are not strictly products of the Indian galvanizing industry, for they are not galvanized by the Company but made from galvanized sheet. The telegraph poles are also not in evidence in this enquiry. The bulk of the sales of baths, tanks and kneading troughs in 1924 were Government orders, and these orders were the principal cause of a 50 per cent. increase of the turn-over in that year. It is very far from clear that there is any considerable demand for articles of this class or for the miscellaneous articles. If the imports of buckets into India are worth less than Rs. 1.5 lakhs on the average, the total imports of the galvanized hardware may not exceed Rs. 5 lakhs and the imports into the Calcutta area in that case could hardly be more than Rs. 2 lakhs at the outside. If so, the demand is not sufficient to keep galvanizing works fully employed at any one centre in India, and the industry does not possess a large home market in the sense demanded by the Fiscal Commission.

16. It is of course possible that the demand for galvanized hardware is larger than we suppose it to be, but the *onus* clearly lies on the applicants for protection to show that the market exists. All the information available suggests that the total demand for galvanized hardware in

Industry does not fulfil conditions laid down by the Fiscal Commission.

India is narrowly restricted, and no reasons for expecting a rapid increase have been given. In these circumstances we are not satisfied that protection would result in any extension of the industry, or even that the single firm which has come before us would find enough work to secure a capacity output. In reply to our enquiry whether it was claimed that the second condition laid down by the Fiscal Commission was satisfied the Indian Galvanizing Company stated that without protection the industry would not develop at all. This may be quite true, but it has still to be shown that protection would result in development. As regards the third condition, the Company claim that—given fair conditions—the industry could eventually dispense with protection, and that the need for protection at present arose from the handicap of the duties on materials. We have already shown that the duties on materials do not in fact handicap the industry which is better off under the present tariff than it would be if there were no duties at all. It is not these duties therefore that create the need for protection, and no other explanation of the causes has been given. Apart from the difficulty in keeping the works fully employed, it has not been suggested that the industry is faced by any special difficulty of a temporary kind which may ultimately disappear, and we have already expressed our doubt whether protection could do much to increase the output. The Indian Galvanizing Company have now been working for ten years and should be able to gauge the position accurately, and if there were reasons for expecting that the cost of production would ultimately be lower, we must assume that they would have been stated. It has not been made clear that the industry will eventually be able to dispense with protection, or that the third condition laid down by the Fiscal Commission is satisfied.

17. For the reasons explained in paragraphs 10 to 16 we are unable to recommend the imposition of a protective duty on imported galvanized hardware. The only proposal we have to place before the Government of India is therefore the removal of the 15 per cent. revenue duty on imported zinc and spelter of all kinds (see paragraph 9). In concluding this report we desire to acknowledge the assistance we have received in our enquiry from the two firms who gave evidence. Mr. Ginwala, who returned from leave after the hearing of the evidence had been concluded, does not sign the Report.

G. RAINY—*President.*

J. MATTHAI—*Member.*

C. B. B. CLEE—*Secretary.*

14th April 1926.

APPENDIX I.

	Tons.
Production of galvanized sheet	4,108
Quantity of spelter used	636.55
Quantity of zinc dross recovered	138.50
Nett consumption of spelter	498.05
Gross consumption of spelter per ton of sheet	347 lbs.
Nett consumption of spelter per ton of sheet	272 lbs.
	Rs.
Gross cost of spelter per ton of sheet	101.68
Nett cost of spelter per ton of sheet	79.70
Cost of duty on spelter per ton of sheet	11.62
Percentage of works cost of sheet represented by duty on spelter—	
(a) Plain sheet	3.69 per cent.
(b) Galvanized sheet	3.48 per cent.

Evidence.

DEPARTMENT OF COMMERCE.

RESOLUTION.

TARIFFS.

Delhi, the 28th March 1925.

No. 38-T. (2).—The Government of India have received a number of representations to the effect that the development of certain industries in India is hampered by the fact that the duty on the finished article is lower than the duty on the materials which have to be imported for the manufacture of that article. A list of such representations is appended to this Resolution. The representations will now be referred to the Tariff Board. It is requested to examine these representations and any others of a similar nature which may be brought to its notice and to make such recommendations, whether general or special, as it thinks fit.

2. Firms or persons interested in the above enquiry should address their representations direct to the Secretary of the Tariff Board.

ORDER.—Ordered that a copy of the above Resolution be communicated to all Local Governments and Administrations, all Departments of the Government of India, the Director General of Commercial Intelligence, the Indian Trade Commissioner in London and the Secretary of the Tariff Board.

Ordered also that it be published in the *Gazette of India*.

D. T. CHADWICK,

Secy. to the Govt. of India.

List of representations.

No.	Applicant.	Manufactured articles or works.	Rate of duty to which now subject. <i>Ad val.</i>	MAIN COMPLAINT THAT MATERIALS ARE ASSESSED AT HIGHER DUTIES.		Subsidiary request.
				Articles.	Duty.	
1	The Indian Galvanising Company, Calcutta.	Galvanised steel poles and hardware.	2½ or 15 per cent.	Spelter.	15 per cent.	Protection for galvanised hardware and steel poles.

Press Communiqué issued by the Tariff Board on the 19th September 1925.

Representations have been made to the Tariff Board by the Indian Galvanizing Company and the Tata Iron and Steel Company asking that duty on imported spelter may be removed in the interests of the galvanizing industry. The Indian Galvanizing Company have also asked that the duty on imported galvanized hardware may be raised from 15 per cent. to 25 per cent. The Board will hear evidence on both points in October, and will be glad to consider representations from other firms or persons who may be interested in the removal of the duty or who may wish to be heard regarding the proposed increase of the duty on galvanized hardware. The questionnaire (reproduced below) which the Board have addressed to the two firms named above in connection with the removal of the duty on spelter will indicate the points on which information is desired.

2. All representations should reach the Board at their office in No. 1, Council House Street, Calcutta, not later than the 10th October, and all firms or persons who desire to give oral evidence should inform the Board before that date.

QUESTIONNAIRE FOR THE GALVANIZING FIRMS.

1. Is duty levied on the zinc which you import on a tariff valuation or *ad valorem*?
2. Would the zinc which you import, be classified in the Trade Returns as "unwrought," "wrought" or "other sorts"?
3. What is the ordinary trade description of the zinc you import?
4. What is the present price—f.o.b. a British port and c.i.f. Calcutta of the zinc which you import and what have been the maximum and minimum prices during the last two years?
5. What is the amount of the Customs duty per ton on the zinc you import?
6. What quantity of zinc do you require annually according to your present output of galvanized goods, and what quantity would you require if you attained the full output of which your works, as at present equipped, are capable?
7. What percentage of the total cost of the galvanized articles produced by your firm is represented by
 - (a) the cost of the zinc or spelter used in their manufacture, and
 - (b) the cost of the duty on the zinc or spelter?
8. What are the principal industrial uses of spelter in India, apart from galvanizing, and what other Indian industries would be likely to benefit from the removal of the duty?
9. Is commercial spelter manufactured in India at present and if so where and by what firms?

QUESTIONNAIRE FOR THE INDIAN GALVANIZING COMPANY.

1. When was your Company established and when did manufacture commence?
 2. Where are your works situated and what reasons influenced the choice of a site?
 3. Apart from Hamilton poles and galvanized buckets, what are the principal articles of galvanized hardware which your firm manufacture?
 4. What has been the actual output at your works, in each of the last three years, of galvanized buckets and of the other articles mentioned in your answer to question 3? If possible both the number or quantity and the approximate value of the output of each article should be given.
 5. According to the Trade Returns the value of the imports of buckets of tinned or galvanized iron in 1924-25 was Rs. 1,42,352. Can you estimate from your knowledge of the course of prices during that year the approximate number of buckets imported on the assumption that the number of tinned buckets was negligible?
 6. The Trade Returns do not give separate figures for other articles of galvanized hardware. Can you give any estimate of the probable demand in the area commanded by your factory for the articles mentioned in your answer to question 3?
 7. Are there any other firms in India besides the Indian Galvanizing Company which manufacture galvanized hardware?
 8. What is the fixed capital expenditure incurred by your Company on
 - (a) buildings.
 - (b) machinery,
 - (c) other fixed capital charges?
- The cost of the plant especially erected for the manufacture of Hamilton poles should be given separately.
9. What amount has been written off the block on account of depreciation since manufacture commenced?
 10. What raw materials do you use besides steel sheet and spelter?
 11. You have stated that your total consumption of steel sheets when your works, as at present equipped, were fully employed would be 100 tons a year. What would be the approximate value of your output at current prices at this rate of consumption?
 12. What would be the approximate total works cost of your output for a year if the factory were fully employed throughout the year?

13. What percentage of the total works cost would be accounted for by—

- (a) steel sheet
- (b) spelter
- (c) other items?

14. What is the sum required annually at income-tax rates to provide for depreciation on your buildings and plant?

15. What sum would you require as working capital if the works were fully employed, and at what rate would interest be payable?

16. What sum is required annually to meet agency and head office charges?

17. Taking the total works cost as 100 what percentage additions would be necessary to cover—

- (a) depreciation,
- (b) interest on working capital,
- (c) agency and head office charges?

18. Do you propose that the duty on imported galvanized hardware should be increased merely to the extent necessary to compensate for the duties on spelter and steel sheet, or do you also claim substantive protection for the galvanizing industry?

19. When the factory is fully employed the duty on steel sheet apparently increase the works cost by Rs. 3,000 a year (100 tons at Rs. 30 a ton). What quantity of spelter would you require annually and what would be the duty payable on that quantity?

20. Do you claim that India possesses natural advantages for the galvanizing industry, notwithstanding the fact that spelter is not produced in India?

21. Does the work done in your factory require the employment of imported skilled labour or supervision? If so, how many imported hands would you require when the works were fully employed, and what percentage of the total works cost would their salaries represent?

22. What number of workmen are employed at present and what is the amount paid annually in wages? What would be the number of workmen and the amount paid in wages if the works were fully employed?

23. Can you throw any light on the question of the market for galvanized hardware in India and the extent to which the industry might develop in favourable circumstances?

24. Do you consider that, if protection is withheld, the industry will not develop at all, or will not develop so rapidly as is desirable in the national interest?

25. Do you consider that the industry will eventually be able to dispense with protection and face world competition unaided?

26. If your answer to question 25 is in the affirmative, what are the reasons why protection is required now?

27. If you claim substantive protection, how do you propose that the amount required should be determined?

28. Please furnish the Board with a statement comparing the all-in cost of typical articles of galvanized hardware with the price obtainable for such articles in Calcutta in competition with imported hardware.

29. What countries are the principal exporters of galvanized hardware to India?

Witness No. 1.

THE INDIAN GALVANIZING COMPANY, LIMITED.

WRITTEN.

Statement I.—Representation, dated 23rd May 1924, to the Member of Council in Charge, Commerce and Industries Department, Simla.

We beg to bring to your notice the serious hardship which will result to this Company from the adoption as they stand of the recommendations of the Tariff Board.

Before going into these details we wish to lay before you the position which this Company occupies in the industrial activities of the country and of Bengal in particular.

The Company which was floated just before the war has been up to recently chiefly concerned in the manufacture of buckets for which there was a large demand during the war. Of recent years with the importation of cheap galvanized sheets this business has dropped owing to the bazaar sheet made bucket being adopted for the cheap bulk trade of the country. This Company has therefore had to turn in other directions and in particular has successfully carried out contracts for galvanized articles for the Ordnance and other Government Departments, where really galvanized articles are required, i.e., made from Black Sheets and subsequently galvanized all over as contrasted with the bazaar article made mostly from galvanized sheets and painted with aluminium paint to look like galvanizing on the remaining parts. The Company also have been to a great expense in laying down plant for the manufacture of Hamilton Poles similar to that used by the Government Telegraph Department at Alipore. It was understood that should the Government Works at any time be unable to cope with requirements they would be only too glad to avail themselves of the facilities offered by our works.

Unfortunately the installation of our plant coincided with the recent retrenchment of all possible expenditure with the result that no orders have been placed with us for this material by the Telegraph Department and there does not appear to be any immediate likelihood of this being done. The Company has therefore had to look elsewhere for pole orders. It is here, however, that even the present tariff inflicts great hardship upon us since whereas imported steel poles come into the country under only 2½ per cent. duty under the Electrical Transmission Material Clause we on our part have to pay 10 per cent. duty on sheets and 15 per cent. on spelter and other materials for galvanizing.

With the new duties our position will be much worse in that we shall pay a duty or additional price equal to 20 per cent. on our sheets while the imported poles are apparently still to come in at 2½ per cent.

We maintain that the Hamilton pole is suitable in every way for the great majority of the requirements of this country and this is more than borne out by the very extensive experience which the Government have had in connection with the Alipore Works of the Telegraph Department and the very large number of such poles which they have turned out.

Further for heavier lines lattice work poles can be and are frequently used. If therefore imported poles are allowed to enter at 2½ per cent. it means that structural engineering concerns in India any of whom can manufacture lattice and similar poles will be handicapped by paying the equivalent of a 20 per cent. duty on their material, whereas imported poles will only pay 2½ per cent.

We maintain therefore that all imported poles should pay 25 per cent. duty and be scheduled with structural steel-work.

Galvanized hardware.—As you will realise our manufactures are of the same class as imported galvanized articles which also are really galvanized

as opposed to the bazaar product. The competition with cheap imported galvanized articles has recently been becoming more and more severe and we therefore claim that as an industry making a similar article we should not be handicapped by extra duties now to be imposed to assist the Indian Steel Industry. We therefore have to ask that the duty on galvanized hardware be increased from 15 per cent. to a minimum of 20 per cent.

Galvanizing.—Of the cost of galvanizing the price of spelter or zinc represents roughly two-thirds. On this commodity a 15 per cent. duty is levied although no spelter is produced in India and there is no likelihood as far as we know of this ever being the case. The Tariff Board has accepted the principle of the abolition of such duties in the case of sulphur and we claim a similar concession in the interests of all galvanizers, not least Messrs. Tatas in the production of corrugated and plain galvanized sheets, and all engineers and machinery makers who are regularly using spelter in the manufacture of brass. The very extensive use of brass articles by all classes of Indian people may also be cited as an additional reason for cheapening the cost of brass manufactured in this country.

Finally we would point out that galvanizing firms merit encouragement from the point of view that their plant is essential to all engineers particularly shipbuilders and ship repairers though on such work alone in any one port of India no galvanizing company could exist.

Hence Galvanizing Companies in India must be manufacturers also and as such their interests and expansion are intimately connected with steel production in the country. Up to the present Messrs. Tatas have not been in a position to supply sheets such as we use but we shall be only too glad to avail ourselves of their material as soon as this is on the market. The total consumption of steel sheets by this Company when fully employed with the present plant would be approximately 100 tons per annum.

We summarise our recommendations as follows:—

1. Duty on all imported steel poles of whatever type and for whatever purpose to be 25 per cent. *ad valorem* and such poles to be classed as structural steel work.
2. Duty on galvanized hardware to be increased to at least 20 per cent.
3. Duty on spelter to be abolished.

Statement II.—Representation from the Indian Galvanizing Company, Limited, dated the 3rd April 1925, to the Tariff Board.

We addressed in May 1924 the Commerce and Industries Department regarding the hardships caused to this Company owing to the enhanced steel duties and the duty on spelter. We note that our case will now be considered about and we trust that you will be able to go into the matter without delay as so much time has already elapsed.

We enclose herewith a copy of our letter* to the Commerce and Industries Department dated the 23rd May 1924, which details the various items on which we claim consideration.

We trust that in any case there will be no delay in consideration of the spelter import duty to the abolition of which, we feel sure there can be no possible objection, as this duty heavily enhances the cost of galvanizing, this abolition will be of material assistance to us.

The question of Hamilton Pole manufacture is also one of importance to us and we feel that the present duties are equivalent to protecting imported poles to the complete detriment of our prospects as a young manufacturing enterprise in this country seeing that we pay duties or an increase in the cost of steel, equivalent to 20 per cent., whereas imported poles are charged at the rate of 2½ per cent.

Statement III.—Letter dated the 14th October 1925, from the Indian Galvanizing Company, Limited, forwarding their replies to questionnaires.

With reference to your letter No. 529 of the 19th ultimo and telephone conversation, we have pleasure in handing you herewith replies to the questionnaires sent us with your letter under reference. We note that the present enquiry is not concerned with the increase of duty on transmission poles. We have to request that the figures given with regard to our output, costs and manufacture in our answers to your questionnaires may be treated as strictly confidential.* The writer will appear before the Board on Monday next, the 19th instant, at 11 A.M. to give oral evidence.

(1) Replies to Questionnaire for the Galvanizing Firms.

1. Duty is levied on spelter at the rate of 15 per cent. on Rs. 25 a cwt., which is the Tariff valuation.
2. The Zinc we import is classified as spelter, plate or plates, which necessarily means unwrought.
3. Soft or virgin spelter.
4. The present net price of spelter f.o.b. British Port is £34-17-6 a ton, the net price in Calcutta being about Rs. 32 a cwt. Our maximum price in 1923 was Rs. 33-8 a cwt. and the minimum Rs. 28-4 in 1924, the maximum price was Rs. 32-8 the minimum being Rs. 27-8 net.
5. Rs. 75 a ton.
6. In 1923 we imported 73 tons, in 1924 69 tons. Working to our full capacity we should use 150—200 tons.
7. Galvanizing represents on an average 30 per cent. of total cost.
Cost of spelter represents $\frac{1}{3}$ cost of Galvanizing=20 per cent. total cost (a).
Hence duty at 15 per cent.=3 per cent. total cost (b).
8. In the form of sheets and boiler tiles and as mixed with copper to form brass. All Engineering industries would benefit from the removal of the duty.
9. No.

(2) Replies to Questionnaire for the Indian Galvanizing Company, Limited.

1. Manufacturing commenced on present site in 1923. Company was formed in 1913.
2. Originally at Kidderpore but owing to restricted space, we were obliged to transfer the plant to Chandapara Lane, Ghosery, that being where a cheap site was obtainable and labour was available.

* This stipulation was subsequently withdrawn.

3. Tanks, Drums and Kegs, Bath Tubs, Kneading Troughs, and other smaller items.

4.

	1922.	1923.	1924.
Material galvanized for other parties.	7.5 per cent.	7.2 per cent.	4.5 per cent.
Material manufactured and galvanized—			
Buckets	46.1	12.4	6.3
Baths . . . . .	.4	.4	10.4
Tanks	1.0	13.4	12.0
Kneading Troughs and Tubs I. G.	1.6	6.3	13.6
Telegraph Poles . . .	2.2	17.3	15.9
Miscellaneous articles .	3.1	28.0	26.9
Material manufactured but not galvanized—			
Drums and kegs . . .	38.2 per cent.	14.4 per cent.	10.4 per cent.

5. We regret we cannot estimate the approximate number of buckets imported in 1924-25, nor can the Collector of Customs help us, he having advised that no analysis is kept of the importation of hollow ware. If we assume that the figures represent mainly a cheap type of bucket of an average size of 12 inch, the number involved would be approximately 1,20,000.

6. It is impossible to estimate future demands. The bulk of the figures shown under the headings of Tanks, Bath Tubs and Kneading Throughs represent Government demands which we have no means of estimating.

7. Galvanized Hardware has been made by the Sirdar Carbonic Acid Gas Company, Bombay, W. Leslie and Company, Calcutta, P. N. Dutt, Calcutta, Marwar Galvanizing Company, Calcutta, but as to whether these concerns are manufacturing at the present time or not, we cannot say.

8. The total cost of buildings was Rs. 99,478-2; Machinery Rs. 3,01,481-14-3; Furniture Rs. 932-11; Tubewell Rs. 8,400; Salami, etc., of land Rs. 48,126-4. The cost of the plant especially erected for the manufacture of Hamilton Poles Rs. 79,921 exclusive of buildings.

9. Rs. 1,37,679.

10. Flat and Round Iron, Hoop Iron, Rivets, Acid, Block Tin, Muriate of Ammonia, Coal, Coke, Cast Iron parts for Telegraph Poles, Sawdust, Bucket Ears, Pig Lead, etc., etc.

11. Figure given was 1,000 tons a year. Estimating at 700 per ton this would give a total output of Rs. 7,00,000.

12. We should estimate Rs. 5,00,000.

13. (a) 40 per cent.

(b) 15 per cent.

(c) Including Labour 45 per cent.

14. From Rs. 25,000 to Rs. 26,000 yearly from 1922 to 1924. Prior to 1922, the sum paid was very much less.

15. Two lakhs. Not less than 1 per cent above Bank rate.
16. Agency Rs. 9,000. Office Charges Rs. 23,600.
17. (a) On the basis of paragraph 11, 12 and 14, 5 per cent.
(b) On the basis of (at 7 per cent. say) 3 per cent.
(c) On the basis of (at 7 per cent. say) 6½ per cent.
18. Yes to the extent necessary to compensate for the duties on Steel, Spelter and other materials.
19. Estimate 150 to 200 tons. Present duty on which would amount to Rs. 11,250 to Rs. 15,000.
20. We claim that a galvanizing works in successful operation is a necessity at every large port or centre of the engineering industry in India or any other country. That there are no conditions as regards labour or climate or material which should prevent the industry being successfully carried on in India.
21. Yes skilled supervision. Two Percentage of total works cost in salaries would be 3.5 per cent.
22. Between 200 and 300. Rs. 60,000. With works fully employed figures would be approximately Rs. 400 and Rs. 1,20,000.
23. No.
24. It will not develop at all.
25. Yes given fair conditions, i.e., if all duties on raw material were removed or equivalent protection given.
26. On account of the handicap we are working under owing to the heavy steel duties now in force; also duty on spelter and all other commodities imported.
27. It should be made equivalent to that amount payable by us in present import duties.
28. 26G 12 inch Bucket Rivetted. Our cost.
Imported Cost Rs. 13-8 doz. Rs. 15-8
Special Railway Tanks Rs. 90 Rs. 92.
Bath Tubs 36 inch Rs. 6 Rs. 6-12
29. Chiefly United Kingdom.

Statement IV.—Letter dated 20th October 1925, from the Indian Galvanizing Company, Limited, submitting supplementary information.

As promised to-day, we enclose herewith statement showing proportion of our output taken up by various articles, from which you will see that the material manufactured and galvanized now forms the great bulk of our work. We have included with Kneading Troughs an article classed as "tubs f. G." which, like the Kneading Trough, is used only by the Army Department.

2. With regard to total turnover, that for 1923 showed an advance of 6 per cent. over 1922, while that for 1924 showed an advance of 50 per cent. The reason for the large increase in 1924, with the consequence of very much better results of the Company's working, was chiefly due to our receiving a large share of the Government requirements for the two years 1923-24, 1924-25, these both coming within the Company's financial year, which runs from January 1st to December 31st. The turnover for 1925 cannot, we fear, show any improvement on 1923.

3. With regard to our replies to your questionnaire we would confirm the following:—

In the first questionnaire in paragraph 4. The nett price in Calcutta of spelter represented the lowest market rate. The other rupee prices represented our actual cost of imported spelter.

4. *The cost of galvanizing.*—The figure of 20 per cent. given in paragraph 7 of the 1st questionnaire represents the proportion of total cost of manufacture, excluding Works salaries and overhead charges. On the other hand, the figure of 15 per cent. given in answer to paragraph 13-B of the 2nd questionnaire represents the proportion of total works cost, including overhead charges, when working on full time.

Enclosure.

Value of manufactures expressed as percentage of total turnover for the year.

Material galvanized for other parties.	1922.	1923.	1924.
	7.5 per cent.	7.2 per cent.	4.5 per cent.
<i>Material manufactured and galvanized.</i>			
Buckets	46.1	13.4	6.3
Baths	4	4	10.4
Tanks	1.0	13.4	12.0
Kneading Troughs & Tubs I. G.	1.6	6.8	13.6
Telegraph Poles	2.2	17.8	15.9
Miscellaneous articles	3.1	28.0	26.9
	54.4 per cent.	78.3 per cent.	85.1 per cent.
<i>Material manufactured but not galvanized.</i>			
Drums and Kegs	38.2 per cent.	14.4 per cent.	10.4 per cent.

THE INDIAN GALVANIZING COMPANY, LIMITED.

B.—ORAL.

Evidence of Mr. H. C. W. BISHOP recorded at Calcutta on Monday, the 19th October 1925.

President.—I think we might begin with the first question of the first questionnaire about the removal of the duty on spelter. You say that the zinc you import is classified as spelter, flats or plates. What would be the approximate dimensions of a plate?

Mr. Bishop.—Actual size of our slabs is about 1½" thick, 18" long and 8" broad.

President.—The whole question of the Customs classification is extremely obscure. We asked the Collector of Customs, Calcutta, who said* that slabs are classed as unwrought, and practically everything else as wrought. What he meant by "slabs," I don't know.

Mr. Bishop.—I think that different makers have different sizes.

President.—The object we had in view in asking that question was to find out whether there was a real distinction between wrought and unwrought spelter, because it might have served your purposes to remove the duty on the unwrought spelter, and to retain it on the wrought spelter. As nearly as I can make out, the distinction is not clear.

Mr. Bishop.—I think it would be easy enough to differentiate the wrought from the unwrought. Rolled zinc sheet is about the only form of wrought spelter that comes in.

President.—You have also mentioned boiler tiles.

Mr. Bishop.—It is hard to distinguish those from slabs.

President.—The Collector told us that the basis of the distinction was that spelter which could be used without manipulation was classed as "wrought." But what he meant by manipulation, I have no idea. As far as I understand the galvanizing industry, the spelter is put into a tank and melted.

Mr. Bishop.—It is melted up at once.

President.—There is no question of manipulation?

Mr. Bishop.—No.

President.—I don't think, as a matter of fact, it will make much difference, because if we exempt from duty "slabs," "plates" and "tiles," practically everything of importance from the revenue point of view would be exempted except the zinc sheets, and the imports of these are probably not large.

Mr. Bishop.—I don't think so. They are only used in making a very few specialised articles.

President.—Could you tell us for what purposes zinc sheets are used?

Mr. Bishop.—Some railways use them for carriage tanks instead of using galvanized tanks.

President.—That is to say instead of galvanizing the metal, they give the tank a zinc lining. Is that it?

Mr. Bishop.—They make the whole tank with zinc sheets. It is very expensive, but practically it lasts for ever.

President.—What would they be for?

Mr. Bishop.—Some of the railways use these tanks for carrying water over the carriages in the trains. I think that is about the only big use. One or two railways use it like that; some people will have kitchen tables covered with zinc sheets. I don't think it would make very much difference from the revenue point of view.

*Not printed.

President.—It cannot be a matter of much importance as far as I can see. The industrial uses of zinc are almost entirely in combination with other metals as an element in an alloy, or as an impure coating.

Mr. Bishop.—Yes. Any article made of zinc would cost at least twice as much as the ordinary article.

President.—What would be the approximate percentage of zinc in the spelter you usually buy? What is the standard you aim at or do you buy different qualities?

Mr. Bishop.—We buy pure virgin spelter. It is a trade name which is supposed to have 98 to 99 per cent. zinc purity.

President.—From the evidence we had from the Tata Company, there seems to be a very substantial difference between the prices. Between the 98 per cent. quality and the 99·5 per cent. quality, there might be a difference of a couple of pounds.

Mr. Bishop.—Prices always vary. The electrolytic brand (99·5 upwards zinc purity) is practically pure spelter and the price of that is generally £4 to £5 more.

President.—You have given a price of £34-17-6. That would be about 98 to 99 per cent. pure.

Mr. Bishop.—Yes. Cabled price on 20th October 1925, £43-2-6 c.i.f. Calcutta. Cabled price on 22nd September 1925, £39-15-0 c.i.f. Calcutta.

President.—Is that a quotation you recently received from England?

Mr. Bishop.—That was correct for the last consignment we had received shipped in July, but, since then, prices have gone up.

President.—I think the Tata Company gave us a rather higher figure than that. They usually gave it as c. i. f. The best quality of spelter having an approximate 99·9 zinc purity is about £43-5-6.

Mr. Bishop.—That is electrolytic.

President.—They say: "The price of zinc having a minimum zinc content of 98 per cent. guaranteed, but not much higher than this is approximately £40 c. i. f. Calcutta." But the price at which they imported in June last 50 tons of Victoria brand was £36-5-0 c. i. f. Calcutta.

Mr. Bishop.—Ours is a Continental brand as a matter of fact which is a bit cheaper than the British.

President.—I have got into some difficulty in trying to connect your rupee price per cwt. with the sterling price per ton. You say Rs. 32 a cwt. is the equivalent of £34-17-6 f. o. b. per ton.

Mr. Bishop.—I believe that Rs. 32 is the lowest rate at which we could get from the dealers here.

President.—In the first place Rs. 32 per cwt. is what you would have to pay if you bought from a dealer in Calcutta?

Mr. Bishop.—Yes.

President.—Do you ever buy from a dealer in Calcutta?

Mr. Bishop.—Very seldom.

President.—Taking the exchange at 1s. 6d. the f. o. b. price per ton is Rs. 465 and Rs. 32 per cwt. comes to Rs. 640 per ton. If you add Rs. 75 for the duty to Rs. 465, you get to Rs. 550. The freight and landing charges can hardly run to Rs. 90 a ton.

Mr. Bishop.—No.

President.—What freight do you pay on spelter?

Mr. Bishop.—It is actually 38s. 6d. as paid by us from the Continent.

President.—I should not have been surprised if it were a little higher.

Mr. Bishop.—I don't remember at the moment. I think it is about 30 shillings per ton and the landing charges, harbour dues, etc., should be about Rs. 7-8-0. Actually Rs. 8 per ton.

President.—The landing charges to your works would be about Rs. 7-8-0?

Mr. Bishop.—Yes.

President.—The freight would not be more than £2 anyhow?

Mr. Bishop.—No.

President.—That enables one to get somewhere near about.

Mr. Bishop.—That would bring about Rs. 28 per ton.

President.—If you allow Rs. 27 for the freight and another Rs. 7-8-0 for landing charges, making in all Rs. 35, that would bring the total to Rs. 575 (Rs. 465 plus Rs. 75, plus Rs. 35).

Mr. Bishop.—Yes.

President.—Are all the prices given in your answers dealers' prices?

Mr. Bishop.—The rest of the prices are our actual costs. We found Rs. 30 a cwt. to be a sort of mean for the last two years.

President.—I think your answers cover that point now. Apparently, with the quantities of spelter you have mentioned, the duty costs you at present from Rs. 5,000 to Rs. 5,500 a year.

Mr. Bishop.—Yes.

President.—And with your full output it will be Rs. 11,000 to Rs. 15,000.

Mr. Bishop.—Yes.

President.—There is one point which I want to ask you. Is the Hamilton pole which you make galvanized?

Mr. Bishop.—Yes.

President.—In these total quantities, have you included the spelter you use in making Hamilton poles?

Mr. Bishop.—Yes.

President.—Can you give an approximate estimate of the proportion of the spelter used by your firm which goes into the making of Hamilton poles?

Mr. Bishop.—I should think about half.

President.—In answer to question 7 you say that the cost of spelter represents two-thirds of the cost of galvanizing which is equal to 20 per cent. of the total cost of the articles you manufacture.

Mr. Bishop.—Yes.

President.—If you will look at your answer to question 17 in the other questionnaire, you give the percentage there as 15. Possibly the Hamilton pole has made the difference. If 40 per cent. is the cost of the sheet, 15 per cent. is the cost of the spelter and 45 per cent. is the other costs.

Mr. Bishop.—In these costs here I have not taken into account any standing charges.

President.—You mean things like management at the works?

Mr. Bishop.—Salaries and works standing charges other than the items of office charges and agency.

President.—Then taking the works cost in the sense in which the Board use it, 15 per cent. will be the correct figure.

Mr. Bishop.—No, that would be working under the most favourable conditions. As a matter of fact more than $\frac{1}{3}$ is now represented by spelter.

President.—I must adopt one figure, whatever it is.

Mr. Bishop.—I would like you to take 20 per cent. as really being more accurate. This 15 per cent. is based on the full output being achieved.

President.—I should expect, with the full output, the percentage of the cost of spelter to go up and not down, because your establishment charges will form a smaller percentage. I don't see why you should use less spelter per unit of production, because you have got a bigger output.

Mr. Bishop.—It is the case. Now we have to shut down at night, for instance, and then the bath gets cool. But this 15 per cent. would contemplate working day and night when you get a more level temperature and a more even coating than when you have to be continually altering the temperature. That is our chief trouble as compared with the people at Home.

President.—You would be getting a more economical use of spelter when the works are working to capacity?

Mr. Bishop.—Yes.*

President.—We may take it this way. 20 per cent. is what it is at present and 15 per cent. is what you hope to achieve.

Mr. Bishop.—That would be correct.

President.—I wonder if you could elaborate your answer to question 8. As we are now considering this question of the removal of the duty on spelter, we invited people to come forward, but no one has come forward. Do you know to what extent brass is actually made in this country out of the raw materials, copper, zinc and so on?

Mr. Bishop.—I could not give you any figure.

President.—Is it imported as brass, or are copper and zinc imported separately and made into brass in India? I have not yet succeeded in getting any information about that.

Mr. Bishop.—We sell the stuff we get back from the process which is called dross. It corresponds to hard spelter which is imported at a cheap rate, and all that goes up country to make brass.

President.—There must be some brass foundries, I have no doubt. What I want is to get some idea of the extent to which the brass makers will benefit from the removal of the duty.

Mr. Bishop.—Is it not possible to get anything from the Returns?

President.—The Returns show nothing. They only show that a certain amount of copper, a certain amount of zinc and a certain amount of brass are imported into India. That does not enable me to say how much of the zinc and how much of the copper is used in making brass. In the Returns showing the Industrial Establishments in India, there are only a few brass foundries mentioned. Do you think that brass is made principally by small establishments?

Mr. Bishop.—It is very easy to cast brass. Big engineering works cast their own brass for bearings, etc.

President.—What it means, so far as the manufacture of brass is concerned, is that no one would benefit very much from the removal of the duty, but quite a number of people would benefit a little.

Mr. Bishop.—That is what it comes to.

President.—You have already mentioned the use that it is put to. Do you know at all why the boiler tile is called a boiler tile?

Mr. Bishop.—They are put inside boilers to prevent electrolysis and corrosion. The corrosion is taken up by the zinc instead of the boiler shell.

President.—How exactly would it be applied to the material inside the boiler?

Mr. Bishop.—It is simply fastened to it inside.

President.—The tile would be a thin thing?

Mr. Bishop.—It would be about 1' thick. When the electrolytic action takes place between zinc and water, zinc is gradually eaten off instead of the shell of the boiler.

President.—It is not a lining then?

Mr. Bishop.—No. It is just fastened to the boiler.

President.—Is there any other fairly important industrial use of zinc you can think of, apart from the use of zinc for paint which is rather a different thing.

Mr. Bishop.—I think that the great bulk of the use of zinc the world over is in galvanizing.

Dr. Matthai.—With regard to your answer to the first question about the tariff valuation, I find that since 1923 it has stood at Rs. 25 a cwt.

Mr. Bishop.—Yes. They are revised as a rule every year.

* See para. 3 of Statement IV.

Dr. Matthai.—It has not been actually changed since 1923?

Mr. Bishop.—No.

Dr. Matthai.—Do you think that Rs. 25 a cwt. is a fair valuation? I will tell you why I ask you that question. Taking your f.o.b. price here as £34-17-6 and adding a couple of pounds to cover freight and so on, it works out almost exactly to Rs. 25 a cwt. at the rate of 1s. 6d. to the rupee.

Mr. Bishop.—Yes.

Dr. Matthai.—On that basis it would be a fair valuation.

Mr. Bishop.—Yes. The sterling price has gone up. On the other hand exchange has also gone up, so the nett result is the same.

Dr. Matthai.—How often do you import your spelter?

Mr. Bishop.—Generally every month.

Dr. Matthai.—If you take the cost of galvanizing and deduct the cost of spelter, the balance would be the cost of labour?

Mr. Bishop.—Labour, acid, etc.

Dr. Matthai.—But labour would be the main thing?

Mr. Bishop.—No, there is coke, acid, muriate of ammonia, and a certain amount of lead, etc.

Dr. Matthai.—Could you tell me roughly what proportion would be the labour charges?

Mr. Bishop.—About 10 per cent. on the whole, not more than that.

President.—In answer to question 22 of the second questionnaire, you have given the total wages working to capacity as about Rs. 1,20,000.

Mr. Bishop.—Yes.

President.—That is about 25 per cent. of your total works cost.

Mr. Bishop.—Wages are a very much higher percentage in the making up than in the actual dipping or galvanizing process.

President.—Coming on to the other questionnaire, I am very glad that you have seen your way to allow us to publish the greater part of the figures you have given. As regards the figures given in answer to question 4, I don't know that I fully understand the reasons why you regard it as very undesirable to publish them. Apparently you have no competitors in India!

Mr. Bishop.—We had up to a little time ago. We are always given to understand that other firms will come into the field. We have no data to go upon except the Government authorities who place some of the ordnance orders with us. They are constantly telling us that there are other firms who do similar things.

President.—As regards the figures in the form in which you have given them, I do not know that they are of great importance to us. But it is really important for us to have definitely on record the percentage in value of your output which goes into a particular commodity, because that is the only information you are able to give us as to the market.

Mr. Bishop.—We should like to group them in that case.

President.—The question of the market is a very important point.

Mr. Bishop.—Buckets, tanks, bath tubs, kneading troughs are all made out of black sheets and then galvanized afterwards. Drums and kegs are on the other hand made either from black sheets or from galvanized sheets. They are not made from black sheets and galvanized afterwards here. We don't galvanize them at all because it is too expensive.

President.—Is the drum made out of galvanized sheets?

Mr. Bishop.—Yes.

President.—Then it is hardly a product of the galvanizing industry so far as India is concerned. As far as the drum is concerned, the removal of the duty on spelter, for instance, would not affect that.

Mr. Bishop.—No.

President.—The main interest of that would be that it is an outlet for galvanized sheets made in India.

Mr. Bishop.—Yes.

President.—As Tata's can only make at the very outside about 15 per cent. of the total consumption of galvanized sheets, they are not particularly in need of a further outlet.

Mr. Bishop.—It is essential for us to make a living somehow.

President.—Quite definitely a distinction should be drawn.

Mr. Bishop.—Yes.

Dr. Matthai.—Why is it more expensive to galvanize these things?

Mr. Bishop.—We get a very much heavier coating. When sheets are galvanized, they are put through rolls and it is possible to get them off with the minimum amount of spelter. But as we have simply to dip the thing, we cannot get it off with a light coating.

President.—Perhaps the best plan is to leave this point at the moment and return to it later on.

You tell us in your answer to question 1 that manufacture commenced at the present site in 1923, and that the Company was formed in 1913. In 1913, did you actually commence to manufacture at the old site?

Mr. Bishop.—They commenced in 1915. We took over the managing agency at the end of 1920.

President.—I am not going to refer to the figures but merely to the fact that these items given in your answer to question 3 are the important things you manufacture.

Mr. Bishop.—Yes, other than poles.

President.—You have told the Government of India in your original letter* that during the war you had a big market for buckets.

Mr. Bishop.—That is correct.

President.—And now that market has to a large extent disappeared.

Mr. Bishop.—Yes.

President.—What is that due to in the main? Have you been cut out by the imported bucket, or by the bazar-made bucket which is made out of galvanized sheets locally?

Mr. Bishop.—Chiefly by the latter.

President.—As far as buckets are concerned, can protection do anything for you?

Mr. Bishop.—There is an import of galvanized buckets and there is no reason why we should not supply that demand.

President.—Still it cannot do very much for you.

Mr. Bishop.—Not in buckets alone but in other things. It would help us, for instance, in the case of bath tubs which are imported more than made here. It is reasonable to suppose that people will be less inclined to go in for these make-shift things as time goes on.

President.—But if you raise the price of the properly made bucket, you may increase the sale of the bazar bucket. In a country like India that is the natural result.

Mr. Bishop.—Yes.

President.—Supposing the protective duty enabled you to displace to a large extent the imported bucket in Bengal, it is not certain that you could do so in Bombay, because it would cost you a good deal to take your buckets to Bombay.

Mr. Bishop.—We could not compete in Bombay.

President.—Therefore you would not displace the whole of the imported buckets but only a part.

Mr. Bishop.—Yes.

President.—In addition there may be this factor, that, in proportion to the increase in the price, there may be a reduction in the total consumption of buckets of this standard, because people will say "If I have to pay so much, I am going to buy the bazar bucket."

Mr. Bishop.—May be. The market we have for buckets is with the people who want the really galvanized article.

President.—There is another point about buckets. According to the Trade Returns, the total value of the buckets imported is only Rs. 1,20,000, and I doubt whether more than half of that is within the range of your works.

Mr. Bishop.—Still, it will be a great help.

President.—You could not displace as much as 70 per cent. of the imports. At the most, you could only capture 50 per cent.

Mr. Bishop.—We would be very glad to do that.

President.—No doubt you would. What would be the common size of drums and kegs you make? Are they bigger than the buckets?

Mr. Bishop.—They run to five gallons. An ordinary petrol tin will hold 2 gallons and a kerosine tin 4 gallons.

President.—What are they principally used for?

Mr. Bishop.—Oil Companies use them for sending petrol to their up-country agents. Government also use them for military petrol requirements. A number of these are also used by the paint and chemical people and oil mills.

President.—As regards kneading troughs, is it to the military bakeries that you have been selling them?

Mr. Bishop.—Yes, to the Army Department.

President.—Is there any considerable market outside the Army?

Mr. Bishop.—No.

President.—There are not a great many European bakeries in India?

Mr. Bishop.—No market outside the Army.

President.—I was gratified to learn that Government had shewn a sudden desire to supply bath tubs, but although it is laudable, it is a little mysterious. Which Department have bought these?

Mr. Bishop.—It is practically all army requirements. We did not have the orders two years before.

President.—You have said in answer to question 6, "The bulk of the figures shown under the headings of Tanks, bath tubs and kneading troughs represent Government demands which we have no means of estimating." What it comes to is this that except buckets and to a lesser extent drums and kegs, there does not seem to be any galvanized article for which there is a considerable demand.

Mr. Bishop.—There is a considerable import of a cheaper kind of bath tub which we should be able to supply.

President.—Would the import of bath tubs exceed the import of buckets?

Mr. Bishop.—Not on the whole.

President.—Even then, it does not amount to very much. In answer to another question, you have given the value of your full output as about Rs. 7 lakhs.

Mr. Bishop.—Yes.

President.—If the buckets amount to only Rs. 1,40,000, it seems to me exceedingly doubtful if there is a sufficient demand for anything like an output of Rs. 7 lakhs.

Mr. Bishop.—At the moment there is not but we believe it can be increased if we are released from the handicap under which we are at present working due to the new duties on steel and duty on spelter.

President.—I will come to that in a moment. If the total market to be captured is very small, you cannot be certain that it is sufficient even to enable one firm to work to capacity. As far as any question of protection is concerned, it weakens the case very much, if there is little room for development. In a country like India you must call a galvanized article like a bath tub an article of luxury, because relatively speaking only very wealthy people can afford to buy it.

Mr. Bishop.—That is so but we make a large number of articles used for industrial purposes which in the aggregate amount to a large proportion of our production.

President.—Can you mention any other galvanized article for which there is a considerable bazar demand and where there is room for development?

Mr. Bishop.—There is nothing very big in itself but we make and galvanize the following which are some of the articles referred to above:—

Brackets.	}	Used for electrical transmission.
Earthing rings.		
Earth plates.		
Straining screws.		
Latrine buckets.	}	Household hardware.
Refuse tubs.		
Salamanders.		
Horse-feeding troughs.		
Watering cans.		
Elevator buckets.	}	Industrial articles.
Mortar pans.		
Wheel-barrows.		
Irrigation tubing.		
Air ducts and ventilation tubing for mines.		
Galvanized hook bolts.		
Railway latrine pans.		
Salt weighing pans.		

President.—I think there is a distinct difficulty about anything in the nature of substantive protection as opposed to removing any handicaps, because of the second condition laid down by the Fiscal Commission, viz., that without protection the industry will not develop at all or will not develop so rapidly as is desirable in the national interests. If there is nothing to develop it is very difficult to say that that condition is satisfied. Development must mean at least more than one firm.

Mr. Bishop.—We believe that there should be room for one firm at each of the big centres.

President.—It does not look to me as if there is much room for firms who specialise in galvanizing.

Mr. Bishop.—We serve all the local engineering people when they want anything to be galvanized, but the amount of this work is really not sufficient to keep anybody going.

President.—That raises another point. Taking the total value of the work you do for them in a year, what would be the percentage of that?

Mr. Bishop.—Galvanizing other people's materials—not more than 10 per cent. of our output.

President.—Supposing your firm were not in existence, is there any reason why one of the engineering firms should not have a department equipped to do that kind of thing?

Mr. Bishop.—They can, but the cost would be out of all proportion to the work. They will have to keep quite a lot of spelter locked up.

President.—It does not seem to me that it necessarily follows. If it is a work that would in any case have to be done, they would be able to get their price. Even though an engineering firm, were to do galvanizing work, as a small side branch, it could afford to do it and get its price.

Mr. Bishop.—It would make the price go up. It is not done so at home. Even the big firms send the galvanizing work out.

President.—Naturally, if there are galvanizing firms in existence they will always be able to under-cut an engineering firm with a small galvanizing plant. But supposing your firm disappears, if it is necessary to do the work, somebody will do it. You said in answer to one of the questions that you considered it necessary that there should be galvanizing works in every large centre of trade in India. My criticism would be that that is an over-statement. We do not know of any works in India except in Calcutta. If that be so, it is difficult to say that galvanizing works are a necessity, though they may be very desirable.

Mr. Bishop.—It has been the case in Bombay, i.e., there has been a galvanizing works there.

President.—I am glad to hear it. Your answer on that point is that galvanizing used to be done by certain firms but that you were unable to say whether they were manufacturing at this time or not. It can hardly be called a necessity if they have ceased to manufacture. The work, I take it, is done by somebody.

Mr. Bishop.—I consider in the national interests it is a necessity.

President.—I quite understand that in every large centre there is a certain amount of repair work to be done and that it may cause great inconvenience if it cannot be done locally. I also admit that, if there are no separate galvanizing works, the cost of getting it done may be higher. But it seems to me that it is going too far when you say that a separate galvanizing works is necessary at each centre because things can be done otherwise, that is my point.

Mr. Bishop.—You might say that you can get the repair work done at home.

President.—If you cannot get it done locally, it will have to be done somewhere else. There is no doubt about that. My point is rather this. It does not seem to me to follow that because it is very desirable that this work should be done locally, there ought to be a separate galvanizing works. Take, for instance, the Sirdar Carbonic Acid Gas Company people, whom you mention. You say that they used to make galvanized hardware. Did they specialise in that and do nothing else?

Mr. Bishop.—During the war they made buckets like us.

President.—Why do they call themselves "Sirdar Carbonic Acid Gas Company"?

Mr. Bishop.—The galvanizing work was perhaps only a branch of their works.

President.—They started making buckets and thought that they could do a certain amount of galvanizing work. Messrs. Leslie and Company cannot have been specialising in galvanizing work only.

Mr. Bishop.—Recently they have advertised themselves as galvanizers. I don't know how far they go.

President.—If it is really necessary to have galvanizing works at every industrial centre the only reply is that India cannot have them. The demand is so small that works could only exist in one or two places at the outside. Is not that so?

Mr. Bishop.—Yes.

President.—I have got to put you all these points because they are difficulties which have occurred to me and I am bound to put them to you.

Mr. Bishop.—It is hardly fair to us to take up that attitude. If the industrial side of the country is going to develop, there is all the more need for this kind of work to be done in the country.

President.—The point is that you cannot expect the industrial development of the country to proceed with equal rapidity in all directions.

Mr. Bishop.—No.

President.—It may be that India may be ready for rapid development in one branch of industry and quite unready for rapid development in another.

Mr. Bishop.—Quite so.

President.—In our first enquiry, we found a similar difficulty in the case of enamelled hardware. There were three or four small firms and it was very doubtful if the market was large enough to enable them to work to capacity. There was in addition a special difficulty. They said that it was no use putting an extra duty on because people would begin to use something else instead of enamelled ware. On that their case broke down. That is the second point. The first point is my doubt as to the sufficiency of the market.*

I added up the details you gave of the various items of fixed capital expenditure. It comes to Rs. 4,58,000. Is that inclusive or exclusive of Rs. 79,900 which is the cost of special plant for the manufacture of Hamilton poles?

Mr. Bishop.—Inclusive.

President.—That is to say, Rs. 79,900 is included in the Rs. 3 lakhs for machinery.

Mr. Bishop.—Yes.

President.—Then you have already told us that the Hamilton poles amount to half your output.

Mr. Bishop.—Yes, but only as regards consumption of spelter, not in value.†

President.—On that basis, would half your steel sheets and half your spelter be going into these poles?

Mr. Bishop.—Yes. But owing to the heavy sheets and relatively large article the finished price per cwt. is much lower than the bulk of our output.

President.—In your answer to question 10, you have given a list of the raw materials you use other than steel sheets and spelter. Of these which are you importing?

Mr. Bishop.—Everything except acid, coal, coke, cast iron parts and part of the flat and round iron sheets.

President.—It does not really matter whether you buy in India or not. In a certain sense you pay the duty because the price would be determined by the cost of importation.

I find a little difficulty in connecting up the figure you gave in answer to question 11 and the figure you gave in answer to question 12. You told us that working to capacity the works cost of all your output would be about Rs. 5 lakhs.

Mr. Bishop.—Yes.

President.—In answer to question 11 you say consuming 1,000 tons of steel sheets and working to capacity, the value of your output would be Rs. 7 lakhs. Adding depreciation, overhead charges and also an allowance for

* The list of articles given on page 33 shows that our existence is of service to a very large class of customers who would otherwise have no alternative but to import their requirements with consequent great delay. We believe that considerable expansion is possible in the demand for these items and that we merit assistance accordingly apart altogether from our position as potential steel users.—(Sd.) H. C. W. BISHOP.

† See Enclosure to Statement IV.

manufacturers' profit, I find I cannot get it much above Rs. 6 lakhs. I will give you the exact figures:—

	Rs.
Works cost	5,00,000
Depreciation at 5 per cent.	25,000
Interest on working capital at 3 per cent.	15,000
Agency and head office charges at 6½ per cent.	32,500
TOTAL	5,72,500

If you add profit at 8 per cent. on a capital of Rs. 4·6 lakhs, it comes to Rs. 37,000, and the total is Rs. 6,10,000.

Mr. Bishop.—Our capital is Rs. 7½ lakhs.

President.—I cannot tell what you spent your capital on. It may be that you are using it partly as working capital which is already provided for. If you like to send us a copy of your balance sheet * it might be useful. Practically, I take it, a good deal of the share capital must be used as working capital because on the liability side of your balance sheet, in addition to the share capital, you have only two items "Stock Reserve Rs. 11,000" and "Liabilities Rs. 31,000" which means that at that date you had not been obliged to borrow working capital.

Mr. Bishop.—No, we had not.

President.—I have provided Rs. 15,000 for interest on working capital in addition to what is allowed for profit. But even supposing you had another Rs. 10,000 down, it only comes to Rs. 6·2 lakhs whereas Rs. 7 lakhs is what you hope to sell your output for.

Mr. Bishop.—1,000 tons is rather under-valued at Rs. 5 lakhs cost. In any case it is impossible to forecast such figures with any accuracy.

President.—I quite admit these figures are only estimates, and possibly Rs. 5 lakhs is an under-estimate. That is why I drew your attention to it.

Mr. Bishop.—I think if we were getting the full output we would expect to get a very much larger return than 8½ per cent.

President.—When you are getting a full output a little over Rs. 6 lakhs would give you all that you require owing to the reduction in the cost? However I do not want to go into the matter very deeply. At any rate the figure I have worked on is Rs. 5 lakhs.

In answer to Question 13 you give the cost of the steel sheets when working to full capacity as 40 per cent. of Rs. 5 lakhs. Then your sheet is going to cost you Rs. 2 lakhs?

Mr. Bishop.—Yes.

President.—And the cost per ton is Rs. 200?

Mr. Bishop.—Yes.

President.—That I think is rather higher than the price that we got in our last steel enquiry. What is the thickness of the sheets you use mostly?

Mr. Bishop.—That is very difficult to say. We use 26 gauge up to ½ inch. That 40 per cent. we have mentioned would include only sheets.

President.—Would that include steel bars, for instance?

Mr. Bishop.—No.

President.—I would wish to make sure about the figure. The question was—

"What percentage of the total works cost would be accounted for by—

(a) steel sheet,

(b) spelter,

(c) other items?"

Where did you get this figure of 200 from?

Mr. Bishop.—It is by taking the average in the case of several articles.

President.—I think it is rather high. When the Board were making their original enquiry into the Steel industry they estimated that black sheet would enter India without duty at about Rs. 200 a ton. Since then the exchange has risen—that has taken off Rs. 20 out of the price straightway. In addition there has been a fall in the sterling price, and the figure which the Tata Iron and Steel Company gave us was a good deal less than that.

Mr. Bishop.—Our average price of sheet is well over Rs. 10 per cwt.

President.—Where do you get your sheets from?

Mr. Bishop.—We get the pole stuff from Tatas but as a rule we have to buy largely in the local market.

President.—Do you import?

Mr. Bishop.—Only when we can. There is such a large variety of work that it is not easy to carry stock. Also sheets deteriorate after a year or two.

President.—If you are not importing direct but buying in the local market the price must be higher. I think Tatas would be very glad to supply as much as you want at Rs. 200 a ton. They are not getting anything like that.

Mr. Bishop.—We paid them Rs. 205 a ton for one recent order. This was earlier in the year. We are now paying less, *viz.*, Rs. 185.

President.—Their average price, as far as I can recollect, was rather substantially below that. Of course there may be various reasons to account for it. The cost of spelter you took at 15 per cent. of Rs. 5 lakhs as Rs. 75,000. Is that on the basis of 150 tons?

Mr. Bishop.—Yes.

President.—That would be about Rs. 500 a ton?

Mr. Bishop.—Yes.

President.—With the present duty the cost will be actually higher?

Mr. Bishop.—Yes.

President.—Are you assuming in this 15 per cent. that the duty has been taken off or are you thinking that the price of zinc is going to fall?

Mr. Bishop.—I am assuming the duty is taken off and that the price will fall.

President.—It will go up and down, but whether on the average it will go lower one does not know. My point is rather this that in the case of spelter it does look as if the cost of spelter might be a bit higher. 15 per cent. is a conservative estimate.

Mr. Bishop.—That is the minimum.

President.—In answer to question 14 you have given what your depreciation would cost. You say "From Rs. 25,000 to Rs. 26,000 yearly from 1922 to 1924. Prior to 1922 the sum paid was very much less." Are these sums what you actually wrote off in the year?

Mr. Bishop.—These are at income-tax rates.

President.—Did you increase your plant in 1921, and is that the reason for writing off a larger amount of depreciation?

Mr. Bishop.—At the end of 1921 we moved the works and the cost of that and new plant has put up the amount of depreciation.

President.—The question is not so much what you actually wrote off but what is the sum actually required at income-tax rates to provide for depreciation on your buildings, plant and machinery. What rate do they allow on machinery?

Mr. Bishop.—7½ per cent.

President.—And 2½ per cent. on buildings, is it?

Mr. Bishop.—Yes.

President.—If the rate on machinery is 7½ per cent. then that agrees very well with your capital figure. Then as regards your working capital what

it means is that your working capital is equal to the works cost of about 4 to 5 months' output.

Mr. Bishop.—Yes.

President.—How are your agency charges calculated? How did you arrive at the figure of Rs. 9,000?

Mr. Bishop.—That we estimated from our actual agreement.

President.—Is it calculated on the profit or on the output?

Mr. Bishop.—That is a fixed monthly allowance. We also have commission on profits but we have not included that.

President.—I wanted to make sure of that. The head office charges seem to be a bit high. Both taken together amounts to Rs. 32,000 and *prima facie* it looks a bit high. Do they include selling charges?

Mr. Bishop.—It is a bit high as compared to the present output. It includes all selling charges, travellers' expenses, advertising, postage, printing, auditors' and directors' fees.

President.—For the interest on working capital you have taken 7½ per cent. as probably a fair rate?

Mr. Bishop.—Yes.

President.—There is a point here of some importance. You have given the cost of steel sheet as approximately Rs. 2 lakhs. The quantity is 1,000 tons and the duty is Rs. 30 a ton. You would be paying as duty Rs. 30,000.

Mr. Bishop.—Yes.

President.—Then again in the case of spelter, taking the consumption at 150 tons the duty would be Rs. 11,250. Now, taking all the other imported things you buy for your manufacture together, what do you think the duty would probably amount to?

Mr. Bishop.—Not more than Rs. 2,000.

President.—Altogether the total amount you would be paying as duty with the full output would be about Rs. 43,000 and 44,000?

Mr. Bishop.—Yes.

President.—And you get an output that is worth approximately Rs. 6 lakhs?

Mr. Bishop.—Yes.

President.—If the same quantity of goods were imported they would pay a duty of 15 per cent. which amounts to Rs. 90,000.

Mr. Bishop.—They pay on the c.i.f.

President.—Let us take it at Rs. 75,000, taking the value as Rs. 5 lakhs. The point about that is, if you take what you pay as duty Rs. 45,000 and what the importer pays for the same quantity as duty Rs. 75,000, then your duty amounts to 9 per cent. of the value of the goods whereas theirs is 15 per cent., so that you are getting 6 per cent. substantive protection.

Mr. Bishop.—In the case of poles he pays only 2½ per cent.

President.—I quite admit that, but we will eliminate Hamilton poles for the moment. I am only considering the galvanized articles.

Mr. Bishop.—In the case of railway tanks they are coming in at 10 per cent. instead of 15 per cent.

President.—But even at 10 per cent. you are no worse off than you would be if there were no duties at all.

Mr. Bishop.—Yes.

President.—That all leads up to question 18. The question was—

“Do you propose that the duty on imported galvanized hardware should be increased merely to the extent necessary to compensate for the duties on spelter and steel sheet, or do you also claim substantive protection for the galvanizing industry?”

to which your answer is—

“ Yes, to the extent necessary to compensate for the duties on steel, spelter and other materials.”

My answer is that, if that is all you want, then you have got it already, and therefore if you should like to modify any answer you have given to the questionnaire you are at perfect liberty to do so. People are always inclined to argue that if the duty on raw material is 15 per cent., then the duty on the finished product should be 15 per cent. That is all right from the point of view of Customs revenue but not from the point of view of protection.

Mr. Bishop.—There was protection before the steel duties were introduced.

President.—When Government put up the duty on galvanized hardware to 15 per cent., so to speak you received a bonus. So the effect of increasing the duty on steel sheet has merely been to deprive you partly of that bonus, and unless you are able to establish your claims to protection, all you are entitled to is that you should be no worse off than if there were no duties at all. I do not want to press you for an answer. It is very important from your point of view, but if you adhere to the answer in its present form, the only possible effect would be that the Board would say that you have already got what you ask for.

Mr. Bishop.—I don't see how we can carry on as a galvanizing concern if we are not given assistance.

President.—But what was in your mind when you gave this answer? What did you think the Board would do?

Mr. Bishop.—Give us something equivalent to the extra duty we are paying on steel.

President.—It is only Rs. 15 higher now than it would otherwise be?

Mr. Bishop.—Yes.

President.—That would only raise it from 15 to 18 per cent. Going back to the figure of Rs. 5 lakhs we have said that the importer of the same quantity of goods pays Rs. 75,000 on a 15 per cent. duty, that is for 1,000 tons. The protective duty on sheets is only Rs. 15,000 and if you want that to be compensated it cannot be more than Rs. 15,000, and if the importer pays 18 per cent. instead of 15 per cent. would that make any considerable difference? And indeed if you put it in that light, then the removal of the duty on spelter compensates for the higher duty on sheet, because although you are paying Rs. 15 a ton more on your sheets, you are getting back Rs. 11 a ton on your spelter. You see you have left your whole position rather vague as to what exactly you are asking for.

Mr. Bishop.—My point is that it is Rs. 15 a ton higher than what it was before.

President.—Let us put it like this. The tariff valuation I think was Rs. 175 before the protective tariff came into operation. The Board thought that tariff valuation was distinctly on the low side on the price of 1923 and a price of Rs. 200 without duty would be near it. What I am assuming is that the price of imported sheet without duty to-day is about Rs. 150 and with the old 10 per cent. tariff it would be reduced by Rs. 10 to Rs. 15. The duty actually is Rs. 30 and therefore the additional protective part of the duty is Rs. 15 a ton.

Mr. Bishop.—If we could get that we should be satisfied.

President.—You think that will be sufficient to make up the difference?

Mr. Bishop.—Yes.

President.—Now we go back to the question of the market. The moment you get on to that ground it is no longer a question of mere equality of tariff treatment. You are definitely asking for protection because the present duty the importer pays on the goods he imports is higher than the duty you pay on your raw material for making the same quantity of goods. Therefore what it amounts to is that you are asking for substantive protection.

Mr. Bishop.—That is so.

President.—My difficulty about this question of the market is that the market is apparently so small that it seems to me really doubtful—supposing you are able to displace all the imported galvanized hardware in the area which can be economically commanded from Calcutta—whether there is room for further development.

Mr. Bishop.—That is true. If we had been able to exist solely as hardware manufacturers we would not have gone in for poles, etc., and thought of running a bigger plant.

President.—I quite recognise that. Supposing you had been very nearly able to displace the imported article, you might be able to sell an output of something like Rs. 3 lakhs a year, but I think the Fiscal Commission hardly contemplated the grant of protection in cases of this kind. They contemplated the grant of protection where there was a reasonable chance of development of an industry.

Mr. Bishop.—I am afraid we cannot pretend to be a national industry.

President.—In your answer to question 21 you say:—

“Percentage of total works cost in salaries would be 3·5 per cent.”

Mr. Bishop.—That is on the Rs. 5,00,000.

President.—I worked it out roughly on your answers to question 23 where you give the imported cost and your cost of buckets. Are these special railway tanks entirely made out of zinc sheets?

Mr. Bishop.—No. They are all galvanized.

President.—As regards buckets and bath tubs what I did was this. I deducted the duty at 15 per cent., compared it with the Indian cost and found the duty required to equalise. Take the case of buckets. The imported cost is Rs. 13·5. 15 per cent. duty comes to Rs. 2, that means the imported cost without duty is Rs. 11·5 whereas the Indian cost is Rs. 15·5. The duty required therefore is Rs. 4 which is about 30 per cent.

Mr. Bishop.—Yes.

President.—In the case of buckets and bath tubs you want about 30 per cent. In the case of railway tanks it is only 17·2 per cent. Is there any special reason for that? You are very close to the imported cost in the case of railway tanks whereas you are a good bit off in the other two items.

Mr. Bishop.—The freight charged on that will probably be very high.

President.—In calculating your own cost did you make an allowance for the profit?

Mr. Bishop.—There is only 10 per cent. margin for contingencies.

President.—10 per cent. on what?

Mr. Bishop.—On labour and material. We have to allow for the material which fails in manufacture.

President.—If these figures are correct, the raising of the duty from 15 per cent. to 18 per cent. will do you very little good.

Mr. Bishop.—Quite.

President.—The only result will be that the consumer will pay more and you will still be unable to manufacture at a profit.

Mr. Bishop.—If the duty was 25 per cent. and the spelter duty was removed, it would put us in a position to compete.

President.—I believe that Rs. 150 is not an unfair estimate of the cost of black sheet without duty. Since the duty is Rs. 30 it is only 20 per cent. On what basis are you justifying 25 per cent.?

Mr. Bishop.—It is the rate already ruling in the case of structural steel work to compensate for the increased duties on steel and we feel we are entitled to the same.

President.—On the figures you have given you would have a margin as regards these particular things, but I do not know how great is the demand for tanks. Is it very large?

Mr. Bishop.—No.

President.—Turning to question 4, if you would prefer not to give the exact price, at least give us the percentage value of each of the total production.

Mr. Bishop.—If you would like us to group, then we could do as follows:—

1. Galvanizing done for outsiders including repairs and renewals.
2. Articles made up and galvanized.
3. Articles made up but not galvanized, such as drums and kegs.

President.—Unless you can give me some idea separately of the demand for tanks, kneading troughs, etc., I have no information to place before the Government of India as to what sort of market there is for these things. I admit that the bulk of them went to Government. The only inference that can be drawn from that is that the market is relatively small.

Mr. Bishop.—Government* insist on having properly galvanized things like people at Home; the bazar demand for such is small.

President.—How are the bath tubs imported? Are they imported one inside the other?

Mr. Bishop.—Yes.

President.—Even then the freight must be very heavy.

Mr. Bishop.—It is fairly heavy.

President.—There you have a sort of natural protection.

Mr. Bishop.—We have much more chance of competing in that than in buckets.

President.—In your revised answer to question 4 give us the percentages as you propose, but in addition explain that the big demand has fallen off mainly for the reason given, *viz.*, that the bazar bucket cuts you out, but on the other hand you will be able to increase your production of tanks, drums, kegs, etc. I do feel it will be difficult to make the point clear unless we get some definite statement.

Mr. Bishop.—Would you like us to separate the figures from the Government demand?

President.—What I should like to have for each of the three years is the percentage in value of each of these items; then, if you like, the miscellaneous repair work and so on and the other things which don't come under any of these headings.

Mr. Bishop.—I can give you that.†

Dr. Matthai.—Going back to the point raised by the President I have a sort of feeling that, as far as ordinary bazar things are concerned, buckets and so on, your worst competitor is not the things that are imported or the things which are made here locally. I believe the real competitor is the second-hand kerosine tins. If your price goes up, as far as the bazar demand is concerned, they have got a cheap substitute to which they will readily turn.

Mr. Bishop.—There is a big demand in the bazar for buckets. You will find in all these villages they have something in the shape of buckets, say 7 inches in diameter, which they use for drawing water from wells. Every family in Bengal must have one or two like this.

Dr. Matthai.—You will find the demand to be very sensitive to price.

Mr. Bishop.—Kerosine tins now cost you about six to eight annas. You can buy these buckets at about Rs. 3-8-0 a dozen.

* Also Railway Companies, Electric Power Companies, Telephone Companies and many other consumers.

† See Statement IV.

Dr. Matthai.—What is the diameter of it?

Mr. Bishop.—7 inches. They will last longer than a kerosine tin.

Dr. Matthai.—Where are your works located?

Mr. Bishop.—In Salkea, at the north end of Howrah.

Dr. Matthai.—Do you get all the labour locally?

Mr. Bishop.—Yes. From the north of Howrah.

Dr. Matthai.—Can you tell me roughly what is your expenditure on power, coal and coke?

Mr. Bishop.—I could not say at the moment. It is Rs. 5,000 a year for power in coal. Coke for galvanizing will be in addition to that.

Dr. Matthai.—How much would that be?

Mr. Bishop.—Rs. 5,000 a year.

Dr. Matthai.—It is about Rs. 10,000 a year on the whole.

Mr. Bishop.—Yes.*

Dr. Matthai.—With regard to your working capital of Rs. 2,00,000, does that include your working capital for the poles?

Mr. Bishop.—Yes.

Dr. Matthai.—As far as galvanizing business is concerned, it would be 1½ lakhs, would it?

Mr. Bishop.—It would be a lakh and a half.

Dr. Matthai.—Supposing you had a year of normal turn-over, the working capital might be smaller than that?

Mr. Bishop.—Yes.

Dr. Matthai.—This is based on present conditions, is it?

Mr. Bishop.—This is based on full output.

Dr. Matthai.—What I am thinking of is this, when you are having a more-difficult time, your turn-over is bound to be very slow.

Mr. Bishop.—Yes.

Dr. Matthai.—Then that would mean that you are keeping enormous stocks and require a bigger working capital. I was wondering when you had a year of normal prosperity whether it would be necessary for you to have a working capital of Rs. 2,00,000 which is really 50 per cent. on your fixed capital.

Mr. Bishop.—I think that will be necessary.

Dr. Matthai.—Coming to question 21 the cost of skilled supervision is now 3·5 per cent. With your present output it would make a very much higher percentage, would it?

Mr. Bishop.—Yes.

Dr. Matthai.—Would it be somewhere about 10 per cent.?

Mr. Bishop.—Not more than 5.

Dr. Matthai.—Among the Indian labourers, are there any skilled ones?

Mr. Bishop.—That includes everything.

Dr. Matthai.—Could you tell me what proportion would be the skilled workers?

Mr. Bishop.—About a third.

Dr. Matthai.—Are they holding any responsible positions?

Mr. Bishop.—We have one foreman Indian.

Dr. Matthai.—What is the highest salary of an Indian?

Mr. Bishop.—Rs. 240 a month.

* Total—1924, Rs. 9,864.—(Sd.) H. C. W. BISHOP.

Witness No. 2.

THE TATA IRON AND STEEL COMPANY, LIMITED

WRITTEN.

Statement I.—Representation dated 15th May 1925.

We have had some correspondence with the Department of Commerce of the Government of India, in the matter of the Customs duty now charged on the import of spelter. We have been advised that this question has now been referred to the Tariff Board for enquiry, and have been asked to address a representation to the Board in the matter of our request that this duty be now abolished.

2. As the Tariff Board are aware, we need spelter for the purpose of galvanizing sheets manufactured on our Sheet Mill. The galvanized sheets are either sold as plain or corrugated.

3. At the time when the Tariff Board conducted their enquiries in the matter of the protection to be afforded to the steel industry generally, our Sheet Mill had not come into operation; and such data as we were able to place before the Board at that time in connection with our probable costs of manufacture and probable receipts from sales of sheets were based on estimates which were furnished to us by our Consulting Engineers, and which we were able to gather as the result of other investigation.

4. The Board have published in Volume I, page 184, of the Evidence recorded during the enquiry into the steel industry, our statement No. LXIII,—an estimated cost of production, which we were able to give only on the basis of such estimates. In this estimated cost of production we assumed that the consumption of spelter per ton of galvanized sheet would be lbs. 198 in weight and Rs. 37.2 in value on the basis of 3 annas per lb.

5. We take this opportunity of correcting the errors in this Cost Sheet. According to advice which we have now received, the best practice that can be had in connection with the galvanizing of sheets requires a consumption of approximately 2 cwts. of spelter per ton of finished galvanized sheets. We also wish to point out that the cost of spelter landed at our Works is far more than 3 annas per lb. which was the value of spelter as assumed in the aforesaid estimate. We regret the incorrect information which was then afforded to the Board.

6. In the Tariff Schedule published by Government for the levy of Customs duty, spelter is assessable to duty at 15 per cent. on an assumed tariff valuation of Rs. 25 per cwt. This would make the landed cost of imported spelter Rs. 500 per ton without duty, handling and other landing charges. The Customs Tariff Schedule makes no distinction between hard spelter and virgin spelter. Probably this differentiation has never been made because it would be difficult by mere sight to distinguish between virgin spelter and hard spelter. As regards the price, the cost of hard spelter is approximately 70 to 75 per cent. of the cost of virgin spelter, and the present Tariff valuation of Rs. 25 per cwt. for spelter would more correctly represent the approximate importing cost of hard spelter c.i.f. ports and not of virgin spelter.

7. The spelter required for galvanizing purposes and that used at our Works is virgin spelter, and our experience of the purchases which we have made during the past few months since our Sheet Mills came into operation shows that the c.i.f. Calcutta price of this material on an average exceeds £40 per ton.

8. We pay a duty on imported spelter of Rs. 75 per ton because of the tariff valuation stated above. Assuming then that we reach that which has been stated to us to be the very best practice in the matter of obtaining galvanized sheets, *viz.*, 2 cwts. of spelter per ton of finished products, we have to bear a charge of Rs. 7.8 for each ton of galvanized sheets because of this customs duty alone.

9. As a matter of fact, we have not yet, during our few months' experience of manufacture, reached this fine practice, and the consumption of spelter at our Works per ton of finished galvanized sheets has been in the neighbourhood of 800 lbs. with the result that the cost of our manufacture on this item is considerably higher than was estimated in the statement furnished to the Board along with our evidence during the general enquiry in connection with the steel industry.

10. We submit that there are cogent reasons for the entire abolition of this duty on imported spelter. In the first place, spelter cannot be manufactured in India, and it is extremely unlikely that its manufacture will be taken up in this country at any very early date. Except for revenue purposes, there is no fiscal ground why this duty should be imposed. In the second place, we beg to point out that this duty adversely affects not only our industry but all galvanizing industries in India, and makes it difficult for manufacturers of galvanized hollow ware, etc., to compete with similar imported products. Thirdly, it is in the interest of the steel industry that the galvanizing industry in India should be given adequate protection against foreign products, because in connection with the manufacture of such products as galvanized hollow ware, the manufacturers would consume black sheets and steel flats and rounds to some extent, whilst if they have to face strong competition from importers and have at the same time to pay duty on an essential raw material, this industry would be adversely affected, and would consequently affect adversely the manufacture of black sheets and bars in India.

11. The duty on galvanized hollow ware stands at 15 per cent. on the same tariff valuation, whilst the duty on black sheets has been enhanced since the Tariff Board made its report and the Steel Industry Protection Act was passed. The result is that galvanizers in this country have been adversely affected, and to relieve them it would be desirable to remove the import duty on spelter. Whilst they obtain the sea freight advantage over the importers in competition with foreign products, they have to bear this duty on spelter, and in addition they bear the excess price which they would have to pay in respect of their other raw materials which also are affected by various customs duties, including the enhanced customs duties on steel sheets and steel bars.

12. Whilst we admit that the revised scale of duties on black sheets and galvanized sheets is a measure of protection which helps us in our industry, we beg to point out that since the investigation made by the Tariff Board in the first instance, and that made in the second instance, when only the question of steel structural material and steel bars was considered, the selling prices in India of black sheets and galvanized sheets, both plain and corrugated, have dropped considerably. When we commenced the manufacture of corrugated sheets we could obtain for our product approximately Rs. 320 per ton, whilst we have to make recently sales of galvanized corrugated sheets even at Rs. 290 per ton to meet foreign competition.

13. The Board is acquainted with the costs of production of steel bars and the comparative cost of production of steel galvanized sheets. The specific duty on steel bars is Rs. 40 per ton and on galvanized sheets Rs. 45 per ton. If our revised figures are accepted, the import duty on spelter alone will take away a protection equivalent to Rs. 7-8 per ton from the duty fixed for galvanized sheets.

14. We submit that the Board will agree that there should be a difference of about Rs. 5 per ton in the protective duty on galvanized sheets in excess of that fixed for bars, after providing for any further disadvantage that we may have to submit to in connection with the import of raw materials. In this view of the case, we request that the duty to which we are subject in respect of spelter should be entirely abolished, so that we may be able to obtain the benefit of such advantage.

15. There is one further point which we crave leave to urge in this connection. The supply of zinc concentrates for being refined into virgin spelter is getting more and more restricted, and the trade returns which we obtain

in connection with our purchases of this commodity tend to show that a further rise in the price of this raw material may be expected and as our competitors abroad in England, America, and particularly on the Continent, have the advantage not only of being able to obtain this raw material at their very door, but also of making special terms with zinc refineries for their requirements, we shall be very greatly handicapped. The removal of this duty will afford us some relief against the constantly rising price of spelter.

16. We forward copies of our Works costs of galvanized plain and corrugated sheets. This manufacture being entirely new to this country, we have had to bring out a large number of employees from abroad, with the result that our cost of labour per ton is at present much larger than was estimated in Statement LXIII furnished to the Tariff Board in their first enquiry. This will of course go down as will the consumption of spelter per ton, but it indicates the difficulties attendant on the introduction of a new industry in this country. We believe that the Board will agree that such difficulties should not be increased by duties on the raw materials required and we therefore urge that the abolition of the duty on spelter should be recommended to Government. A slight increase in the duty on galvanized articles can easily replace this duty and would in effect only be a duty levied on spelter when applied to manufactured articles.

Enclosure I.

Works average cost of Black Sheets.

December 1924 to March 1925.

Total production	5,735 tons.
Average yield	78.17 per cent.
Average net metal cost	Rs. 109.15 per ton.
" labour cost	61.87 " "
" stores, tools and supplies	10.80 " "
" steam	0.38 " "
" fuel	6.15 " "
" rolls	5.00 " "
" service expenses	14.32 " "
<hr/>	
	Rs. 207.17 per ton.

N.B.—At present, out of 9 mills, 6 mills are working.

Enclosure II.

Works average cost of Plain Galvanized Sheets from December 1924 to March 1925.

Total production	2,099 tons.
Average yield	89.55 per cent.
Average metal cost Black Sheets	Rs. 197.00 per ton.
" spelter cost 326.8 lbs.	91.08 " "
" lead cost	0.05 " "
" tin cost	0.53 " "
" galvanized band	8.83 " "
<hr/>	
Gross metal cost	Rs. 202.49 per ton.
Less scrap, etc.	9.94 " "
<hr/>	

Average net metal cost	Rs. 282-55 per ton.
Average fuel for pots	" 2-72 " "
" acid-white pickling	" 6-69 " "
" net Sal Ammonia cost	" 4-64 " "
" labour	" 27-13 " "
" tools and supplies	" 4-26 " "
" steam	" 0-26 " "
" service expense	" 7-61 " "
Total cost	Rs. 335-86 per ton.

Enclosure III.

Works average cost of Corrugated Galvanized Sheets from December 1924 to March 1925.

Total production	1,865 tons.
Average yield	99-73 per cent.
Average net metal cost	Rs. 337-03 per ton.
Labour	" 17-15 " "
Tools and supplies	" 0-59 " "
Steam	" 0-30 " "
Service expense	" 5-55 " "
Total cost	Rs. 360-62 per ton.

Statement II.—Letter, dated the 3rd October 1925, from The Tata Iron and Steel Company, Limited, forwarding replies to questionnaire issued to them.

With reference to your letter No. 523 of the 19th September, addressed to our Head Office at Bombay, we beg to enclose herewith in the form of a separate statement with enclosures a reply to the questionnaire submitted by you.

We also beg to advise you that Mr. D. M. Madan, Chief Accountant of this Company, will attend and give oral evidence in connection with our representation in the matter of the removal of the Customs duty on Spelter.

Answers of The Tata Iron and Steel Company, Limited, to the questionnaire from the Tariff Board in regard to application for removal of Customs duty on Spelter.

1. Duty on the zinc which we import is levied at 15 per cent. on a tariff valuation of Rs. 25 per cwt. The duty is thus Rs. 75 per ton of the material imported.

2. We believe the zinc which we import would be classified in the Trade Returns as "other sorts."

3. The ordinary trade description of zinc which we import is "Soft or Virgin Spelter."

4. The answer to this question depends upon the percentage of zinc in the spelter which we import. We have been importing for our use Virgin Spelter having a zinc content ranging from 98 per cent. up to 99.9 per cent.

For the best quality of spelter having an approximate 99.9 per cent. zinc purity the price is about £43.5 c.i.f. Calcutta. The price for spelter having a minimum zinc content of 98 per cent. guaranteed, but not much higher than this, is approximately £40 c.i.f. Calcutta. The prices f.o.b. British Port would be about £2 less. We enclose herewith a statement marked "A" showing the average prices as published in "Queen's Metal Hand Book and Statistics" showing the average prices realised for ordinary grades of spelter during the last four years. The prices quoted therein would be the prices for 98 per cent. virgin spelter.

5. As mentioned in the answer to Question 1, the Customs duty per ton on the zinc which we import is Rs. 75.

6. According to our present output of galvanized goods we would require annually approximately 2,000 tons of spelter. If we attained the full output of which our Works are capable, we shall have to consume annually approximately 2,500 tons of spelter.

7. (a) The cost of spelter including duty, railway freight and handling charges up to our Works as used in the manufacture of our galvanized sheets represents 32.27 per cent. on our total cost of galvanized plain sheets. This percentage is obtained from an analysis of our average cost for the five months ended 31st August 1925.

(b) The cost of the Customs Duty paid on spelter per ton is equivalent to 3.69 per cent. of the total cost of manufacturing plain galvanized sheets at our Works. This percentage is also obtained from our experience of the average cost of the five months ended 31st August 1925.

We attach hereto statements giving abstracts of our Works average costs of black sheets, plain sheets, and corrugated sheets, for the five months ended 31st August 1925. This will bring up to date the information contained in the enclosures to the representation made by our Head Office on the 15th May 1925, and addressed to the Secretary, Tariff Board, Calcutta.

We also attach a statement showing the quantities of spelter used, the quantities of return zinc dross credited to the Mills and the ratios of the cost of zinc and the ratio of the duty on zinc to the total Works cost.

A statement is also enclosed showing the prices which we have paid for the purchase of different quantities of spelter from the time we began to indent spelter for our needs up to date.

8. We are unable to answer this question in detail, but we may say that some quantity of zinc is utilised in mixtures to obtain metal alloys. We ourselves use about 15 cwt. of pure zinc monthly in mixtures for the manufacture of what is known as white metal or babbitt metal or bearing metal.

9. We do not know of any place where virgin or soft spelter is manufactured in India. We believe, however, that there are several parties that handle zinc dross obtained from Galvanizers in India, and after refining the same produce hard spelter. Hard spelter gives much inferior results compared with virgin spelter in the manufacture of metal alloys, and would not be serviceable for the galvanizing process. We are unable to give, however, the names of the firms that handle the manufacture of hard spelter.

Enclosure No. I.

Mean average price of G. O. B.'s.

	1921.			1922.			1923.			1924.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
January	25	15	7 $\frac{1}{2}$	26	10	2 $\frac{1}{2}$	34	16	8 $\frac{1}{2}$	34	9	2 $\frac{1}{2}$
February	25	5	5 $\frac{1}{2}$	24	9	9 $\frac{1}{2}$	35	8	9	36	1	6 $\frac{1}{2}$
March	25	10	5	25	10	5 $\frac{3}{8}$	36	15	4 $\frac{1}{2}$	35	3	4
April	26	1	5 $\frac{1}{2}$	26	10	10 $\frac{1}{8}$	34	6	8 $\frac{1}{2}$	32	11	6 $\frac{1}{2}$
May	27	6	7 $\frac{1}{2}$	27	4	9 $\frac{3}{8}$	31	0	11 $\frac{1}{2}$	30	14	7 $\frac{1}{2}$
June	27	2	2 $\frac{1}{2}$	27	16	1 $\frac{3}{4}$	29	12	6 $\frac{1}{4}$	31	13	8 $\frac{1}{2}$
July	26	12	0 $\frac{1}{2}$	28	18	5 $\frac{1}{2}$	29	8	4 $\frac{1}{4}$	32	1	4 $\frac{3}{4}$
August	25	8	0 $\frac{1}{4}$	30	16	3	32	1	11 $\frac{1}{2}$	32	9	10 $\frac{1}{2}$
September	25	10	8 $\frac{1}{4}$	31	8	8 $\frac{1}{4}$	33	2	10 $\frac{1}{2}$	32	16	6 $\frac{1}{2}$
October	26	10	7 $\frac{1}{2}$	34	0	6 $\frac{1}{4}$	32	12	10 $\frac{1}{2}$	33	8	8 $\frac{1}{4}$
November	26	4	10 $\frac{1}{4}$	36	18	9	33	0	1 $\frac{1}{4}$	34	17	7 $\frac{1}{2}$
December	27	0	11 $\frac{1}{2}$	36	4	11 $\frac{1}{4}$	32	14	8 $\frac{1}{2}$	36	16	1 $\frac{1}{4}$
Year's average . . .	26	4	0 $\frac{1}{2}$	29	14	1 $\frac{1}{2}$	32	18	6	33	12	0 $\frac{1}{2}$

Enclosure No. II.

THE TATA IRON AND STEEL COMPANY, LIMITED.

*Works average cost of black sheets.**April 1925 to August 1925.*

Total production	Tons.	11,428
Average yield	%	83.38
„ Net metal cost	Rs.	93.95
„ Labour	„	55.51
„ Stores, tools and supplies	„	9.77
„ Steam	„	30
„ Fuel	„	5.03
„ Rolls	„	6.00
„ Service expenses	„	13.31
Total cost		183.87

Enclosure No. III.

THE TATA IRON AND STEEL COMPANY, LIMITED.

Works average cost of plain galvanized sheets from April to August 1925.

Total production	Tons	4,108
Average yield	%	87.91
„ Metal cost, black sheets	Rs.	176.73
„ Spelter (347 lbs.)	„	101.68
„ Lead	„	..
„ Tin	„	26
„ Galvanized bands	„	5.28
Gross metal cost		283.92
Less scrap, etc.	„	14.16
Average Net metal cost		269.76
„ Fuel for pots	„	2.04
„ Acid White Pickling	„	6.56
„ Net Sal Ammonia cost	„	5.04
„ Labour	„	21.43
„ Tools and supplies	„	3.76
„ Steam	„	19
„ Service expenses	„	6.34
Total cost		316.12

Enclosure No. IV.

THE TATA IRON AND STEEL COMPANY, LIMITED.

Works average cost of corrugated galvanized sheets from April 1925 to August 1925.

Total production	{ Black	.	.	.	.	Tons	25
	{ Galvd.	.	.	.	.	"	3,331
Average Yield	.	.	.	.	.	%	99.88
" Net metal cost	.	.	.	.	.	Rs.	314.17
" Labour cost	.	.	.	.	.	"	12.48
" Tools and supplies	.	.	.	.	.	"	.82
" Steam	.	.	.	.	.	"	.23
" Service expense	.	.	.	.	.	"	6.17
Total cost							333.87

Enclosure No. V.

Production of galvanized plain sheets from April to August 1925	.	.	.	.	.	Tons	4,103
Cost per ton of plain galvanized sheets from April to August 1925	.	.	.	.	.	Rs.	315.12
Spelter used	.	.	.	.	.	Tons	636.55 or 347 lbs. per ton of galvanized sheets.
Zinc dross credited	.	.	.	.	.	Tons	133.50 or 75 lbs. per ton of galvanized sheets.
Per cent. of spelter cost to total works cost	.	.	.	.	.		32.27 per cent.
" of duty on spelter used to total works cost	.	.	.	.	.		3.69 "
Duty per ton of production	.	.	.	.	.	Rs.	11.62

Enclosure No. VI.

Statement showing different grades of spelter purchased in England since August 1924.

Order No.	Date.	Quantity.	Brands.	Price.
3812—5269	13th August 1924	10 tons . . .	Stewarts & Lloyds	£34-15-0 per ton f.o.b.
		25 " . . .	Athletic	£35-10-0 " " c.i.f.
		25 " . . .	Eagle Picture	£35-10-0 " " "
		25 " . . .	Bankville	£35-10-0 " " "
		20 " . . .	Tadanac 99½%	£36-10-0 " " f.o.b.
		25 " . . .	Victoria	£33-3-6 " " c.i.f.
4094—5638	12th November 1924	12½ " . . .	Stewarts & Lloyds	£36-10-0 " " f.o.b.
4094—5573	13th November 1924	50 " . . .	Tadanac 99½%	£39-10-0 " " c.i.f.
		50 " . . .	Blackwell	£38-7-6 " " "
		50 " . . .	Corphalie	£37-0-0 " " "
		12½ " . . .	Stewarts & Lloyds	£38-5-0 " " "
		12½ " . . .	Puredelle	£38-5-0 " " "
		12½ " . . .	Stewarts & Lloyds	£38-5-0 " " "
5573 addl.	6th January 1925	12½ " . . .	Stewarts & Lloyds	£38-5-0 " " "
4168—5687		150 " . . .	Tadanac	£44-19-0 " " "
		150 " . . .	Blackwell	£41-18-6 " " "
		150 " . . .	Victoria	£40-6-0 " " "
		100 " . . .	Stewarts & Lloyds	£43-10-0 " " "
		50 " . . .	Puredelle	£43-10-0 " " "
4264—5729	12th January 1925	25 " . . .	Victoria	£40-0-0 " " "
		15 " . . .	Corphalie	£40-15-0 " " "

Statement showing different grades of spelter purchased in England since August 1924—contd.

Order No.	Date.	Quantity.	Branch.	Price.
4264—5731	"	10 tons . . .	Stewarts and Lloyds	£42-0-0 per ton c.i.f.
4264—5732	"	25 " . . .	A. Z. Pure 99.9%	£44-2-6 " " "
4264—5733	"	25 " . . .	Blackwell	£41-5-0 " " "
4265—5790	12th February 1925	100 " . . .	Tadanac	£44-3-9 " " "
		73 " . . .	Blackwell	£40-15-0 " " "
		50 " . . .	Stewarts & Lloyds	£42-15-0 " " "
		75 " . . .	Victoria	£39-15-0 " " "
5974	18th May 1925 . .	25 " . . .	Blackwell	£37-0-0 " " "
5953	6th May 1925 . .	100 " . . .	Corphalie, Victoria or equal	£32-15-0 " " f.o.b.
5928	23rd April 1925 . .	50 " . . .	Dumont or Corphalie or equal	£35-8-0 " " c.i.f.
5927	"	40 " . . .	Corphalie, Victoria or equal	£35-7-0 " " "
5926	22nd April 1925 . .	25 " . . .	Victoria	£37-5-0 " " "
		50 " . . .	Blackwell	£38 0-0 " " "
5925	"	20 " . . .	Good ordinary	£35-2-6 " " ex ware house.
5994	21st May 1925 . .	25 " . . .	Stewarts & Lloyds	£38-7-6 " " c.i.f.
6088	15th June 1925 . .	25 " . . .	Prime Western	£36-15-0 " " "
6090	17th June 1925 . .	50 " . . .	Victoria	£36-5-0 " " "
4583—6091	18th June 1925 . .	90 " . . .	A. Z. 99.9%	£38-0-0 " " f.o.b.
4583—6091	19th June 1925 . .	60 " . . .	A. Z. 99.9%	£38-0-0 " " "
4583—6292	4th September 1925 . .	100 " . . .	Blackwell	£39-16-6 " " c.i.f.

THE TATA IRON AND STEEL COMPANY, LIMITED.

B.—ORAL.

Oral evidence of Mr. D. M. MADAN, representing the Tata Iron and Steel Company, recorded at Calcutta on Tuesday, the 13th October 1925.

President.—I think that it would almost be true to say that we have brought you here on false pretences because you have given us so much information in your replies to the questionnaire that I do not know that there is a great deal more to ask you about. However, there are certain points on which perhaps you will be able to give us a little more help. Do you pay duty on the spelter you import for galvanizing on the tariff valuation?

Mr. Madan.—Yes.

President.—Then, I take it that it must be in one or other of the forms given in the Schedule. The entry in the Schedule is "tiles, slabs or plates."

Mr. Madan.—It is exactly in the form of tiles, slabs or plates.

President.—Can you tell us what the distinction is between a tile, a slab and a plate?

Mr. Madan.—I believe these are interchangeable terms.

President.—That leads me on to another point. There is some difficulty in ascertaining what the financial effect of removing the duty might be, because the classification in the Trade Returns does not by any means agree with the classification in the Tariff Schedule. We wrote to the Collector of Customs about that, and we got a reply* which does not seem to make things very plain. In the Trade Returns, they classify the spelter into "wrought," "unwrought" and "other sorts," but what the Collector of Customs says is that the slabs are classed as "unwrought" and that tiles and plates are classed as "wrought." I do not know why? Then he says "For purposes of assessment, zinc or spelter tiles, slabs or plates, hard or soft, requiring manipulation before being put into use are assessed at the tariff rate." I do not quite know what he means by "manipulation." In the case of the zinc that you use at Jamshedpur, what do you do before using it for galvanizing? Do you subject it to any process?

Mr. Madan.—No. There is what is known as the galvanizing pot which contains a quantity of molten mixture and from time to time this mixture is being fed with one slab at a time.

President.—Is that all that is done?

Mr. Madan.—Yes.

President.—It can hardly be called manipulation?

Mr. Madan.—Hardly any manipulation is required.

President.—As things stand at present, one is unable to understand what principle is followed, either for tariff or for statistical purposes?

Mr. Madan.—For other purposes, they do manipulate, but for galvanizing, we don't.

President.—The import of zinc for galvanizing is becoming a very large proportion of the imports nowadays?

Mr. Madan.—Yes. Our imports would be 200 tons a month.

President.—That is a considerable quantity.

Dr. Matthai.—You say that the zinc which you import would be classified in the Trade Returns as "other sorts."

Mr. Madan.—That is what I thought.

* Not printed.

Dr. Matthai.—Is there any category as "other sorts" in the Trade Returns?

Mr. Madan.—As a matter of fact I have not seen any classification anywhere else as wrought and unwrought.

President.—What do you mean by "anywhere else?"

Mr. Madan.—In other trade publications, books on metals, etc.

President.—There is such a classification as "other sorts" in the Annual Trade Returns. The other sorts are quite small in quantity. For instance, in 1923-24 it only comes to about 43 tons.

Mr. Madan.—That is too little for spelter.

President.—For our purpose, it is negligible.

Mr. Madan.—Yes.

President.—What I notice looking at the monthly Trade Returns is this that the imports of unwrought spelter have been for the last three years in round figures 56,000 tons, 57,000 tons and a drop to 39,000 tons in 1924-25. whereas the imports of wrought spelter have been 38,000 tons, 55,000 tons and 67,000 tons, so that the wrought or manufactured spelter has been going up and the unwrought going down. The natural inference will probably be—since you became considerable importers in the year 1924-25—that your spelter has been classified as wrought. Can you tell me the approximate dimensions of the slabs or plates that you import?

Mr. Madan.—They are usually 1 cwt. in weight and the dimensions would be about 12" x 7" and 1 to 1½" deep.

President.—I should imagine that it would probably be classed as a plate or tile and not as a slab because one would usually take a slab to be much bigger than that.

Mr. Madan.—The usual name given in our invoices is "plates."

President.—It would be classed as wrought?

Mr. Madan.—Some people would call it even ingot.

President.—One name is really as good as the other.

Dr. Matthai.—Is spelter ever imported without being given any specific shape?

Mr. Madan.—The first form of zinc is zinc concentrate. That is what the Burma Corporation can get out of their mines. Then, it is refined into virgin spelter. The quantity mentioned in these Trade Returns as unwrought spelter is so heavy that I am partly inclined to think that it might be zinc concentrates.

President.—I do not think that anybody would import zinc concentrates into India because nobody can refine it here.

Mr. Madan.—Quite so.

President.—It is simply this that the classification is quite uncertain. It apparently depends on what the size of the thing is that you import. It is not a very satisfactory basis of classification. You have given us a statement of the different rates at which you have purchased spelter from 1921 to 1924. What I was wondering at was this. You sometimes buy the purest spelter (99.9 per cent. purity) and sometimes you purchase spelter having a zinc content of not much more than 98 per cent. What guides the Company in deciding which it will buy at any particular moment?

Mr. Madan.—It has got to buy in any case anything which has a minimum of 98 per cent. zinc purity. In order to get the mixture easy, the galvanizer prefers to have the purest article but he never uses any one grade. He always uses more than one grade.

President.—Why?

Mr. Madan.—I do not know, but the non-technical understanding I have obtained from the Sheet Mill Superintendent is that it is necessary to keep the melting pot easy to mix the brands. And there are some people who use only inferior brands having a zinc content of 98 per cent. Occasionally they

are guided by prices which they have to pay. If the difference in price is only trifling they will probably use a better brand. The price we paid for "A.Z." in June 1925 which is very nearly the purest—it is always guaranteed 99.9 per cent. zinc purity—is £38 f.o.b.

President.—The price given in the Statement does not quite agree with the answer given in reply to question No. 4. You say in the answer that for the best quality of spelter having an approximate 99.9 per cent. zinc purity the price is about £43.5 c.i.f. Calcutta.

Mr. Madan.—That is the latest price. •

President.—"A.Z." which you show in the Statement as having 99.9 per cent. purity is only £38 f.o.b.

Mr. Madan.—The market has taken a tremendously upward tendency between June and now. It was a purchase made in the month of June. That was about the time when we effected the biggest purchase because we felt that the market was too low. Since then, the market has been rising constantly. I have got here three papers dated 3rd March, 9th June and 8th September. In March the week ago price was £36-13-9, in June the week ago price was £34 and in September the week ago price was £36-8-9, that is all for inferior brands. The latest report I have by cable of the price of a brand having 98 per cent. zinc purity is £39-16-6; that is for "Blackwell," which could be purchased at that time for £35. There was one purchase made in January at £41-18-6 c.i.f. and there was a purchase made in April at £38 c.i.f. Calcutta. The market is just now showing an upward tendency. It keeps on rising, that is the latest report I have received.

Dr. Matthai.—When there is an upward trend, the prices of all these brands go up?

Mr. Madan.—Yes. The cause of the rise in the market is I think partly due to the shipping strike in Australia. Australia supplies a lot of zinc concentrates and during the strike there has been no shipment with the result that the demand is higher than the supply. "Tadanac" is quoted as £43; that is the latest report which I had from London. Here is another book which is the handbook of statistics. It is from this that we have given the average prices of different brands. It also gives the daily average for the whole of the year 1924, being a book for 1925, which shows a very great rise and fall. The minimum is about £30 and the maximum is something over £38, that is for the brand having 98 per cent. zinc purity.

President.—Tell me from what country do you usually buy?

Mr. Madan.—We buy it from the country of origin.

President.—Do you usually buy from America or Europe?

Mr. Madan.—We get both from America and from Europe. We get "A.Z." from Australia.

President.—Is it refined in Australia?

Mr. Madan.—Yes.

President.—Does it come straight from Australia to India?

Mr. Madan.—It never comes to us direct. We get the virgin spelter brand from the Zinc Producers Association, London and Australia.

President.—It does not follow that the spelter was actually made in Australia.

Mr. Madan.—About "A.Z." I had some little doubt. It stopped coming in at all when there was a shipping strike.

President.—It is not a point of great importance. What I wanted to find out was this. Where is it shipped to you from, the bulk of the spelter you buy?

Mr. Madan.—"A.Z." was shipped to us from Hamburg. 'Tadanac' comes to us from Canada which is the country of origin. 'Blackwell' comes to us from United States of America which is the country of origin. There is 'Victoria' which is a Belgian brand, which we get from Hamburg. Although the purchases are effected in London, they come from the countries of their origin.

President.—There is no one special source of supply?

Mr. Madan.—No.

President.—You get it from various places?

Mr. Madan.—Yes.

President.—At present you are using about 347 lbs. of spelter per ton of galvanized sheet.

Mr. Madan.—I have got here the most up-to-date information. In the month of September we made 1,210 tons of galvanized sheets, the consumption of spelter being 331 lbs. per ton. In August our average was 343. 347 lbs. was the average for five months.

President.—The point I was leading up to is this that it is a good deal higher than the practice in Great Britain.

Mr. Madan.—That is so.

President.—Could you tell me what would be considered reasonably good practice in the British Steel Works for making galvanized sheets?

Mr. Madan.—2 cwts. per ton. But there is this point which has been explained to me, viz., the zinc dross that we obtain in the process can be sold. The galvanizer claims that the zinc dross is not to be taken as consumption of spelter but that it is only another form of spelter which is given back, that is to say, 224 lbs. should be taken as nett. Whatever we get as dross would not be treated as a consumption but as a conversion.

President.—347 lbs. was your gross consumption?

Mr. Madan.—Yes.

President.—If you had taken it the other way round and deducted what you recovered as dross, what would be the approximate nett amount?

Mr. Madan.—The nett is 272 lbs. which is a good deal higher than it should be.

President.—But you hope gradually to bring it down?

Mr. Madan.—Yes.

Dr. Matthai.—Are you quite certain that this fine practice of 224 lbs. means the nett consumption?

Mr. Madan.—That is the latest information we have got.

President.—What do you do with your zinc dross which you recover?

Mr. Madan.—We sell it. We have been able to find a market for it at Mirzapore where, I understand, it is used in mixing up with brass for making brass utensils.

Dr. Matthai.—What percentage of zinc do you get out of zinc dross?

Mr. Madan.—That is hard spelter. They get more than 90 per cent.

President.—What price do you get for it?

Mr. Madan.—About 70 per cent. of the price of virgin spelter. We started selling at low prices but we are now averaging about Rs. 430 a ton.

President.—In your answer to question No. 7, you say "The cost of spelter including duty, railway freight and handling charges up to our Works as used in the manufacture of our galvanized sheets represents 32.27 per cent. on our total cost of galvanized plain sheets." That is the gross cost, is it not?

Mr. Madan.—Yes.

President.—The nett cost would be a little lower?

Mr. Madan.—Yes, it would be about 20 per cent. lower.

President.—Have you got the exact figure?

Mr. Madan.—It will be about 25½ per cent.

President.—You have told us that you also use spelter for manufacturing Babitt metal.

Mr. Madan.—Yes.

President.—Is the kind of spelter suitable for galvanizing also suitable for that?

Mr. Madan.—Yes, we want virgin spelter for that. All the railways use a lot of that, I understand, for bearings. They make their own bearing metal.

President.—The reason why we asked that question, viz.: "What are the principal industrial uses of spelter in India, apart from galvanizing, and what other Indian industries would be likely to benefit from the removal of the duty?" is this. So far, the proposal has been put before us only by the galvanizing industry. As far as one can judge, it is impossible for Customs purposes to discriminate between the spelter for galvanizing and the spelter which is used for other purposes. If the duty comes off in the case of one, it has got to come off in the other case as well. Naturally, one would wish to explain clearly to the Government of India who are likely to benefit. Of course, the more you can show that a number of industries will benefit, the stronger the case for the removal of the duty becomes. We published the communiqué on the 19th September on the subject—the questionnaire was also published—in the hope that other firms, who make brass and so on, would respond, but we had no response at all so far. Unless the people who are going to benefit come forward and tell us, it is very difficult for us to give the Government of India the information.

Mr. Madan.—I should say that all railways would benefit by it.

President.—I should not think that the total quantity would be very much. It would probably not make much difference.

Mr. Madan.—It would not.

President.—I presume there are some brass foundries in India who make use of it.

Mr. Madan.—Yes, there are brass foundries in India.

President.—The cost of their zinc would be quite a serious item.

Mr. Madan.—It must be.

President.—What we hoped was that they would tell us something about it. But so far they have not. We also wrote to the Burma Corporation asking whether they had any objection to the removal of the duty on spelter and their reply is as follows:—

"The Burma Corporation does not object to the removal of the Customs duty on spelter.

The Zinc Ores produced in the Corporation's mines are subjected to treatment in an experimental concentrating plant before export, and the assay value of the concentrates produced is approximately 15 per cent. Ag, 7 per cent. Pb, 43 per cent. Zn.

At the moment the Corporation does not contemplate the manufacture of commercial spelter in India."

If they are not going to make spelter, as far as I know, there is nobody else in India who can make commercial spelter.

Mr. Madan.—It appears from the report of the Burma Corporation published yesterday that they got in the quarter ended 30th June 3,510 tons having on an average a zinc content of 39.2 per cent. The proposal at one time was—you must have heard of it when you were at Jamshedpur—that the Burma Corporation would come over here and refine the zinc concentrates into spelter for us to buy it. They also built houses, railway lines and so on.

Dr. Matthai.—How long ago was that?

Mr. Madan.—It was about three years ago.

Dr. Matthai.—Was it only a proposal?

Mr. Madan.—We discussed the matter with them but could not come to terms.

President.—By 1922 the Burma Corporation was finding great difficulty in raising money and they had to curtail their operation in all things.

Mr. Madan.—Yes. They wanted us to participate in the capital but we were not in a position to do so.

President.—Everybody was finding by 1922 that the ambitious programmes they had made were just a little more than they could realise. That was the common experience.

Mr. Madan.—About January last we also wrote to the Burma Corporation as to the nearest future date on which they contemplated refining and their reply was that they did not contemplate refining. That was the information and then we had to import from abroad.

President.—When you mention there are people who make spelter in India, what do you mean by it?

Mr. Madan.—They refine the dross into hard spelter and then use it. I asked one of our customers who buys zinc dross from us as to what was being done with it and the information he gave was that they convert these into brass vessels.

President.—You can hardly call it manufacturing hard spelter. That is a sort of bye-product. It is getting its material second-hand so to speak.

Mr. Madan.—That is so. If you will allow me, I will place before you an interesting comparison of the prices of galvanized sheet side by side with the average price of spelter. You will notice how the price of spelter for the year 1924 was stiffening up and the price of galvanized sheet coming down. In March the price is £16-7-6 to £16-15, or an average of £16-12, in June it is £16-10, and in September £16-5. It is coming down all the time, whereas the price of spelter is stiffening up.

Dr. Matthai.—In answer to question 6 you say “According to our present output of galvanized goods we would require annually approximately 2,000 tons of spelter.” At what rate are you calculating that?

Mr. Madan.—I have taken the hopeful outlook of reducing our consumption of spelter. When we say 2,000 tons it comes to something like an average of 160 tons per month, whilst in September we consumed 179 tons.

Dr. Matthai.—What I was asking was that when you were estimating your total requirements at 2,000 tons, were you taking it at the rate of fine practice that you quoted in your letter or the actual rate of consumption?

Mr. Madan.—Just between the two.

Dr. Matthai.—I think it is nearly your actual consumption.

Mr. Madan.—We consumed 179 lbs. in September alone, but I took it this way: about 1,200 tons can be manufactured with about 1/12th of 2,000 tons, i.e., 164 or 165 lbs. That is how we have estimated, but we shall improve in practice shortly.

Dr. Matthai.—But the difference between virgin spelter and hard spelter really turns on the proportion of zinc in it?

Mr. Madan.—Hard spelter contains certain other impurities which would make it useless for galvanizing.

Dr. Matthai.—It contains a good deal of iron, does it?

Mr. Madan.—It catches iron; it has more iron in it.

Dr. Matthai.—Is there any considerable amount of hard spelter imported?

Mr. Madan.—Yes, a good deal.

Dr. Matthai.—For customs purposes do you think it would be quite difficult to distinguish between hard spelter and virgin spelter?

Mr. Madan.—An expert can distinguish easily even by fracture, that is by breaking it and examining the grains.

Dr. Matthai.—It is never used in galvanizing?

Mr. Madan.—Never.

Dr. Matthai.—Is it simply used for manufacturing alloys?

Mr. Madan.—Yes. There is a thing mid-way between the two, what is called re-distilled spelter. There are two of this brand which we have purchased, namely, "Stewards and Lloyds" and "Puredelle." Just a little bit of that is used.

Dr. Matthai.—From your point of view this present application really amounts to an application for further additional protection, does it not?

Mr. Madan.—What we have stated is this, that when the tariff duty was specifically fixed at Rs. 45 per ton for galvanized sheets, there was hardly a chance of this item of duty on spelter having been taken into consideration.

Dr. Matthai.—You raise the general ground which has been approved by the Fiscal Commission that when a raw material is used for an industry in India and the material itself does not require protection then the duty on the raw material ought to go. That general ground is there. But supposing I put it to you this way, that when galvanized sheets were protected and a duty of Rs. 45 a ton was fixed by the Legislature and the Government of India, at that time the duty on spelter was taken into account because that was part of your cost?

Mr. Madan.—It should have been taken into account, but candidly we believe this was not taken into account. The price of spelter in fact was put down at 3 annas a lb. which is a far cry now. That was true three years ago.

Dr. Matthai.—Theoretically what it comes to is this. You have to admit that this was taken into account when this protective duty was fixed. But since then you can say that circumstances have changed. You suggest two changes in the circumstances; the first is you find that you consume a far bigger amount of spelter than 198 lbs. which was the rate in the original estimate.

Mr. Madan.—We had no expert knowledge at that time. That was an estimate which was given to us by the consulting engineers, and in fact when that estimate was prepared the price was 3 annas a lb.

Dr. Matthai.—The other thing that you suggest is an increase in the landed cost of spelter. That is immaterial because the duty you pay is on a tariff valuation.

Mr. Madan.—The valuation is altered from time to time.

Dr. Matthai.—Has it been altered? I have a sort of impression that it has been Rs. 25 per cwt. for some time.

Mr. Madan.—It has been so for a considerable time. For more than 12 months it has been the same.

President.—In the estimate you put the consumption of spelter as 198 lbs.

Mr. Madan.—That is very low.

President.—I notice that Mr. Hardy, the Collector of Customs, Calcutta, in his letter* No. 10925, dated 5th October 1925, says "Rolled zinc sheets ready for use, zinc tiles or slabs having a hole in the centre, and known as boiler tiles, and zinc sheets of any thickness are assessed *ad valorem*." What would zinc imported in the form of sheets probably going to be used for?

Mr. Madan.—They are used in the sulphuric acid plant and for lining of those tanks where acids are used, because zinc is not easily attacked by acid. A sulphuric acid plant has always a zinc sheet coating all round. These are what are known as chemical sheets which have got strong properties to withstand the action of acids.

* Not printed.

Witness No. 3.

BURMA CORPORATION, LIMITED.

WRITTEN.

Letter dated 29th September 1925.

Referring to your letter No. 523 of the 17th instant we beg to advise as follows:—

1. The Burma Corporation does not object to the removal of the Customs duty on spelter.
2. The zinc ores produced in the Corporation's mines are subjected to treatment in an experimental concentrating plant before export, and the assay value of the concentrates produced is approximately 15 per cent. Ag., 7 per cent. Pb., 43 per cent. Zn.
3. At the moment the Corporation does not contemplate the manufacture of commercial spelter in India.

The Corporation does not desire to depute a representative to give oral evidence on its behalf.