

# STATUTORY ENQUIRY—1926

## STEEL INDUSTRY

### VOLUME VII

**Evidence recorded by the Indian  
Tariff Board during the enquiry  
into the question of the continuance  
of protection to the Tinplate  
Industry**



CALCUTTA: GOVERNMENT OF INDIA  
CENTRAL PUBLICATION BRANCH

1927

**Government of India Publications are obtainable from the Government of India Central Publication Branch, Imperial Secretariat Building, 3, Government Place, West, 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 DEPOTS :**

**MADRAS :—**Office of the Superintendent, Government Press, Mount Road, Madras.  
**BOMBAY :—**Superintendent, Government Book Depot, Town Hall, Bombay.  
**SIND :—**Library attached to the Office of the Commissioner in Sind, Karachi.  
**BENGAL :—**Office of the Bengal Secretariat Book Depot, Writers' Buildings, Room No. 1, 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 BERRAR :—**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. Gulzarbagh, 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.  
R. Cambray & Co., Calcutta.  
S. K. Lahiri & Co., Calcutta.  
The Indian School Supply Depot, 303, Bow Bazar Street, Calcutta, and 225, Nawabpur, Dacca.  
Butterworth & Co. (India), Ltd., Calcutta.  
Rai M. C. Sarcar Bahadur & Sons, 30-2A, Harrison Road, Calcutta.  
The Weldon Library, 17, Park Street, Calcutta.  
Standard Literature Company, Limited, Calcutta.  
Association Press, Calcutta.  
Chakraverty, Chatterjee & Co., Ltd., 13, College Square, Calcutta.  
The Book Company, Calcutta.  
James Murray & Co., 12, Government Place, Calcutta. (For Meteorological Publications only.)  
Roy Chandhury & Co., 68/5, Russa, Road, North Calcutta.  
Higginbotham & Co., Madras.  
V. Kalyanarama Iyer & Co., Madras.  
P. 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, Taikad, Trivandrum, South India.  
V. S. Swaminathan, Bookseller, West Tower Street, Madras.  
E. M. Gopalakrishna Kone, Pudumaudapam, Madras.  
Vijapur & Co., Vizagapatam.  
Thacker & Co., Ltd., Bombay.  
D. B. Taraporevala, Sons & Co., Bombay.  
Sunder Pandurang, Bombay.  
Ram Chandra Govind & Sons, Kalbadevi, Bombay.  
N. M. Tripathi & Co., Booksellers, Princess Street, Kalbadevi Road, Bombay.  
R. B. Umadikar & Co., The Bharat Book Depot, Dharwar.  
Proprietor, New Kitabkhana, Poona.  
The Manager, Oriental Book Supplying Agency, 15 Shukrawar, Poona City.  
A. S. Gondhalekar's Book Depot, Publisher and Bookseller, Budhwar Chawk, Poona City.  
Managing Director, Co-operative Bookstall, Booksellers and Publishers, Poona City.  
The Standard Bookstall, Karachi, Quetta, Delhi, Murree and Rawalpindi.  
J. Ray & Sons, 43, K. & L. Edwardes Road, Rawalpindi.  
The Standard Bookstall, Quetta.  
The Standard Book Depot, Lahore, Lucknow, Nainital, Mussoorie, Dalhousie and Ambala 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.  
The Karachi Book Depot, Karachi.  
N. B. Mathur, Supdt., Nazir 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 Depot, Juhi, Cawnpore.  
Rai Sahib M. Gulab Singh & Sons, Mufid-i-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 Depot, 63, Chandni 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, Phavre Street, Rangoon.  
The International Buddhist Book Depot, Post Box No. 371, Rangoon.  
Burma Book Club Ltd., Rangoon.  
Manager, The "Hitavada," Nagpur.  
Bhisey Brothers, Booksellers and Stationers, Sitabaldi, 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.  
The Srivilliputtur Co-operative Trading Union, Ltd., Srivilliputtur (Satur, S. I. R.).  
Banwari Lal, Esq., Pakariya Street, Pilibhit, United Provinces.  
The Manager, Educational Book Depot, Jubbulpore.  
Raghunath Prasad & Sons, Patna City.  
Dandekar Brothers, Indore City.  
The Hyderabad Book Depot, Chaderghat, Hyderabad (Deccan).

# I.—TABLE OF CONTENTS.

## Part I.—Written Representations.

### The Tinsplate Company of India, Limited—

|   |    |
|---|----|
| (1) Representation, dated the 5th May, 1926 . . . . .   |    |
| (2) Letter from the Tariff Board to the Tinsplate Company of India, Limited, dated the 27th April, 1926 . . . . . | 3  |
| (3) Letter from the Tinsplate Company of India, Limited, dated the 20th/24th May, 1926 . . . . .                  |    |
| (4) Letter from the Tariff Board to the Tinsplate Company of India, Limited, dated the 24th May, 1926 . . . . .   |    |
| (5) Letter from the Tinsplate Company of India, Limited, dated 2nd June 1926 . . . . .                            | 12 |
| (6) Letter from the Tinsplate Company of India, Limited, dated 3rd June, 1926 . . . . .                           | 12 |
| (7) Letter from the Tinsplate Company of India, Limited, dated 24th June, 1926 . . . . .                          | 13 |
| (8) Letter from the Tinsplate Company of India, Limited, dated 28th June, 1926 . . . . .                          | 13 |
| (9) Letter from the Tinsplate Company of India, Limited, dated 2nd July, 1926 . . . . .                           | 14 |
| (10) Letter from the Tinsplate Company of India, Limited, dated 5th July, 1926 . . . . .                          | 64 |
| (11) Letter from the Tinsplate Company of India, Limited, dated 14th July, 1926 . . . . .                         | 71 |
| (12) Letter from the Tinsplate Company of India, Limited, dated 19th July, 1926 . . . . .                         | 71 |
| (13) Letter from the Tariff Board to the Tinsplate Company of India, Limited, dated 21st July, 1926 . . . . .     | 73 |
| (14) Letter from the Tinsplate Company of India, Limited, dated 26th July, 1926 . . . . .                         | 73 |
| (15) Letter from the Tinsplate Company of India, Limited, dated 18th August, 1926 . . . . .                       | 73 |
| (16) Letter from the Tinsplate Company of India, Limited, dated 7th September, 1926 . . . . .                     | 74 |
| (17) Letter from the Tinsplate Company of India, Limited, dated 21st September, 1926 . . . . .                    | 83 |
| (18) Letter from the Tinsplate Company of India, Limited, dated 5th October, 1926 . . . . .                       | 83 |

### Welsh Plate and Sheet Manufacturers' Association .

|  |    |
|--|----|
| (1) Letter from the Tariff Board to the Welsh Plate and Sheet Manufacturers' Association, dated the 11th May, 1926 . . . . . | 84 |
| (2) Letter from the Tariff Board to the Welsh Plate and Sheet Manufacturers' Association, dated 24th May, 1926 . . . . .     | 84 |
| (3) Letter from the Welsh Plate and Sheet Manufacturers' Association, dated 16th June, 1926 . . . . .                        | 86 |
| (4) Letter from the Welsh Plate and Sheet Manufacturers' Association, dated 24th June, 1926 . . . . .                        | 87 |
| (5) Letter from the Welsh Plate and Sheet Manufacturers' Association, dated 1st July, 1926 . . . . .                         | 93 |

|  | PAGE. |
|--|-------|
| III. The Imperial Tobacco Company of India, Limited—   |       |
| Letter from the Imperial Tobacco Company of India, Limited,<br>dated 15th July, 1926 . . . . . | 115   |
| IV. The Tata Iron and Steel Company—   |       |
| Letter from the Tata Iron and Steel Company, dated 12th/18th<br>October, 1926 . . . . .        | 116   |

## Part II.—Oral Evidence.

### THE TINPLATE COMPANY OF INDIA, LIMITED.

*21st June, 1926.*

|   |         |
|---|---------|
| Preliminary examination of representations of the Tinplate Company of India, Limited, the Burmah Oil Company, Limited, and the Tata Iron and Steel Company, Limited . . . . . | 119—131 |
|---|---------|

*7th July, 1926.*

|  |         |
|--|---------|
| Examination of the claim for continuance of protection to the industry—Examination of Statement XI—The Fair Selling Price—Intermediate Costs—The Tinhouse and Warehouse Department—Cost above Metal—Statements I.—IV Costs—Combined Costs—Overhead charges—Depreciation—Manufacturer's profit. Statement IX d. The Realised Prices . . . . . | 132—171 |
|--|---------|

*8th July, 1926.*

|  |         |
|--|---------|
| Wasters—Import Prices—Statements submitted by the Company I.—V—Statement VI the Hot Mills—Statement VII—Statement VIII—Statement IX A—Statement IX (a), Statement IX C.—Statement X—Statement XI—Statements XIV, XV and XVI—Labour—Labour Welfare Statement XVII—Statement XVIII—Statement XIX Future Estimate of Costs—Statement IV—The Tinhouse and Warehouse—Letter of the 5th July, 1926—Representation by the Welsh Plate and Sheet Manufacturers' Association, dated 16th June, 1926 . . . . . | 172—205 |
|--|---------|

### THE WELSH PLATE AND SHEET MANUFACTURERS' ASSOCIATION.

*3rd August, 1926.*

|  |         |
|--|---------|
| Trade conditions in the Welsh Tinplate Industry—Points raised in the Association's Representation—Works Costs in Wales and India—Wasters—Scruff Scrap—Tinbar—Cost of Plant and Machinery—The Representation of the Association . . . . . | 206—247 |
|--|---------|

*4th August, 1926.*

|  |         |
|--|---------|
| The Representation of the Association (continued)—National aspect of the Tinplate Industry—Samplers—Exemption from the protective duties of certain varieties—Imperial Preference—Capitalization . . . . . | 248—268 |
|--|---------|





## ***PART I.***

### ***Written Representations***

## I. THE TINPLATE COMPANY OF INDIA, LIMITED.

*(1) Representation, dated the 5th May 1926.*

We refer you to your Press Communiqué, dated 16th April, and have the honour to submit below our representations.

Our industry is still in its early stages and requires assistance for a further period whilst our labour becomes fully trained and we are able to adapt and perfect our operations to suit the conditions under which tinplate has to be manufactured in India.

During 1925 we obtained an output of 620,000 basis boxes at a cost of Rs. 1,791 per 100 basis boxes. This shows a great improvement over the previous year and is Rs. 17 per 100 boxes less than the estimated cost figure given in our letter of 30th April 1925. Prices of tinplates unfortunately fell steadily during the year and our average price realised was Rs. 1,740 per 100 boxes only which is Rs. 90 per 100 boxes lower than our estimated figure. As against the price in Wales of 23s. 3d. per basis box in January 1925, the year finished with a price of 19s. 10½d. only with the result that on cost of production alone there is a deficit over the year of Rs. 51 per 100 boxes to which must be added depreciation and interest figures.

In our cost figures given above steel is taken at Rs. 113.18 per ton which is the average of the prices paid to the Tata Iron and Steel Company, Limited, and against outside purchases, and we have not taken into consideration any settlement under the profit and loss sharing arrangement. We have arranged with the Tata Iron and Steel Company, Limited, for supplies of our full requirements during the year 1926 at Rs. 84 per ton but this is a temporary arrangement only whilst various points in dispute between the parties are subjected to judicial interpretation. The reduction in the cost of steel will lower our figure of costs by Rs. 182 per 100 boxes but the price of tinplates is now only 19s. 4½d. and our return, unless conditions improve during the remainder of the year, will be lower than that for 1925, not taking into account the increase in protection of Rs. 25 per ton lately granted to the tinplate industry and the reduction in the duty on tin. This current price of tinplates, we understand from the trade papers, does not pay the Welsh manufacturers and schemes are being considered for reduction in output. If these eventuate prices should show an immediate improvement.

Simultaneously with this fall in rates we have, however, been able to procure reductions in our costs in various directions. The price of coal has declined to the extent of Rs. 2 to Rs. 2.8 per ton and this same cause has led the Tata Iron and Steel Company to reduce the cost of power from 10 pies per unit to 9.24 pies per unit. The price of sulphuric acid has been reduced by Rs. 5 per ton and we now pay only annas 9 per ton to the Metallurgical Inspector for examining our steel instead of annas 12 paid in 1925. Every possible method of economising in our Works operation is being investigated and steps are being taken to reduce costs to a minimum in all directions in which this is feasible.

During the first quarter of this year the outturn at Works was 186,000 boxes as against 168,000 boxes for the same period of 1925 and given freedom from industrial disturbances, or serious break-downs in our plant or power supply, the outturn for the year should be in excess of the 1925 figure which was in itself in excess of the output for which the plant was designed.

During the latter part of 1925 we commenced to instal a smaller type of tinning machine which is giving better results and yields of raw materials but we have yet to test these machines during the monsoon when our greatest difficulties arise. The re-organization is not yet complete and it is early yet to form any definite estimate of the saving which will accrue, but there is no doubt that a reduction in costs will result.

We trust that the information given above will show you that continued and substantial improvements are being made and that satisfactory results may confidently be looked for in the future.

The question of the re-organization of the capital of the Company is now under consideration and we hope very shortly to discuss the question fully with the Tata Iron and Steel Company, Limited, in Bombay and that a mutually satisfactory accommodation, will be arranged between the parties. An outline of the scheme of re-organization suggested has been forwarded to the Honourable Member for Commerce and Railways.

Although the progress of the Company is steady and assured it still requires the full measure of protection granted to carry it over at least until such a time as it has been able to acclimatise itself to the entirely new conditions under which it has to work in this country and until the Indian labour is fully skilled in all the very difficult operations involved.

Enclosure.

*Statement showing probable profits and losses during 1926 as compared with 1925. (These figures do not take into account Depreciation and Interest.)*

|   |            |     |                |
|---|------------|-----|----------------|
|   |            | Rs. |                |
| Saving in the cost of steel . . . . .                         |            | 182 | per 100 boxes. |
| <i>Saving for the year in the cost of—</i>                    |            |     |                |
|   | Rs.        |     |                |
| Power . . . . .   | 55,000     |     |                |
| Coal . . . . .  | 75,000     |     |                |
| Inspection . . . . .  | 8,000      |     |                |
| Acid . . . . .  | 14,000 say | 21  | do.            |
|   |            | 203 | per 100 boxes. |
| Less loss in 1925 . . . . .                                   |            | 51  |                |
|   |            | 152 |                |
| Less fall in price say 2s. 2d. per box . . . . .              |            | 144 |                |
|   |            |     |                |
| Nett profit on basis of protection in force in 1925 . . . . . |            | 8   | per 100 boxes. |
|   |            |     |                |
| On 700,000 boxes, say . . . . .                               | 56,000     |     |                |
| Increase in duty Rs. 25 per ton on 33,000 tons . . . . .      | 8,25,000   |     |                |
| Saving in tin duty of Rs. 275 per ton on 500 tons . . . . .   | 1,37,500   |     |                |
|   |            |     |                |
| Gross profit (excluding depreciation and interest) . . . . .  | 10,18,500  |     |                |

In taking the duty on 33,000 tons of tinplate only we have taken into consideration the fact that we obtain no added duty on casings for tinplates as duty is charged on the nett weight of a box only.

The figure of 700,000 boxes for the output is the maximum we can hope to attain over the year.

(2) *Letter, from the Tariff Board, dated the 27th April 1926, to the Tinplate Company of India, Limited, Calcutta.*

I am directed by the Tariff Board to ask you to forward for the Board's information:—

(i) Five copies of the Memorandum and Articles of Association of your Company.

(ii) Five complete sets of your Company's balance sheets to date.

(iii) A statement showing (a) the subscribed, (b) the paid up, share capital under various heads.

(iv) A statement showing your debenture issue, the rate of interest, the conditions as to redemption, etc.

(v) A statement showing the block value of your works under the following headings:—

(a) Land.

(b) Buildings.

(c) Plant and machinery.

(d) Miscellaneous.

(vi) A statement giving full details of the expenditure incurred year by year upon your works under the above headings and of the yearly depreciation you have actually allowed for. Where machinery, etc., has been bought in America its price should be quoted in dollars, giving the rate of exchange current at the time of purchase.

(vii) The present day replacement value of your plant and machinery, with a statement of your reasons for arriving at such value.

Five spare copies of each of the statements (iii) to (vii) may please be sent.

(3) *Letter, dated 20th/24th May 1926, from the Tinplate Company of India, Limited, Calcutta.*

We have the honour to acknowledge receipt of your letter No. 186, dated 27th ultimo in which you asked us to supply to you copies of our Memorandum and Articles of Association, Balance Sheets and various statements.

Your letter called for statements, etc., under seven headings and we now send you herewith:—

(1) Five copies of our Memorandum and Articles of Association.\*

(2) Five copies of our Balance sheets\* for the period ended 30th June 1920, the half-year ended 31st December 1920 and for the years ended 31st December 1921, 31st December 1922, 31st December 1923 and 31st December 1924. Our accounts for last year are not yet finally completed and we will send you copies of the balance sheet as soon as it is available.

(3) Six copies of a statement of our Share Capital, Enclosure 1.

(4) Six copies of a statement of our Debenture Issue, Enclosure 2.

(5) Six copies each of five statements, Enclosure 3 (a), (b), (c), (d) and (e) giving the information required concerning the Block Value of our Works and yearly expenditure upon it.

With reference to these last statements you required us to furnish figures showing the cost to the Company in rupees of its purchases on Capital Account year by year of plant paid for in dollars and in sterling but we beg to point out that up to the year 1924 a very large proportion of this Capital expenditure had been financed by sterling loans raised from the Burmah Oil Company, Limited in the United Kingdom.

During the period 15th January to 27th March 1924 the Company raised money in India by issue of debentures and with the funds so obtained repaid (by remittance made through exchange banks) the loans above referred to. By the 27th of March 1924 the whole balance due to the Burmah Oil Company on 31st December 1923 (£504,820-9-11 as per our printed balance sheet of that date) had been remitted, the cost of this at sundry rates of exchange being Rs. 71,05,352.

It follows therefore that the cost to the Company of a very large share of its capital purchases does not appear in a final form (that is at final rates of exchange) in the accounts until 1924, when the loans were repaid.

The repayment of £504,820-9-11 was to meet the following finance which had been provided by the Burmah Oil Company:—

- |  |   |                                 |
|--|---|---------------------------------|
| (1) Cost of \$1,407,000 supplied by B.O.C. to meet our New York purchases on capital account.  | } | £334,456-2-4 Rs. 47,07,472-0-0. |
| (2) Cost of £116,591-1-9 expended by B. O. C. to meet our capital purchases in United Kingdom. |   |                                 |

|                 |                                 |
|-----------------|---------------------------------|
| Capital Account | £451,047-4-1 Rs. 63,48,493-0-0. |
|-----------------|---------------------------------|

- |   |   |
|---|---|
| (3) Cost of £53,773-5-10, expended by B. O. C. to meet our purchases in the United Kingdom of operation stores. | } |
|   |   |

|                 |                                |
|-----------------|--------------------------------|
| Revenue Account | £53,773-5-10 Rs. 7,56,859-0-0. |
|-----------------|--------------------------------|

|  |                                  |
|--|----------------------------------|
|  | £504,820-9-11 Rs. 71,05,352-0-0. |
|--|----------------------------------|

The cost to the Company of the above was Rs. 71,05,352 and a list is attached showing the dates of remittance and the rates of exchange.

At the end of 1924 the capital expenditure of the Company (leaving out Golmuri town) appeared in the balance sheet as Rs. 1,43,45,382-1-9, and this may be analysed as under:—

- |  |   |                            |
|--|---|----------------------------|
| (1) Cost of remittances from Calcutta to New York to pay for "dollar" purchases. A list is attached showing the dates of these remittances and the rates of exchange. The remittances were made through the Hongkong and Shanghai Banking Corporation. | } | \$1,049,936 Rs. 40,13,419. |
| (2) Cost of remittances from Calcutta to London to repay to B. O. C. the cost to them of dollar loans raised to pay for further "dollar" purchases.  |   |                            |
| (3) Total dollar expenditure on Capital Account.   | } | \$2,456,936 Rs. 87,20,891. |
| (4) Cost of remittances from Calcutta to London to repay sums advanced on loan by B. O. C. for "Sterling" purchases on capital account.  |   |                            |
| (5) Total rupee cost of "dollars" and "sterling" purchases on capital account.   | } | Rs. 103,61,912.            |
| (6) Capital expenditure in rupees in India.  |   |                            |
| (7) Total agreeing with balance sheet as at 31st December 1924.  | } | Rs. 1,43,45,382.           |
|  |   |                            |

As 1924 is therefore the first year in which our "dollar" and "sterling" expenditure appears at its cost value, we do not think that a yearly statement of capital expenditure previous to that can be of any practical use. We therefore attach the statement asked for as at 31st December 1924 and 31st December 1925, and a further statement showing depreciation written off for the year 1923.

You will see from these that the Company's American purchases on capital account cost \$2,456,986, which in turn cost Rs. 87,20,891, the average rate being Rs. 356.3 to \$100; and that the Company's sterling payments on capital account totalled £116,591 and cost Rs. 16,41,021, the average rate being 1s. 5.048d.

With reference to your request for particulars of the present day replacement value of our plant we regret that we are not at the moment able to supply you with figures but we have cabled to our Home friends and will write further on hearing from them.

Enclosure 1.

#### *Share Capital.*

|  | Rs.       |
|--|-----------|
| Total Authorised Share Capital . . . . | 75,00,000 |
| Total Subscribed Share Capital . . . . | 75,00,000 |
| Total Paid Up Share Capital . . . .    | 75,00,000 |

The Share Capital consists of 5,00,000 shares of Rs. 15 each of which 3,33,332 are held by the Burmah Oil Company, Limited and 1 by Mr. A. K. Faulkner as their representative, and 1,66,666 by the Tata Iron and Steel Company, Limited, and 1 by Mr. D. M. Madan as their representative.

Enclosure 2.

#### *Debenture issue.*

The Company's Debenture Issue consists of 833 Debentures of Rs. 15,000 each totalling Rs. 1,24,95,000 issued on various dates between 21st August 1922 and 28th March 1924.

Interest is payable half-yearly at the rate of 10 per cent. and interest on interest unpaid at the rate of either 10 per cent. or 1 per cent. over the Imperial Bank of India rate of interest on on-demand loans whichever be lower.

The Debentures are First Mortgage Debentures secured upon all the Assets of the Company and upon the benefits and rights enjoyed by the Company under its agreements with the Tata Iron and Steel Company, Limited and the Burmah Oil Company, Limited subject to the obligations which it has incurred under those agreements. The principal becomes repayable if the Company defaults in any payment of principal or interest for a period of six months.

The total number of Debentures are redeemable in fifteen years from the date of issue and will become due as follows:—

- Rs. 4,99,500 on 30th June 1928.
- Rs. 12,49,500 on 30th June 1929.
- Rs. 12,49,500 on the 30th June of each succeeding year up to and including 1937.
- Rs. 7,50,000 on 30th June 1938.

Enclosure 3.

## (a) Capital Expenditure to 31st December 1923.

|                         | Expenditure per B-S.<br>(before final adjustment<br>on repayment of loans). | Depreciation written<br>off in 1923. |
|-------------------------|---|--------------------------------------|
| Hand . . . . .          | Nil.  | Nil.                                 |
| Buildings . . . . .     | Rs. 46,85,266   | Rs. 1,03,209                         |
| Machinery . . . . .     | „ 86,09,004   | „ 4,24,740                           |
| Miscellaneous . . . . . | „ 10,85,543   | „ 64,433                             |
| TOTAL .                 | Rs. 1,43,79,813   | Rs. 5,92,382                         |



सत्यमेव जयते

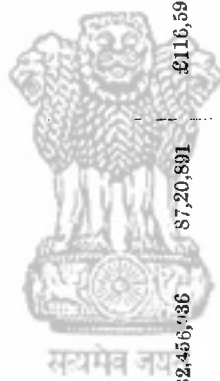
(b) Capital Expenditure as shown in Balance Sheet, dated 31st December 1924 (contains adjustment for final Rates of Exchange.)

| Asset.                        | Rupee<br>Expenditure. | Dollar Expenditure.     | Sterling Expenditure. | TOTAL.      | Depreciation<br>charged in<br>1924. |
|-------------------------------|-----------------------|-------------------------|-----------------------|-------------|-------------------------------------|
| Land . . . . .                | ...                   | Rs.<br>...              | Rs.<br>...            | Rs.<br>Nil. | Rs.<br>...                          |
| Buildings . . . . .           | ...                   | ...                     | ...                   | ...         | ...                                 |
|                               | 28,62,049             | { \$1,049,936 40,13,419 | { £116,591 16,41,021  | { 47,79,556 | 1,18,489                            |
| Machinery and Plant . . . . . | ...                   | { \$1,407,000 47,07,472 | ...                   | 84,44,405   | 6,75,552                            |
| Miscellaneous . . . . .       | 11,21,421             | ...                     | ...                   | 11,21,421   | 73,757                              |
| <b>Total</b>                  | 39,83,470             | \$2,456,936 87,20,891   | £216,591 16,41,021    | 143,45,382  | 8,68,798                            |



(c) Capital Expenditure as shown in Balance Sheet, dated 31st December 1925.

| Asset.                        | Rupee<br>Expenditure. | Dollar Expenditure. | Sterling Expenditure. | Total.      | Depreciation<br>charged in<br>1925. |
|-------------------------------|-----------------------|---------------------|-----------------------|-------------|-------------------------------------|
| Land . . . . .                | ..                    | ..                  | ..                    | Rs.<br>Nil  | Rs.<br>..                           |
| Buildings . . . . .           | 29,77,436             | \$2,456,586         | £116,591              | 47,81,118   | 1,19,528                            |
| Machinery and Plant . . . . . |                       | 87,20,891           | 16,41,021             | 85,58,230   | 6,84,659                            |
| Miscellaneous . . . . .       | 11,43,067             | ..                  | ..                    | 11,43,067   | 75,270                              |
| Total                         | 41,20,503             | \$2,456,586         | £116,591              | 1,44,82,415 | 8,79,457                            |



(d) Remittances made to New York through the Hongkong and Shanghai Banking Corporation to meet the cost of Plant purchased in America.

| Date.                | Dollars.       | Exchange<br>Rupee to<br>\$100 | Rupee Cost.   |
|----------------------|----------------|-------------------------------|---------------|
|                      | \$ cents.      |                               | Rs. A. P.     |
| 14-8-1920 . . . . .  | 100,000 00     | 302                           | 3,02,000 0 0  |
| 18-8-1920 . . . . .  | 11,878 33      | 299                           | 35,516 3 3    |
| 18-8-1920 . . . . .  | 47,106 67      | 299                           | 1,41,028 5 3  |
| 28-8-1920 . . . . .  | 7,183 33       | 304                           | 21,837 5 3    |
| 14-9-1920 . . . . .  | 695 00         | 315                           | 2,189 4 0     |
| 7-10-1920 . . . . .  | 1,239 60       | 333                           | 4,127 14 0    |
| 23-11-1920 . . . . . | 39,006 59      | 380                           | 1,48,225 0 9  |
| 9-12-1920 . . . . .  | 22,000 50      | 420                           | 92,402 1 9    |
| 13-12-1920 . . . . . | 3,406 00       | 422                           | 14,373 5      |
| 22-12-1920 . . . . . | 24,864 19      | 411                           | 1,02,191 13   |
| 28-12-1920 . . . . . | 7,504 08       | 411                           | 30,841 12 3   |
| 4-1-1921 . . . . .   | 4,716 41       | 400                           | 18,865 10 3   |
| 11-1-1921 . . . . .  | 5,221 80       | 374                           | 19,529 8 6    |
| 20-1-1921 . . . . .  | 62,684 98      | 379                           | 2,37,576 1 3  |
| 3-2-1921 . . . . .   | 81,494 31      | 375                           | 3,05,603 10 6 |
| 15-2-1921 . . . . .  | 6,393 14       | 383                           | 24,141 0 6    |
| 26-1-1921 . . . . .  | 2,280 00       | 374                           | 8,527 3 3     |
| 19-2-1921 . . . . .  | 3,553 01       | 384                           | 13,643 9 0    |
| 22-2-1921 . . . . .  | 11,253 25      | 395                           | 1,62,950 5 6  |
| 9-3-1921 . . . . .   | 64,364 09      | 419                           | 2,69,685 8 6  |
| 24-3-1921 . . . . .  | 107,633 44     | 408                           | 4,39,144 7 0  |
| 14-4-1921 . . . . .  | 57,450 00      | 400                           | 2,29,800 0 0  |
| 5-5-1921 . . . . .   | 19,294 11      | 397                           | 195,697 9 9   |
| 2-4-1921 . . . . .   | 228,473 01     | 400                           | 9,13,892 0 9  |
| 19-5-1921 . . . . .  | 13,345 59      | 395                           | 52,715 1 8    |
| 28-7-1921 . . . . .  | 1,924 59       | 445                           | 8,564 6 9     |
| 27-4-1921 . . . . .  | 55,000 00      | 397                           | 2,18,350 0 0  |
| TOTAL . . . . .      | \$1,019,936 02 | ...                           | 40,13,419 3 3 |

Average Rate:—

382-254

## (e) Remittances made to B. O. C. London to repay Sterling Loans.

| Date.                 | Rupees.   | Exchange.           | Sterling.    |
|-----------------------|-----------|---------------------|--------------|
|                       |           | s. d.               | £ s. d.      |
| 15th January 1924 . . | 3,00,000  | 1 5 $\frac{1}{32}$  | 21,249 1 3   |
| " " . .               | 2,50,000  | 1 5 $\frac{3}{32}$  | 17,805 19 10 |
| " " . .               | 10,00,000 | 1 5 $\frac{1}{8}$   | 71,354 3 4   |
| " " . .               | 11,00,000 | 1 5 $\frac{3}{16}$  | 78,776 0 10  |
| " " . .               | 7,00,000  | 1 5 $\frac{7}{32}$  | 50,221 7 1   |
| 18th " . .            | 3,00,000  | 1 5 $\frac{1}{4}$   | 21,562 10 0  |
| 21st " . .            | 3,00,000  | 1 5 $\frac{7}{32}$  | 21,523 8 9   |
| 25th " . .            | 7,00,000  | 1 5 $\frac{1}{4}$   | 50,312 10 0  |
| 31st " . .            | 7,00,000  | 1 5 $\frac{1}{32}$  | 49,674 9 7   |
| 10th March 1924 . .   | 1,00,000  | 1 4 $\frac{1}{4}$   | 6,979 3 4    |
| 14th " . .            | 1,00,000  | 1 4 $\frac{11}{16}$ | 7,005 4 2    |
| 14th " . .            | 1,00,000  | 1 4 $\frac{1}{4}$   | 6,979 3 4    |
| 17th " . .            | 2,00,000  | 1 4 $\frac{1}{4}$   | 13,958 6 8   |
| 20th " . .            | 2,50,000  | 1 4 $\frac{11}{16}$ | 17,382 16 3  |
| 22nd " . .            | 1,00,000  | 1 4 $\frac{11}{16}$ | 6,953 2 6    |
| 22nd " . .            | 1,50,000  | 1 4 $\frac{15}{32}$ | 10,439 9 1   |
| 22nd " . .            | 3,00,000  | 1 4 $\frac{31}{32}$ | 20,898 8 0   |
| 24th " . .            | 2,00,000  | 1 4 $\frac{11}{16}$ | 13,906 5 0   |
| 24th " . .            | 1,50,000  | 1 4 $\frac{15}{32}$ | 10,439 9 1   |
| 27th " . .            | 1,05,352  | 1 4 $\frac{49}{64}$ | 7,359 11 1   |
| TOTAL                 | 71,05,352 | ...                 | 504,820 9 11 |

*(4) Letter, from the Tariff Board, to the Tinplate Company of India, Limited, dated the 24th May 1926.*

I am directed to say that the Tariff Board experiences some difficulty in approaching the enquiry into the continuance of protection to the tinplate making industry owing to the unusual position in which your company is placed by reason of the agreements into which it has entered with the Burmah Oil Company for the sale of its products, and with the Tata Iron and Steel Company for the purchase of sheet bar. It is understood from your demi-official letter No. 6457/28, dated the 20th May 1926 that all the information asked for in the Board's letter No. 186, dated the 27th April 1926 with the exception of that relating to the present day value of your plant, has been forwarded by you, though it has not yet reached the Board, but I am now directed to ask you to send 4 copies of each of the 2 agreements referred to above together with complete particulars as to the conditions under which your debenture issue was made, i.e., the amount of debentures issued, the rate of interest payable, the conditions as to redemption, the rights of the debenture holders in the event of default in payment of principal or interest (including the amount of interest in arrears, if any), etc. Some of this information has already been asked for in the Board's letter of the 27th April, but it would be convenient if all the information required in connection with that aspect of your case which forms the subject matter of this letter could be furnished in a consolidated form.

2. In your representation No. T. P.-6402/28, dated the 5th instant, you state that an outline of the scheme of your capital re-organisation has been forwarded to the Honourable Member for Commerce and Railways. I am to say that the Board does not understand why a copy of this was not included in your representation, as the question is one to which the Board's attention has been specifically drawn by the Government of India, and would be glad if copies could now be sent.

3. I am to add that the Board also wishes to be informed exactly at what stage the litigation between your company and the Tata Iron and Steel Company now stands and to be furnished with a brief summary of the points at issue in that litigation.

4. In addition, I am to request that the information asked for above may be sent with the least possible delay as it appears to the Board very probable that an examination of it will show the desirability of holding a meeting between the Board and representatives of your company, of the Burmah Oil Company and of the Tata Iron and Steel Company in order that the exact nature and scope of any further information the Board may desire to have before commencing the public examination of the representatives of your Company may be explained. If such a meeting is held, the presence of representatives of the Burmah Oil Company will obviously be necessary in view of the position of that company as one of the two partners, as the holders of your debentures, and as the chief purchaser of your products. The presence of the representatives of the Tata Iron and Steel Company is equally necessary in view of the position of that company as the chief supplier of your raw material and also of the fact that by reason of its being the other of the two partners constituting your company, it is to all intents and purposes a joint applicant with you and the Burmah Oil Company for protection to the tinplate industry. Your letter of the 20th instant indicates that you are prepared to send a delegation to Shillong and I am to suggest the 16th June as a suitable date as representatives of the Tata Iron and Steel Company are appearing before the Board on the 14th of that month and would be able to remain here for such a meeting. I am to add that whilst the meeting would be of an informal character, a brief abstract of the proceedings would be drawn up and would form part of the published records.

5. The Tata Iron and Steel Company is being separately addressed with regard to this proposal.

(5) *Letter, dated the 2nd June 1926, from the Tinplate Company of India, Limited.*

We have the honour to acknowledge receipt of your letter No. 281, of the 24th ultimo, and give below the information for which you ask.

We attach two copies of our agreement\* with the Burmah Oil Company, Limited, in connection with the sale of Tinplates to them. We regret that these are the only copies we have in this Office. We are, however, getting others printed and will send you further copies.

We also enclose four copies of our *Plaint*\* in the Suit filed against the Tata Iron and Steel Company, Limited. This *Plaint* includes our Agreement for the supply of Steel.

We gave you in our letter of 20th instant full particulars of the Debenture Issues of this Company and details of the Debenture Holders' rights. We enclose four copies of the Memorandum\* of Agreement in connection with the issue of Debentures and trust that you will now have all the information which you require.

2. The Note to which you refer contained suggestions made by the Burmah Oil Company, Limited, regarding the reconstruction of this Company's Capital and agreements, and these were duly placed before the Tata Iron and Steel Company, Limited, the other partners in our Company. In the event the Steel Company submitted counter-suggestions which have been placed before the Burmah Oil Company in London by cable, and they should receive the writing in which these counter-suggestions are confirmed and more fully detailed on the 7th June. We expect that shortly thereafter further progress will be made in the negotiations between the Shareholders; meantime we understand that nothing has been decided.

3. The state of our litigation with the Tata Iron and Steel Company is as follows:—

We have filed our *Plaint*, copies of which are attached and the Steel Company are preparing their Written Statement which has not, as far as we are aware, yet been filed. The points at dispute will be clear to you from the copies of the *Plaint* and we do not therefore recapitulate them here.

We have also pending an Arbitration Case which we hope will shortly be settled. In this case we are claiming from the Steel Company £3 per ton on 19,000 tons of Steel which we maintain that they short supplied to us in the years 1924 and 1925, under an arrangement come to in London in supersession of our main Agreement. The issue, however, affects only these two years and has no relation to subsequent periods.

4. Your suggestion that a meeting should be held of the Board and representatives of this Company, of the Burmah Oil Company and of the Tata Iron and Steel Company is noted. We would, however, request that the meeting be held on June 17th and not on June 16th if this can be conveniently arranged.

We note that whilst the meeting will be of an informal character a brief abstract of the proceedings will be drawn up and will form part of the published records.

---

(6) *Letter, dated 3rd June 1926, from the Tinplate Company of India, Limited, Calcutta.*

In continuation of our letter of yesterday's date we have now received the printed copies of our agreement with the Burmah Oil Company, Limited, in connection with the sale of Tinplates to them and send you herewith two further copies of this agreement.\* We also enclose two copies of our agreement\* with the Burmah Oil Company, Limited, dated 13th January 1922, which is supplemental to the above agreement.

---

\*Not printed.

(7) *Letter, dated the 24th June 1926, from the Tinplate Company of India, Limited.*

With further reference to your letter No. 186, dated 27th April 1926, we have the honour to advise you that we have now received a telegram from London advising us that Messrs. Perin and Marshall, New York, have telegraphed to them informing them that to-day's all-in cost of purchases made in the United States, including freight, works out at \$2,032,735 against the original cost of \$2,324,870. Confirmatory *pro forma* invoices from suppliers are being forwarded to us. Purchases in the United Kingdom at the present day would cost £39,602 against the original cost of £54,779. On this basis we would make the replacement cost of our plant as follows:—

|   | Rs.                |
|---|--------------------|
| Dollar expenditure . . . . .                    | 56,51,297          |
| Plus 4½ per cent. to Perin & Marshall, New York | 2,54,308           |
| Sterling expenditure . . . . .                  | 5,28,027           |
| Local . . . . .                                 | 39,83,470          |
| Golmuri Town . . . . .                          | 16,74,517          |
| <b>TOTAL</b>                                    | <b>1,20,91,619</b> |

Local expenditure and expenditure on Golmuri Town were almost entirely on account of forwarding materials to Golmuri, the preparation of the site and the election of buildings and machinery. We have made no deductions from these two items. The resulting figure shows that our original cost is some 33 per cent. above the cost of present day. We trust that these figures will give you the information which you require.

We are meantime working on a statement to show the yearly total value of machinery, building material and buildings debited by us to our Capital cost. This statement will, however, require a great amount of work and will not be ready for the present.

(8) *Letter, dated the 28th June 1926, from the Tinplate Company of India, Limited.*

We were asked during our examination on June 21st for a note on the differences between the rolling of sheets and the rolling of blackplate such as is required for tinplates and we now have the honour to give this below.

The process of rolling blackplate differs considerably from rolling sheets. The measure of the difference may be gauged by the difference in the selling rates. Thus, "The Iron and Coal Trades Review" of 28th May 1926 quotes:

|   |          |
|---|----------|
| Blacksheets 24 G. . . . .                       | £10-17-6 |
| 26 G. . . . .                                   | £11-10-0 |
| 28 G. . . . .                                   | £12-2-6  |
| Blackplates P. & C. A. Rectangles 28 G. . . . . | £14-10-0 |

It will be seen that the price of blacksheet falls as the sheet gets thicker; and as you know, the price per ton of blackplate or tinplate increases as it gets thinner, consequently, the price of 30 G. blackplate, which forms the bulk of our production, will be very much higher than the price of 24 G., 18 G. or 16 G. blacksheets, which form the bulk of Tatas' Sheet Mill production.

The main difference between the processes lies in the fact that we have to roll our plates once or twice more than a Sheet Mill. We finish our plate in "eights," we rough down the pairs, match, double and re-heat; then we roll the "fours," double and re-heat; finally we roll the "eights." Thus, we have three heatings and four rollings.

In a Sheet Mill working 16/24G., they rough, match, double and re-heat; and then finish. On some orders, they only rough down, match and finish.

Further, the thinner the sheets, the less the tonnage produced. For example we get less tonnage rolling 90-lb. plate than we get in rolling 30 G. plate; the number of boxes per shift is less, as well as the weight per box. It may be said that greater care is necessary, and therefore longer time is occupied, in rolling thin sheets than in rolling thick sheets. Average production per mill must therefore be much less in a Tinplate Works than in a Sheet Works.

(9) *Letter, dated 2nd July 1926, from the Tinplate Company of India, Limited, Calcutta.*

We have the honour to enclose five sets of statements which at our examination on June 21st we were asked to prepare.

We regret that it has not been possible to submit these to you earlier but the compilation of many of the statements has required a considerable amount of work and we have only now been able to complete our figures.

We are writing to you fully in connection with these statements and on the subject of our application for continued protection and hope to let you have this letter in the course of the next three days.

#### STATEMENT I.

##### *Costs—1923.*

|  | Tons.               |
|--|---------------------|
| Production . . . . .                   | 9,071               |
|  | Rs.                 |
| Hot Mill Costs per ton . . . . .       | 418.400             |
| Intermediate Costs . . . . .           | 48.935              |
| Tinhouse and Warehouse Costs . . . . . | 108.989             |
|  | <hr/> 576.324 <hr/> |

## STATEMENT II.

*Hot Mill Costs.*

|  | 1924.       | 1925.       | January to<br>March 1926. |
|--|-------------|-------------|---------------------------|
| Production . . . . .                       | Tons 20,763 | Tons 29,555 | Tons 8,868                |
| Steel consumed per ton of black-<br>plate. | " 1·3167    | " 1·3256    | " 1·4183                  |
| Yield of good blackplate . . .             | 75·95%      | 75·09%      | 73·40%                    |
| Cost per ton of blackplate . . .           | Rs. 296·710 | Rs. 233·534 | Rs. 192·218               |
| Steel cost f. o. r. works per ton .        | " 127·155   | " 107·386   | " 84·000                  |
| Steel cost delivered to mills per<br>ton.  | " 129·800   | " 109·756   | " 85·976                  |
| Steel cost per ton of blackplate .         | " 173·380   | " 145·496   | " 121·508                 |
| Less credit for scrap . . . . .            | " 3·793     | " 2·312     | " 4·504                   |
|  | Rs. 169·587 | 143·184     | 117·204                   |
| Fuel . . . . .                             | 6·775       | 4·940       | 3·903                     |
| Labour . . . . .                           | 65·349      | 41·084      | 32·795                    |
| Materials for repairs . . . . .            | 1·090       | 1·210       | 1·189                     |
| Power . . . . .                            | 19·810      | 16·225      | 14·473                    |
| Rolls, greases, etc. . . . .               | 12·210      | 12·313      | 12·379                    |
| Shearing & opening . . . . .               | 6·640       | 4·146       | 3·336                     |
| General works expenses . . . . .           | 15·749      | 12·044      | 8·973                     |
|  | Rs. 296·710 | Rs. 233·534 | Rs. 192·218               |
| Credit for spoiled sheets . . . .          | ...         | 1·612       | " 2·034                   |
|  | Rs. 296·710 | Rs. 233·534 | Rs. 192·218               |
| Cost above metal . . . . .                 | Rs. 127·123 | Rs. 90·350  | Rs. 75·014                |



## STATEMENT III.

*Intermediate Costs 1924, 1925 and January to March 1926.*

|  | 1924.       | 1925.       | Jan. to March<br>1926. |
|--|-------------|-------------|------------------------|
| Production . . . . .                               | Tons 20,768 | Tons 29,555 | Tons 8,863             |
| Cost of blackplate per ton as per<br>statement II. | Rs. 296.710 | Rs. 238.534 | Rs. 192.218            |
| Fuel . . . . .                                     | Rs. 3.946   | Rs. 2.524   | Rs. 1.983              |
| Labour . . . . .                                   | „ 9.165     | „ 6.015     | „ 4.523                |
| Materials for repairs . .                          | „ 0.865     | „ 0.989     | „ 0.945                |
| Power . . . . .                                    | „ 3.233     | „ 2.883     | „ 2.383                |
| Acid . . . . .                                     | „ 5.779     | „ 6.128     | „ 5.727                |
| Rolls, greases, etc. . . .                         | „ 2.070     | „ 2.292     | „ 1.678                |
| Annealing box covers and<br>bottoms.               | „ 2.703     | „ 4.208     | „ 4.134                |
| General works expenses . .                         | „ 2.609     | „ 2.122     | „ 1.607                |
| Debit for spoiled sheets . .                       | Nil         | „ .782      | „ 0.707                |
|  | Rs. 327.080 | Rs. 261.427 | Rs. 215.805            |
| Cost above metal . . . .                           | „ 30.370    | „ 27.893    | „ 23.587               |

## STATEMENT IV.

*Tinhouse and Warehouse.*

|  | 1924 |         | 1925 |         | Jan. to March 1926. |         |
|--|------|---------|------|---------|---------------------|---------|
| Production . . . . .                             | Tons | 20,763  | Tons | 29,555  | Tons                | 8,863   |
| Cost of tinplate per ton . . . .                 | Rs.  | 458·927 | Rs.  | 380·999 | Rs.                 | 313,816 |
| Cost of tin per ton . . . . .                    | "    | 3·898   | "    | 3·983   | "                   | 4·365   |
| Tin consumed per ton of tinplate                 | lbs. | 52·65   | lbs. | 48·94   | lbs.                | 41·34   |
| Cost of tin per ton of tinplate .                | Rs.  | 91·540  | Rs.  | 87·025  | Rs.                 | 80·560  |
| Less credit for scrap . . . . .                  |      | 15·285  |      | 15·490  |                     | 19·922  |
|  | Rs.  | 76·255  |      | 71·535  |                     | 60·638  |
| Palm Oil . . . . .                               |      | 5·485   |      | 5·097   |                     | 4·533   |
| Acid . . . . .                                   |      | 2·685   |      | 1·407   |                     | 0·418   |
| Zinc Chloride . . . . .                          |      | 1·584   |      | 2·181   |                     | 1·817   |
| Fuel . . . . .                                   |      | 1·661   |      | 1·177   |                     | 1·078   |
| Labour . . . . .                                 |      | 15·436  |      | 11·595  |                     | 8·729   |
| Materials for repairs . . . . .                  |      | 3·646   |      | 2·252   |                     | 0·966   |
| Power . . . . .                                  |      | 0·874   |      | 0·957   |                     | 1·017   |
| Greases, etc. . . . .                            |      | 2·333   |      | 1·984   |                     | 1·565   |
| Packing and despatching . . . .                  |      | 13·926  |      | 15·618  |                     | 12·788  |
| General works expenses . . . .                   |      | 7·962   |      | 5·782   |                     | 4·472   |
| Debit for spoiled sheets . . . .                 |      | Nil     |      | 0·077   |                     | ...     |
|  | Rs.  | 131·847 |      | 119·572 |                     | 98·011  |
| Cost of blackplate per ton as per Statement III. | "    | 527·080 |      | 261·427 |                     | 215·805 |
|  | Rs.  | 453·927 |      | 380·999 |                     | 313·816 |
| Cost above metal . . . . .                       |      | 55·692  |      | 48·087  |                     | 37·473  |
| Total cost above metal . . . .                   |      | 213·285 |      | 166·280 |                     | 135·974 |

*Note on Statements I—IV—Costs.*

*Year 1923.*—We have given the totals only for the three stages of manufacture as during the year 1923 our costs statements were mainly experimental and detailed comparison with following years would be misleading. The rolling of blackplate was carried out in the Hot Mills throughout the year but the intermediate and finishing departments did not commence work until May.

**Hot Mill costs.**—The consumption of steel per ton of blackplate has increased progressively from 1924 to 1926 and the yield of good blackplate has correspondingly decreased. This is due (1) to the effort to increase production resulting in poorer mill practice and (2) to the absence during the latter half of 1925 and the first quarter of 1926 of about 1/3rd of our covenanted labour on leave. Against this is to be set the fall in labour costs from Rs. 65·349 per ton in 1924 to Rs. 32·795 in 1926. Scrap has been credited at varying rates per ton approximating as nearly as possible to the actual sale value realised, the rate for the past year having been Rs. 20 per ton. The credit in 1924 includes what is shown in 1925 and 1926 as "Credit for spoiled sheets," i.e., plates spoiled in the pickling, annealing, cold rolling and tinning processes. From the credit for scrap we have deducted the cost of scrap baling (Rs. 4 to Rs. 8 per ton) and the loss on scrap in bar cutting. The higher credit in 1926 is due to the large quantity of scrap thrown out as explained above.

Reductions under the heads "Fuel" and "Power" are due partly to decreases in the cost of coal and electricity and partly to increased production. "Rolls, greases, etc.," shows no drop as recent supplies of rolls have proved inferior to those originally purchased and breakages have been more frequent as output increased, especially so since the rolling of greater widths on large rolls has been introduced. Labour costs in the Shearing and Opening Department have fallen considerably in the three years, as also have "General Works expenses," comprising water, machine shop, boilers, etc., and general on costs including administration.

The remainder of the saving (Rs. 52·383 per ton) is due to the fall in the price of steel from Rs. 127·155 per ton in 1924 to Rs. 107·386 in 1925 and Rs. 84 in 1926, so that 50 per cent. of the reduction in the total cost per ton is attributable to steel and 50 per cent. to costs above metal.

**Intermediate costs.**—All items except "Materials for repairs," "Acid" and "Annealing Box Covers and Bottoms" show considerable improvement. The cost of Acid should be read in conjunction with the figures for the same item in the statements of the Tinhouse and Warehouse costs, as owing to alterations to the tinning machines most of the pickling previously done in the Tinhouse is now performed in the pickling department. The total figures for Acid are:—

|      | Rs.   |
|------|-------|
| 1924 | 8·624 |
| 1925 | 7·535 |
| 1926 | 6·140 |

The debit for Annealing Box Covers and Bottoms is an estimated allowance which was found to be insufficient and was increased towards the end of 1924. This accounts for the higher figures in 1925 and 1926.

**Tinhouse and Warehouse.**—The cost of tin per ton has increased each year and is still high in spite of the recent reduction of Rs. 275 per ton in the duty, which does not affect the figures for January/March 1926. A great saving has, however, been effected in the quantity consumed per ton of tinplate, which has fallen from lbs. 52·65 in 1924 to lbs. 41·34 in 1926, equivalent to a saving per ton of Rs. 10·980 in spite of the increased price of tin. The credit for scruff has risen because of the enhanced value of the tin dross recovered from it and because of improvements in the arrangements for recovery. (The credit for January to March 1926 is, however, misleading as it is higher than the average for the year is likely to be.)

The large reduction under "Acid" has been explained above. The quantity of Zinc Chloride consumed was much greater in the later half of 1925 than previously but has since fallen, though not yet to the level of 1924. Very considerable savings have been effected in the Tinhouse by alterations to the machines and this is particularly noticeable under the heads of "Labour" and "Materials for repairs." The main item included in "Packing and Despatching" is a debit for the value of sheets used as the top sheets and outer linings for boxes despatched.

## STATEMENT IV (a) 1.

*Hot Mill Costs—April 1926.*

|   |             |
|---|-------------|
| Production . . . . .                            | Tons 2,839  |
| Steel consumed per ton of blackplate . . . . .  | Tons 1·4072 |
| Yield of good blackplate . . . . .              | 72·28%      |
| Cost per ton of blackplate . . . . .            | Rs. 196·067 |
| Steel cost per ton f.o.r. Works . . . . .       | Rs. 84·000  |
| Steel cost delivered to Mills per ton . . . . . | Rs. 86·180  |
| Steel cost per ton of blackplate . . . . .      | Rs. 121·279 |
| Less credit for scrap . . . . .                 | Rs. 4·242   |
|   | <hr/>       |
|   | Rs. 117·037 |
| Fuel . . . . .                                  | Rs. 3·848   |
| Labour . . . . .                                | Rs. 33·616  |
| Materials for repairs . . . . .                 | Rs. 2·318   |
| Power . . . . .                                 | Rs. 14·574  |
| Rolls, greases, etc. . . . .                    | Rs. 15·310  |
| Shearing and opening . . . . .                  | Rs. 3·309   |
| General Works expenses . . . . .                | Rs. 9·035   |
|   | <hr/>       |
|   | Rs. 199·047 |
| Credit for spoiled sheets . . . . .             | Rs. 2·980   |
|   | <hr/>       |
|   | Rs. 196·067 |
|   | <hr/>       |
| Cost above metal . . . . .                      | Rs. 79·030  |

## STATEMENT IV (b) 1.

*Intermediate Costs—April 1926.*

|  |             |
|--|-------------|
| Production . . . . .   | Tons 2,839  |
| Cost of blackplate per ton as per Statement IV (a) 1 . . . . . | Rs. 196·067 |
| Fuel . . . . .   | Rs. 1·650   |
| Labour . . . . .   | Rs. 4·889   |
| Materials for repairs . . . . .                                | Rs. 0·670   |
| Power . . . . .  | Rs. 2·533   |
| Acid . . . . .   | Rs. 5·542   |
| Rolls, greases, etc. . . . .                                   | Rs. 1·399   |
| Annealing box covers and bottoms . . . . .                     | Rs. 4·397   |
| General Works expenses . . . . .                               | Rs. 1·561   |
| Debit for spoiled sheets . . . . .                             | Rs. 1·111   |
|  | <hr/>       |
|  | Rs. 219·819 |
| Cost above metal . . . . .                                     | Rs. 23·752  |

## STATEMENT IV (c) 1.

*Tinhouse and Warehouse—April 1926.*

|  |             |
|--|-------------|
| Production . . . . .   | Tons 2,839  |
| Cost of tinplate per ton . . . . .                             | Rs. 319·768 |
| Cost of tin per ton . . . . .                                  | Rs. 4·085   |
| Tin consumed per ton of tinplate . . . . .                     | Lbs. 41·65  |
| Cost of tin per ton of tinplate . . . . .                      | Rs. 75·961  |
| Less credit for scruff . . . . .                               | Rs. 18·972  |
|  | <hr/>       |
|  | 56·989      |
| Palm oil . . . . .   | Rs. 10·197  |
| Acid . . . . .   | Rs. 0·459   |
| Zinc Chloride . . . . .  | Rs. 1·823   |
| Fuel . . . . .   | Rs. 0·930   |
| Labour . . . . .   | Rs. 9·612   |
| Materials for repairs . . . . .                                | Rs. 1·459   |
| Power . . . . .  | Rs. 0·789   |
| Greases, etc. . . . .  | Rs. 1·604   |
| Packing and despatching . . . . .                              | Rs. 11·896  |
| General Works expenses . . . . .                               | Rs. 4·191   |
| Debit for spoiled sheets . . . . .                             | Rs. ...     |
|  | <hr/>       |
|  | 99·949      |
| Cost of blackplate per ton as per Statement IV (b) 1 . . . . . | Rs. 219·819 |
|  | <hr/>       |
|  | 319·768     |
| Cost above metal . . . . .                                     | Rs. 42·960  |
| Total cost above metal . . . . .                               | Rs. 145·742 |

## STATEMENT IV (a) 2.

*Hot Mill Costs—January-April 1926.*

|   |             |
|---|-------------|
| Production . . . . .                            | Tons 11,702 |
| Steel consumed per ton of blackplate . . . . .  | Tons 1·4118 |
| Yield of good blackplate . . . . .              | 73·13%      |
| Cost per ton of blackplate . . . . .            | Rs. 193·183 |
| Steel cost per ton f.o.r. Works . . . . .       | Rs. 84·000  |
| Steel cost delivered to Mills per ton . . . . . | Rs. 86·026  |
| Steel cost per ton of blackplate . . . . .      | Rs. 121·473 |
| Less credit for scrap . . . . .                 | Rs. 4·290   |
|   | <hr/>       |
|   | Rs. 117·183 |
| Fuel . . . . .                                  | Rs. 3·890   |
| Labour . . . . .                                | Rs. 33·000  |
| Materials for repairs . . . . .                 | Rs. 1·463   |
| Power . . . . .                                 | Rs. 14·500  |
| Rolls, greases, etc. . . . .                    | Rs. 13·092  |
| Shearing and opening . . . . .                  | Rs. 3·330   |
| General Works expenses . . . . .                | Rs. 8·990   |
|   | <hr/>       |
|   | Rs. 195·448 |
| Credit for spoiled sheets . . . . .             | Rs. 2·265   |
|   | <hr/>       |
|   | Rs. 193·183 |
|   | <hr/>       |
| Cost above metal . . . . .                      | Rs. 76·000  |

## STATEMENT IV (b) 2.

*Intermediate costs—January-April 1926.*

|  |             |
|--|-------------|
| Production . . . . .   | Tons 11,702 |
| Cost of blackplate per ton as per Statement IV (a) 2 . . . . . | Rs. 193·183 |
| Fuel . . . . .   | Rs. 1·827   |
| Labour . . . . .   | Rs. 4·612   |
| Materials for repairs . . . . .                                | Rs. 0·378   |
| Power . . . . .  | Rs. 2·420   |
| Acid . . . . .   | Rs. 5·683   |
| Rolls, greases, etc. . . . .                                   | Rs. 1·610   |
| Annealing box covers and bottoms . . . . .                     | Rs. 4·199   |
| General Works expenses . . . . .                               | Rs. 1·596   |
| Debit for spoiled sheets . . . . .                             | Rs. 0·805   |
|  | <hr/>       |
|  | Rs. 216·813 |
|  | <hr/>       |
| Cost above metal . . . . .                                     | Rs. 23·630  |

## STATEMENT IV (c) 2.

*Tinhouse and Warehouse—January-April 1926.*

|   |                   |
|---|-------------------|
| Production . . . . .  | Tons 11,702       |
| Cost of Tinplate per ton . . . . .                                | Rs. 315.311       |
| Cost of tin per ton . . . . .                                     | Rs. 4.295         |
| Tin consumed per ton of tinplate . . . . .                        | Lbs. 41.42        |
| Cost of tin per ton of tinplate . . . . .                         | Rs. 79.458        |
| Less credit for scruff . . . . .                                  | Rs. 19.695        |
|   | <hr/> 59.763      |
| Palm oil . . . . .  | Rs. 5.908         |
| Acid . . . . .  | Rs. 0.424         |
| Zinc Chloride . . . . .   | Rs. 1.819         |
| Fuel . . . . .  | Rs. 1.039         |
| Labour . . . . .  | Rs. 8.944         |
| Materials for repairs . . . . .                                   | Rs. 1.086         |
| Power . . . . .   | Rs. 0.962         |
| Greases, etc. . . . .   | Rs. 1.574         |
| Packing and despatching . . . . .                                 | Rs. 12.574        |
| General Works expenses . . . . .                                  | Rs. 4.405         |
| Debit for spoiled sheets . . . . .                                | Rs.               |
|   | <hr/> 98.498      |
| Cost of blackplate per ton as per Statement<br>IV (b) 2 . . . . . | Rs. 216.813       |
|   | <hr/> Rs. 315.311 |
| Cost above metal . . . . .  | Rs. 38.735        |
| Total cost above metal . . . . .                                  | Rs. 138.365       |

## STATEMENT IV (a) 3.

*Hot Mill Costs—May 1926.*

|   |       |             |
|---|-------|-------------|
| Production . . . . .                            | Tons  | 2,827       |
| Steel consumed per ton of blackplate . . . . .  | Tons. | 1·3750      |
| Yield of good blackplate . . . . .              |       | 75·39%      |
| Cost per ton of blackplate . . . . .            | Rs.   | 192·127     |
| Steel cost per ton f.o.r. Works . . . . .       | Rs.   | 84·000      |
| Steel cost delivered to mills per ton . . . . . | Rs.   | 86·208      |
| Steel cost per ton of blackplate . . . . .      | Rs.   | 118·517     |
| Less credit for scrap . . . . .                 | Rs.   | 4·017       |
|   |       | <hr/>       |
|   |       | Rs. 114·500 |
| Fuel . . . . .                                  | Rs.   | 3·837       |
| Labour . . . . .                                | Rs.   | 92·199      |
| Materials for repairs . . . . .                 | Rs.   | 2·381       |
| Power . . . . .                                 | Rs.   | 14·473      |
| Rolls, greases, etc. . . . .                    | Rs.   | 12·462      |
| Shearing and opening . . . . .                  | Rs.   | 3·196       |
| General Works expenses . . . . .                | Rs.   | 11·166      |
|   |       | <hr/>       |
|   |       | Rs. 194·214 |
| Credit for spoiled sheets . . . . .             | Rs.   | 2·087       |
|   |       | <hr/>       |
|   |       | Rs. 192·127 |
|   |       | <hr/>       |
| Cost above metal . . . . .                      | Rs.   | 77·627      |



## STATEMENT IV (b) 3.

*Intermediate Costs--May 1926.*

|  |      |         |
|--|------|---------|
| Production . . . . .                                   | Tons | 2,827   |
| Cost of blackplate per ton as per Statement IV (a) 3 . | Rs.  | 192.127 |
| Fuel . . . . .   | Rs.  | 1.776   |
| Labour . . . . .                                       | Rs.  | 4.376   |
| Materials for repairs . . . . .                        | Rs.  | 0.367   |
| Power . . . . .  | Rs.  | 2.166   |
| Acid . . . . .   | Rs.  | 5.053   |
| Rolls, greases, etc. . . . .                           | Rs.  | 1.370   |
| Annealing box covers and bottoms . . . . .             | Rs.  | 4.185   |
| General Works expenses . . . . .                       | Rs.  | 1.859   |
| Debit for spoiled sheets . . . . .                     | Rs.  | 0.650   |
|  |      | <hr/>   |
|  | Rs.  | 213.929 |
|  |      | <hr/>   |
| Cost above metal . . . . .                             | Rs.  | 21.802  |

## STATEMENT IV (c) 3.

*Tinhouse and Warehouse--May 1926.*

|  |      |         |
|--|------|---------|
| Production . . . . .                                   | Tons | 2,827   |
| Cost of tinplate per ton . . . . .                     | Rs.  | 310.769 |
| Cost of tin per ton . . . . .                          | Rs.  | 4.022   |
| Tin consumed per ton of tinplate . . . . .             | Lbs. | 42.09   |
| Cost of tin per ton of tinplate . . . . .              | Rs.  | 75.569  |
| Less credit for scruff . . . . .                       | Rs.  | 18.897  |
|  |      | <hr/>   |
|  | Rs.  | 56.672  |
| Palm oil . . . . .                                     | Rs.  | 7.574   |
| Acid . . . . .   | Rs.  | 0.275   |
| Zinc chloride . . . . .                                | Rs.  | 1.737   |
| Fuel . . . . .   | Rs.  | 0.992   |
| Labour . . . . .                                       | Rs.  | 8.159   |
| Materials for repairs . . . . .                        | Rs.  | 2.037   |
| Power . . . . .  | Rs.  | 0.813   |
| Greases, etc. . . . .                                  | Rs.  | 1.838   |
| Packing and despatching . . . . .                      | Rs.  | 12.040  |
| General Works expenses . . . . .                       | Rs.  | 4.703   |
| Debit for spoiled sheets . . . . .                     |      | .....   |
|  |      | <hr/>   |
|  | Rs.  | 96.840  |
| Cost of blackplate per ton as per Statement IV (b) 3 . | Rs.  | 213.929 |
|  |      | <hr/>   |
|  | Rs.  | 310.769 |
|  |      | <hr/>   |
| Cost above metal . . . . .                             | Rs.  | 40.168  |
| Total cost above metal . . . . .                       | Rs.  | 139.597 |

## STATEMENT IV (a) 4.

*Hot Mill Costs--June 1926.*

|   |      |              |
|---|------|--------------|
| Production . . . . .                            | Tons | 2,774        |
| Steel consumed per ton of blackplate . . . . .  | Tons | 1.2851       |
| Yield of good blackplate . . . . .              |      | 73.06%       |
| Cost per ton of blackplate . . . . .            | Rs.  | 180.829      |
| Steel cost per ton f.o.r. Works . . . . .       | Rs.  | 84.000       |
| Steel cost delivered to mills per ton . . . . . | Rs.  | 86.422       |
| Steel cost per ton of blackplate . . . . .      | Rs.  | 111.062*     |
| Less credit for scrap . . . . .                 | Rs.  | 3.604        |
|   |      | <hr/>        |
|   |      | Rs. 107.458* |
| Fuel . . . . .                                  | Rs.  | 3.599        |
| Labour . . . . .                                | Rs.  | 30.080       |
| Materials for repairs . . . . .                 | Rs.  | 0.910        |
| Power . . . . .                                 | Rs.  | 14.813       |
| Rolls, greases, etc. . . . .                    | Rs.  | 13.353       |
| Shearing and opening . . . . .                  | Rs.  | 2.974        |
| General Works expenses . . . . .                | Rs.  | 10.250       |
|   |      | <hr/>        |
|   |      | Rs. 182.937  |
| Credit for spoiled sheets . . . . .             | Rs.  | 2.108        |
|   |      | <hr/>        |
|   |      | Rs. 180.829  |
|   |      | <hr/>        |
| Cost above metal . . . . .                      | Rs.  | 73.371       |

\* The reason for the much reduced steel cost is that a quantity of blackplate rolled in the Hot Mills and stacked pending an opportunity for finishing was in June passed through the intermediate departments and tinned, the Hot Mills output in June being below normal owing to climatic condi-

## STATEMENT IV (b) 4.

*Intermediate Costs—June 1926.*

|  |      |         |
|--|------|---------|
| Production . . . . .                                   | Tons | 2,774   |
| Cost of blackplate per ton as per Statement IV (a) 4 . | Rs.  | 180·829 |
| Fuel . . . . .   | Rs.  | 1·630   |
| Labour . . . . .                                       | Rs.  | 4·205   |
| Materials for repairs . . . . .                        | Rs.  | 0·435   |
| Power . . . . .  | Rs.  | 2·652   |
| Acid . . . . .   | Rs.  | 5·672   |
| Rolls, greases, etc. . . . .                           | Rs.  | 1·333   |
| Annealing box covers and bottoms . . . . .             | Rs.  | 3·992   |
| General Works expenses . . . . .                       | Rs.  | 1·834   |
| Debit for spoiled sheets . . . . .                     | Rs.  | 0·772   |
|  | Rs.  | 203·354 |
| Cost above metal . . . . .                             | Rs.  | 22·525  |

## STATEMENT IV (c) 4.

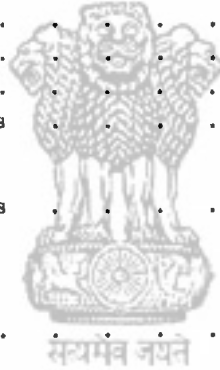
*Tinhouse and Warehouse—June 1926.*

|  |       |         |
|--|-------|---------|
| Production . . . . .                                   | Tons  | 2,774   |
| Cost of tinplate per ton . . . . .                     | ..... |         |
| Cost of tin per ton . . . . .                          | Rs.   | 3·998   |
| Tin consumed per ton of tinplate . . . . .             | Lbs.  | 43·22   |
| Cost of tin per ton of tinplate . . . . .              | Rs.   | 77·150  |
| Less credit for scruff . . . . .                       | Rs.   | 19·815  |
|  | Rs.   | 57·335  |
| Palm oil . . . . .                                     | Rs.   | 5·179   |
| Acid . . . . .   | Rs.   | 0·339   |
| Zinc Chloride . . . . .                                | Rs.   | 1·835   |
| Fuel . . . . .   | Rs.   | 1·009   |
| Labour . . . . .                                       | Rs.   | 8·394   |
| Materials for repairs . . . . .                        | Rs.   | 2·339   |
| Power . . . . .  | Rs.   | 0·861   |
| Greases, etc. . . . .                                  | Rs.   | 1·835   |
| Packing and despatching . . . . .                      | Rs.   | 11·713  |
| General Works expenses . . . . .                       | Rs.   | 4·912   |
| Debit for spoiled sheets . . . . .                     | ..... |         |
|  | Rs.   | 95·751  |
| Cost of blackplate per ton as per Statement IV (b) 4 . | Rs.   | 203·354 |
|  | Rs.   | 299·105 |
| Cost above metal . . . . .                             | Rs.   | 38·416  |
| Total cost above metal . . . . .                       | Rs.   | 134·312 |

## STATEMENT IV (a) 5.

*Hot Mill Costs—January-June 1926.*

|   |      |         |
|---|------|---------|
| Production . . . . .                            | Tons | 17,803  |
| Steel consumed per ton of blackplate . . . . .  | Tons | 1.4068  |
| Yield of good blackplate . . . . .              |      | 73.49%  |
| Cost per ton of blackplate . . . . .            | Rs.  | 191.003 |
| Steel cost per ton f.o.r. Works . . . . .       | Rs.  | 84.000  |
| Steel cost delivered to Mills per ton . . . . . | Rs.  | 86.119  |
| Steel cost per ton of blackplate . . . . .      | Rs.  | 119.307 |
| Less credit for scrap . . . . .                 | Rs.  | 4.134   |
|   |      | <hr/>   |
|   | Rs.  | 115.173 |
| Fuel . . . . .                                  | Rs.  | 3.834   |
| Labour . . . . .                                | Rs.  | 32.397  |
| Materials for repairs . . . . .                 | Rs.  | 1.524   |
| Power . . . . .                                 | Rs.  | 14.464  |
| Rolls, greases, etc. . . . .                    | Rs.  | 13.030  |
| Shearing and opening . . . . .                  | Rs.  | 3.245   |
| General Works expenses . . . . .                | Rs.  | 9.546   |
|   |      | <hr/>   |
|   | Rs.  | 193.213 |
| Credit for spoiled sheets . . . . .             | Rs.  | 2.210   |
|   |      | <hr/>   |
|   | Rs.  | 191.003 |
|   |      | <hr/>   |
| Cost above metal . . . . .                      | Rs.  | 75.830  |



## STATEMENT IV (b) 5.

*Intermediate Costs—January-June 1926.*

|  |            |                |
|--|------------|----------------|
| Production . . . . .                                   | Tons       | 17,303         |
| Cost of blackplate per ton as per Statement IV (a) 5 . | Rs.        | 191·003        |
| Fuel . . . . .   | Rs.        | 1·787          |
| Labour . . . . .                                       | Rs.        | 4·508          |
| Materials for repairs . . . . .                        | Rs.        | 0·724          |
| Power . . . . .  | Rs.        | 2·415          |
| Acid . . . . .   | Rs.        | 5·578          |
| Rolls, greases, etc. . . . .                           | Rs.        | 1·526          |
| Annealing box covers and bottoms . . . . .             | Rs.        | 4·163          |
| General Works expenses . . . . .                       | Rs.        | 1·677          |
| Debit for spoiled sheets . . . . .                     | Rs.        | 0·774          |
|  | <b>Rs.</b> | <b>214·155</b> |
| Cost above metal . . . . .                             | Rs.        | 23·152         |

## STATEMENT IV (c) 5.

*Tinhouse and Warehouse—January-June 1926.*

|  |            |                |
|--|------------|----------------|
| Production . . . . .                                   | Tons       | 17,303         |
| Cost of tinplate per ton . . . . .                     | Rs.        | 311·905        |
| Cost of tin per ton . . . . .                          | Rs.        | 4·203          |
| Tin consumed per ton of tinplate . . . . .             | Lbs.       | 41·82          |
| Cost of tin per ton of tinplate . . . . .              | Rs.        | 78·449         |
| Less credit for scruff . . . . .                       | Rs.        | 19·581         |
|  | <b>Rs.</b> | <b>58·862</b>  |
| Palm oil . . . . .                                     | Rs.        | 6·063          |
| Acid . . . . .   | Rs.        | 0·335          |
| Zinc Chloride . . . . .                                | Rs.        | 1·808          |
| Fuel . . . . .   | Rs.        | 1·026          |
| Labour . . . . .                                       | Rs.        | 8·727          |
| Materials for repairs . . . . .                        | Rs.        | 1·430          |
| Power . . . . .  | Rs.        | 0·921          |
| Greases, etc. . . . .                                  | Rs.        | 1·659          |
| Packing and despatching . . . . .                      | Rs.        | 12·335         |
| General Works expenses . . . . .                       | Rs.        | 4·534          |
| Debit for spoiled sheets . . . . .                     |            | .....          |
|  | <b>Rs.</b> | <b>97·750</b>  |
| Cost of blackplate per ton as per Statement IV (b) 5 . | Rs.        | 214·155        |
|  | <b>Rs.</b> | <b>311·905</b> |
| Cost above metal . . . . .                             | Rs.        | 38·888         |
| Total cost above metal . . . . .                       | Rs.        | 137·870        |

## STATEMENT IV (a) 6.

*Hot Mill Costs—July 1926.*

|   |      |         |
|---|------|---------|
| Production . . . . .                            | Tons | 2,911   |
| Steel consumed per ton of blackplate . . . . .  | Tons | 1·4552  |
| Yield of good blackplate . . . . .              |      | 74·10%  |
| Cost per ton of blackplate . . . . .            | Rs.  | 200·482 |
| Steel cost per ton f.o.r. Works . . . . .       | Rs.  | 84·000  |
| Steel cost delivered to mills per ton . . . . . | Rs.  | 86·245  |
| Steel cost per ton of blackplate . . . . .      | Rs.  | 125·517 |
| Less credit for scrap . . . . .                 | Rs.  | 5·719   |
|   |      | <hr/>   |
|   | Rs.  | 119·798 |
| Fuel . . . . .                                  | Rs.  | 4·141   |
| Labour . . . . .                                | Rs.  | 29·882  |
| Materials for repairs . . . . .                 | Rs.  | 2·261   |
| Power . . . . .                                 | Rs.  | 14·965  |
| Rolls, greases, etc. . . . .                    | Rs.  | 17·141  |
| Shearing and opening . . . . .                  | Rs.  | 3·190   |
| General Works expenses . . . . .                | Rs.  | 10·945  |
|   |      | <hr/>   |
|   | Rs.  | 202·323 |
| Credit for spoiled sheets . . . . .             | Rs.  | 1·841   |
|   |      | <hr/>   |
|   | Rs.  | 200·482 |
|   |      | <hr/>   |
| Cost above metal . . . . .                      | Rs.  | 80·684  |

## STATEMENT IV (b) 6.

*Intermediate Costs—July 1926.*

|  |      |         |
|--|------|---------|
| Production . . . . .   | Tons | 2,911   |
| Cost of blackplate per ton as per Statement IV (a) 6 . . . . . | Rs.  | 200·482 |
| Fuel . . . . .   | Rs.  | 2·104   |
| Labour . . . . .   | Rs.  | 4·186   |
| Materials for repairs . . . . .                                | Rs.  | 0·425   |
| Power . . . . .  | Rs.  | 2·222   |
| Acid . . . . .   | Rs.  | 5·798   |
| Rolls, greases, etc. . . . .                                   | Rs.  | 1·392   |
| Annealing box covers and bottoms . . . . .                     | Rs.  | 4·215   |
| General Works expenses . . . . .                               | Rs.  | 2·054   |
| Debit for spoiled sheets . . . . .                             | Rs.  | 0·634   |
|  |      | <hr/>   |
|  | Rs.  | 223·512 |
|  |      | <hr/>   |
| Cost above metal . . . . .                                     | Rs.  | 23·030  |

## STATEMENT IV (c) 6.

*Tinhouse and Warehouse—July 1926.*

|  |       |         |
|--|-------|---------|
| Production . . . . .                                   | Tons  | 2,911   |
| Cost of tinplate per ton . . . . .                     | Rs.   | 317·808 |
| Cost of tin per ton . . . . .                          | Rs.   | 3·898   |
| Tin consumed per ton of tinplate . . . . .             | Lbs.  | 43·27   |
| Cost of tin per ton of tinplate . . . . .              | Rs.   | 75·271  |
| Less credit for scruff . . . . .                       | Rs.   | 17·956  |
|  | Rs.   | 57·315  |
| Palm oil . . . . .                                     | Rs.   | 4·930   |
| Acid . . . . .   | Rs.   | 0·286   |
| Zinc chloride . . . . .                                | Rs.   | 1·841   |
| Fuel . . . . .   | Rs.   | 1·158   |
| Labour . . . . .                                       | Rs.   | 8·108   |
| Materials for repairs . . . . .                        | Rs.   | 1·134   |
| Power . . . . .  | Rs.   | 0·753   |
| Greases, etc. . . . .                                  | Rs.   | 2·295   |
| Packing and despatching . . . . .                      | Rs.   | 12·118  |
| General Works expenses . . . . .                       | Rs.   | 4·858   |
| Debit for spoiled sheets . . . . .                     | ..... |         |
|  | Rs.   | 94·296  |
| Cost of blackplate per ton as per Statement IV (b) 6 . | Rs.   | 223·512 |
|  | Rs.   | 317·808 |
| Cost above metal . . . . .                             | Rs.   | 36·981  |
| Total cost above metal . . . . .                       | Rs.   | 140·695 |

## STATEMENT IV (a) 7.

*Hot Mill Costs—January-July 1926.*

|   |      |         |
|---|------|---------|
| Production . . . . .                            | Tons | 20,214  |
| Steel consumed per ton of blackplate . . . . .  | Tons | 1.3965  |
| Yield of good blackplate . . . . .              |      | 73.39%  |
| Cost per ton of blackplate . . . . .            | Rs.  | 192.372 |
| Steel cost per ton f.o.r. Works . . . . .       | Rs.  | 84.000  |
| Steel cost delivered to mills per ton . . . . . | Rs.  | 86.073  |
| Steel cost per ton of blackplate . . . . .      | Rs.  | 120.201 |
| Less credit for scrap . . . . .                 | Rs.  | 4.362   |
|   |      | <hr/>   |
|   | Rs.  | 115.839 |
| Fuel . . . . .                                  | Rs.  | 3.878   |
| Labour . . . . .                                | Rs.  | 32.035  |
| Materials for repairs . . . . .                 | Rs.  | 1.630   |
| Power . . . . .                                 | Rs.  | 14.536  |
| Rolls, greases, etc. . . . .                    | Rs.  | 13.621  |
| Shearing and opening . . . . .                  | Rs.  | 3.237   |
| General Works' expenses . . . . .               | Rs.  | 9.748   |
|   |      | <hr/>   |
|   | Rs.  | 194.524 |
| Credit for spoiled sheets . . . . .             | Rs.  | 2.152   |
|   |      | <hr/>   |
|   | Rs.  | 192.372 |
|   |      | <hr/>   |
| Cost above metal . . . . .                      | Rs.  | 76.533  |

## STATEMENT IV (b) 7.

*Intermediate Costs—January-July 1926.*

|  |      |         |
|--|------|---------|
| Production . . . . .   | Tons | 20,214  |
| Cost of blackplate per ton as per Statement IV (a) 7 . . . . . | Rs.  | 192.372 |
| Fuel . . . . .   | Rs.  | 1.833   |
| Labour . . . . .   | Rs.  | 4.463   |
| Materials for repairs . . . . .                                | Rs.  | 9.681   |
| Power . . . . .  | Rs.  | 2.388   |
| Acid . . . . .   | Rs.  | 5.610   |
| Rolls, greases, etc. . . . .                                   | Rs.  | 1.507   |
| Annealing box covers and bottoms . . . . .                     | Rs.  | 4.170   |
| General Works expenses . . . . .                               | Rs.  | 1.731   |
| Debit for spoiled sheets . . . . .                             | Rs.  | 0.754   |
|  |      | <hr/>   |
|  | Rs.  | 215.509 |
|  |      | <hr/>   |
| Cost above metal . . . . .                                     | Rs.  | 23.137  |



## STATEMENT IV (c) 7.

*Tinhouse and Warehouse—January-July 1926.*

|  |      |         |
|--|------|---------|
| Production . . . . .                                   | Tons | 20,214  |
| Cost of tinplate per ton . . . . .                     | Rs.  | 312·762 |
| Cost of tin per ton . . . . .                          | Rs.  | 4·159   |
| Tin consumed per ton of tinplate . . . . .             | Lbs. | 42·03   |
| Cost of tin per ton of tinplate . . . . .              | Rs.  | 77·986  |
| Less credit for scruff . . . . .                       | Rs.  | 19·348  |
|  | Rs.  | 58·638  |
| Palm oil . . . . .                                     | Rs.  | 5·899   |
| Acid . . . . .   | Rs.  | 0·371   |
| Zinc chloride . . . . .                                | Rs.  | 1·741   |
| Fuel . . . . .   | Rs.  | 1·045   |
| Labour . . . . .                                       | Rs.  | 8·638   |
| Materials for repairs . . . . .                        | Rs.  | 1·388   |
| Power . . . . .  | Rs.  | 0·897   |
| Greases, etc. . . . .                                  | Rs.  | 1·751   |
| Packing and despatching . . . . .                      | Rs.  | 12·304  |
| General Works expenses . . . . .                       | Rs.  | 4·581   |
| Debit for spoiled sheets . . . . .                     |      | .....   |
|  | Rs.  | 97·253  |
| Cost of blackplate per ton as per Statement IV (b) 7 . | Rs.  | 215·509 |
|  | Rs.  | 312·762 |
| Cost above metal . . . . .                             | Rs.  | 38·615  |
| Total cost above metal . . . . .                       | Rs.  | 138·285 |

# STATEMENT V.

## Costs and Selling Prices—April 1924 to March 1926.

| Period.                   | Total Production. | Works Cost. | Depreciation. | Interest on Working Capital. | Head Office charges. | Manufacturers' profit. | Fair selling price. | Total we ought to realise. | Actual price per ton realised. | Total realised. | Loss.     |
|---------------------------|-------------------|-------------|---------------|------------------------------|----------------------|------------------------|---------------------|----------------------------|--------------------------------|-----------------|-----------|
|                           | Tons.             | Rs.         | Rs.           | Rs.                          | Rs.                  | Rs.                    | Rs.                 | Rs.                        | Rs.                            | Rs.             | Rs.       |
| 1924 April to December.   | 15,297            | 466.95      | 49.03         | 14.71                        | 4.16                 | 59.42                  | 594.27              | 90,90,548                  | 397.26                         | 60,76,886       | 30,13,662 |
| 1925 January to December. | 29,555            | 391.00      | 25.38         | 7.61                         | 2.24                 | 30.75                  | 448.98              | 1,32,10,494                | 362.70                         | 1,07,19,598     | 24,90,896 |
| 1926 January to March.    | 8,863             | 313.82      | 21.16         | 6.35                         | 1.76                 | 25.64                  | 368.73              | 82,68,054                  | 346.33                         | 30,69,523       | 1,98,531  |

### COMMISSION AND BROKERAGE.

|                          | Total Rs. | Rs. per ton. |
|--------------------------|-----------|--------------|
| 1924 April to December   | 17,877    | 1.17         |
| 1925 January to December | 49,016    | 1.66         |
| 1926 January to March    | 19,662    | 2.22         |

Commission and brokerage have been deducted from our "actual price realised" figures and are therefore shown separately. The increase is due to the fact that with an increase in output we have more plates for sale in the open market. No commission is paid on the sales to the Burmah Oil Co., Ltd., or to the Tanix Storage Co. (India), Ltd.

## STATEMENT V (a).

Costs and selling prices—Primes—1923—1926.

| Period.               | Primes<br>produc-<br>tion. | Works<br>cost per<br>ton. | Deprecia-<br>tion per<br>ton. | Interest on<br>working<br>Capital<br>per ton. | Head<br>Office<br>Charges<br>per ton. | Manufac-<br>turers'<br>profit<br>per ton. | Fair selling<br>price per<br>ton. | Total we<br>ought to<br>realise. | Actual<br>price<br>per ton<br>realised. | Total<br>price<br>realised. | Loss.     |
|-----------------------|----------------------------|---------------------------|-------------------------------|---|---------------------------------------|---|-----------------------------------|----------------------------------|---|-----------------------------|-----------|
|                       | Tons.                      | Rs.                       | Rs.                           | Rs.   | Rs.                                   | Rs.                                       | Rs.                               | Rs.                              | Rs.                                     | Rs.                         | Rs.       |
| 1923 . . . . .        | 7,160                      | 653-351                   | 104-749                       | 31-425  | 10-538                                | 125-698                                   | 925-761                           | 66,26,449                        | 439-17                                  | 31,44,457                   | 34,83,992 |
| 1924 . . . . .        | 15,866                     | 521-085                   | 47-271                        | 14-131  | 5-356                                 | 56-725                                    | 644-588                           | 1,02,27,192                      | 427-78                                  | 67,87,157                   | 34,40,035 |
| 1925 . . . . .        | 23,270                     | 405-710                   | 32-230                        | 9-669   | 2-888                                 | 38-676                                    | 489-173                           | 1,13,83,061                      | 382-13                                  | 88,92,165                   | 24,90,896 |
| 1926 January to April | 3,596                      | 336-132*                  | 29-063                        | 8-726   | 2-420                                 | 34-900                                    | 411-261                           | 35,35,196                        | 386-74*                                 | 33,24,417                   | 2,10,779  |

\* Owing to the periodical adjustments of the average prices for Primes and Wasters sold to the Burma Oil Company, Limited, these figures are not necessarily accurate.

## STATEMENT VI.

*Output—Hot Mills.*

No. of mills—6.

Dates of commencement of operation—

|            |                     |
|------------|---------------------|
| First mill | 18th December 1922. |
| Second     | 29th January 1923.  |
| Third*     | } 20th August 1923. |
| Fourth*    |                     |
| Fifth      | 14th November 1923. |
| Sixth      | 12th December 1923. |

\* Although these two mills were started on 20th August all four mills were not running simultaneously until 15th October, 1923.

*Total or potential capacity.*—The mills were designed for a capacity of 28,000 tons of tinplate per annum. Actually, this has been exceeded; in 1925 the output was almost 30,000 tons. In 1926 it is hoped to attain an output of 34,700 tons; in 1927 an output of 35,600 tons; and in 1928 an output of 36,000 tons. This may be taken as the maximum possible output obtainable from the plant as now laid out, with minor additions to equipment.

*Total ultimate output, with extensions.*—At present, none but minor extensions are contemplated, but the lay-out of the plant was designed so as to admit of its being readily doubled in size, and the total ultimate capacity on this basis would be 72,000 tons—or more than India's present total requirements.

## STATEMENT VII.

*Purchase contracts.*

We have no long term purchase contracts except the following with Messrs. The Tata Iron and Steel Company, Limited.

- (1) *Sheet Bar.*—The terms for this are as you are aware now under discussion and we are not consequently at present in a position to give you figures.
- (2) *Electricity.*—Up till 31st March 1928. The rate is dependent on the price for coal, the present rate being 9·24 pies per unit.

| 1923.<br>Consumption rate.         | 1924.<br>Consumption rate.        | 1925.<br>Consumption rate.          | January 1926.<br>Consumption rate. |
|------------------------------------|-----------------------------------|-------------------------------------|------------------------------------|
| 4,903,400 KWH.<br>0·0·10 per unit. | 9,257,000 KWH.<br>0·0·2 per unit. | 11,772,900 KWH.<br>0·0·10 per unit. | 1,110,800 KWH.<br>0·0·10 per unit. |

*February to 31st May 1926.*

| Consumption.   | Rate.              |
|----------------|--------------------|
| 4,340,000 KWH. | 0·0·9·24 per unit. |

*Water.*—We obtain our supplies of water from Messrs. The Tata Iron and Steel Company, Limited, but have no contract yet signed.

| 1923.  | 1924.  | 1925.   | January to May 1926.                                   |
|--|--|---|--|
| During this year we paid a fixed rate of Rs. 1,150 per mensem as our consumption was below the contract minimum. | Up till June we paid the minimum rate. For the remainder of the year figures were 78,105,700 gallons at 5.25 annas per thousand gallons. | 224,207,900 gallons at 5.25 annas per thousand gallons. | 83,181,400 gallons at 5.25 annas per thousand gallons. |

*Acid.*—We obtain our Sulphuric Acid from Messrs. The Tata Iron and Steel Company at their Works cost *plus* 10 per cent. Supplies have only been made to us since March 1925. Previously we purchased in the open market and still have to purchase part of our requirements elsewhere until 30th June 1926. Full supplies are available from the Tata Iron and Steel Company from this date.

| 1925.                       | 1926.  |
|-----------------------------|--|
| 1,609 tons. Rs. 85 per ton. | 780 tons at Rs. 85 to 17th May 1926.<br>87 „ at Rs. 80 to 31st May 1926. |

#### STATEMENT VIII.

##### *Sales contracts.*

We have no long term sale contracts except with Messrs. The Burmah Oil Company, Limited, to whom we sell their full requirements at a rate equivalent to an average price of Welsh plates, delivered f.o.r. Calcutta. This average is calculated each calendar year. Our statements detailing sales for each year will give full particulars of these sales.

#### STATEMENT IX (a).

##### *Sales—1923-1926—Primes.*

| Year.           | The Burmah Oil Co.,<br>Ld. |                | The Tank Storage<br>Co. (India), Ld. |                | Total. |                |
|-----------------|----------------------------|----------------|--------------------------------------|----------------|--------|----------------|
|                 | Tons.                      | Price per ton. | Tons.                                | Price per ton. | Tons.  | Price per ton. |
| 1923 . . . . .  | 6,717                      | Rs.<br>439.17  | ...                                  | Rs.<br>...     | 6,717  | Rs.<br>439.17  |
| 1924 . . . . .  | 15,949                     | 427.78         | ...                                  | ...            | 15,949 | 427.78         |
| 1925 . . . . .  | 23,474                     | 382.13         | 27                                   | 352.30         | 23,501 | 382.09         |
| 1926—Jan.—May . | 10,331                     | 389.09         | 211                                  | 397.71         | 10,542 | 389.26         |
| Total*          | 56,471                     | 403.08†        | 238                                  | 392.56         | 56,709 | 402.86         |

\*108 lb. plates (30 gauge).

†152-154 lb. plates (27 gauge plates).

**STATEMENT IX (b).**

*Sales—1923-1926—Unassorted.*

| Year.              | *Tea packers and biscuit manufacturers. |                | † Dealers. |                | Total. |                |
|--------------------|---|----------------|------------|----------------|--------|----------------|
|                    | Tons.                                   | Price per ton. | Tons.      | Price per ton. | Tons.  | Price per ton. |
|                    |   | Rs.            |            | Rs.            |        | Rs.            |
| 1923 . . . . .     | ...                                     | ...            | ...        | ...            | ...    | ...            |
| 1924 . . . . .     | ...                                     | ...            | ...        | ...            | ...    | ...            |
| 1925 . . . . .     | 306                                     | 371.55         | 178        | 297.34         | 484    | 344.26         |
| 1926—January—May . | 342                                     | 371.62         | 279        | 300.05         | 621    | 339.47         |
| Total .            | 648                                     | 371.59         | 457        | 298.99         | 1,105  | 341.56         |

\* Messrs. Lipton Ltd.  
 „ Brooke Bond (India) Ltd. } 90 lbs. plates.  
 „ The Britannia Biscuit Co., Ltd. }  
 † We have supplied 90 lbs. plates and 136 lbs. plates.

# STATEMENT IX (c).

Sales—1923-1926—Wasters.

| Year.                      | The Burmah Oil Co., Ltd. |                | The Tank Storage Co. (India), Ltd. |                | Dealers. |                | Export. |                | Total. |                |
|----------------------------|--------------------------|----------------|------------------------------------|----------------|----------|----------------|---------|----------------|--------|----------------|
|                            | Tons.                    | Price per ton. | Tons.                              | Price per ton. | Tons.    | Price per ton. | Tons.   | Price per ton. | Tons.  | Price per ton. |
| 1923 . . . . .             | ...                      | Ra. ...        | ...                                | Ra. ...        | 553      | 334.15         | ...     | Ra. ...        | 553    | 334.15         |
| 1924 . . . . .             | ...                      | ...            | ...                                | ...            | 2,997    | 314.86         | ...     | ...            | 2,997  | 314.86         |
| 1925 . . . . .             | 2,226                    | 296.00         | 9                                  | 327.12         | 3,486    | 283.82         | 290     | 283.47         | 6,011  | 288.38         |
| 1926—January—May . . . . . | 472                      | 262.95*        | 35                                 | 380.45         | 1,117    | 294.17         | ...     | ...            | 2,227  | 298.90         |
|                            | 2,698                    | 250.18         | 47                                 | 370.23         | 8,753    | 299.66         | 290     | 283.47         | 11,788 | 299.25         |

\* Provisional price subject to future adjustment.

Sales to dealers include large deliveries made to various Tin-making Factories by dealers who have the sheets converted into Ghee and Vegetable Oil tins. We are supplying indirectly the Tata Oil Mill, Cochín, the Jallo Resin Factory, Lahore, and many smaller Packing Factories. All these are 105 lb. (30 gauge plates).

## STATEMENT IX (d).

Sales—1923-1926—All qualities.

| Year.                 | Primes. |                | Unassorted. |                | Wasters. |                | Total. |                |
|-----------------------|---------|----------------|-------------|----------------|----------|----------------|--------|----------------|
|                       | Tons.   | Price per ton. | Tons.       | Price per ton. | Tons.    | Price per ton. | Tons.  | Price per ton. |
| 1923 . . . . .        | 6,717   | Rs. 439-17     | ...         | Rs. ...        | 553      | Rs. 334-15     | 7,270  | Rs. 431-18     |
| 1924 . . . . .        | 15,949  | 427-78         | ...         | ..             | 2,997    | 314-86         | 18,946 | 409-92         |
| 1925 . . . . .        | 23,501  | 382-09         | 484         | 344-26         | 6,011    | 288-38         | 29,996 | 362-70         |
| 1926—January to May . | 10,542  | 389-26         | 621         | 339-47         | 2,227    | 298-90*        | 13,390 | 370-43         |
|                       | 56,709  | 402-86         | 1,105       | 341-56         | 11,788   | 299-25         | 69,602 | 384-48         |

\* This average price is inflated owing to our not having sold a large portion of our Waster production during January, May.—These have since been disposed of (in June) to the Burnah Oil Co., Ltd.



## STATEMENT IX (d) I.

*Sales—June 1926—All qualities.*

| PRIMES. |                | UNASSORTED. |                | WASTES. |                | TOTAL |                |
|---------|----------------|-------------|----------------|---------|----------------|-------|----------------|
| Tons.   | Price per ton. | Tons.       | Price per ton. | Tons.   | Price per ton. | Tons. | Price per ton. |
|         | Rs.            |             | Rs.            |         | Rs.            |       | Rs.            |
| 2,027   | 399·97         | 144         | 368·28         | 982     | 298·96         | 3,153 | 367·04         |

## STATEMENT IX (a) II.

*Sales—January-June 1926—Primes.*

| THE BURMAH OIL COMPANY, LIMITED. |                | THE TANK STORAGE COMPANY (INDIA), LIMITED. |                | TOTAL. |                |
|----------------------------------|----------------|--|----------------|--------|----------------|
| Tons.                            | Price per ton. | Tons.                                      | Price per ton. | Tons.  | Price per ton. |
|                                  | Rs.            |  | Rs.            |        | Rs.            |
| 12,333                           | 390·83         | 236  | 396·01         | 12,569 | 390·93         |

## STATEMENT IX (b) II.

*Sales—January-June 1926—Unassorted.*

| TEA PACKERS AND BISCUIT MANUFACTURERS. |                | DEALERS. |                | TOTAL. |                |
|--|----------------|----------|----------------|--------|----------------|
| Tons.                                  | Price per ton. | Tons.    | Price per ton. | Tons.  | Price per ton. |
|  | Rs.            |          | Rs.            |        | Rs.            |
| 486                                    | 370·63         | 279      | 300·05         | 765    | 344·89         |

## STATEMENT IX (c) II.

*Sales—January-June 1926—Wasters.*

| THE BURMAH<br>OIL COMPANY,<br>LIMITED. |                   | THE TANK STORAGE<br>COMPANY (INDIA),<br>LIMITED. |                   | DEALERS. |                   | TOTAL. |                   |
|--|-------------------|--|-------------------|----------|-------------------|--------|-------------------|
| Tons.                                  | Price per<br>ton. | Tons.  | Price per<br>ton. | Tons.    | Price per<br>ton. | Tons.  | Price per<br>ton. |
|  | Rs.               |  | Rs.               |          | Rs.               |        | Rs.               |
| 1,201                                  | 282.00            | 49   | 377.39            | 1,959    | 297.12            | 3,209  | 292.67            |

## STATEMENT IX (d) II.

*Sales—January-June 1926—All qualities.*

| PRIMES. |                   | UNASSORTED. |                   | WASTERS. |                   | TOTAL. |                   |
|---------|-------------------|-------------|-------------------|----------|-------------------|--------|-------------------|
| Tons.   | Price per<br>ton. | Tons.       | Price per<br>ton. | Tons.    | Price per<br>ton. | Tons.  | Price per<br>ton. |
|         | Rs.               |             | Rs.               |          | Rs.               |        | Rs.               |
| 12,569  | 390.93            | 765         | 344.89            | 3,209    | 292.67            | 16,543 | 369.74            |

**STATEMENT X (a).**

*Imported price of Welsh Waster Tinplates per ton.*

| Period.                   | F. o. b.<br>S. Wales. | C. i. f.<br>Calcutta. | Landing<br>Charges. |
|---------------------------|-----------------------|-----------------------|---------------------|
|                           | £ s. d.               | £ s. d.               | Rs. A. P.           |
| 1923 . . . . .            | 22 12 8               | 25 0 4                | 2 6 0               |
| 1924 . . . . .            | 22 3 10               | 24 9 10               | 2 8 0               |
| 1925 . . . . .            | 20 4 9                | 22 10 4               | 2 12 0              |
| 1926 January to May . . . | 19 10 11              | 21 16 5               | 2 12 0              |

The differential between the prices of 18 $\frac{3}{4}$ " x 14" Primos and 18 $\frac{3}{4}$ " x 14" Wasters (30 Gauge) has fluctuated during the years 1923-1926 between 4s. 6d. and 1s. 7.5d.



सत्यमेव जयते

## STATEMENT X (a).

*Imported Price of Welsh Tinplate per ton.*

| Period.                    | F. o. b.<br>S. Wales. | C. i. f.<br>Calcutta. | Landing<br>Charges. |
|----------------------------|-----------------------|-----------------------|---------------------|
| 1923—                      | £ s. d.               | £ s. d.               |                     |
| January . . . . .          | 22 18 3               | 25 5 11               | 2 6 0               |
| February . . . . .         | 23 8 5                | 25 16 1               |                     |
| March . . . . .            | 26 7 4                | 27 15 0               |                     |
| April . . . . .            | 27 9 7                | 29 17 3               |                     |
| May . . . . .              | 26 4 3                | 28 11 11              |                     |
| June . . . . .             | 25 9 0                | 27 16 8               |                     |
| July . . . . .             | 25 8 2                | 27 15 10              |                     |
| August . . . . .           | 25 8 2                | 27 15 10              |                     |
| September . . . . .        | 25 8 2                | 27 15 10              |                     |
| October . . . . .          | 25 8 2                | 27 15 10              |                     |
| November . . . . .         | 25 9 0                | 27 16 8               |                     |
| December . . . . .         | 25 15 9               | 28 3 5                |                     |
| Average for 1923 . . . . . | 25 6 2                | 27 13 10              |                     |
| 1924—                      |                       |                       |                     |
| January . . . . .          | 26 7 7                | 28 13 7               | 2 8 0               |
| February . . . . .         | 26 12 8               | 28 18 8               |                     |
| March . . . . .            | 27 5 4                | 29 11 4               |                     |
| April . . . . .            | 26 13 7               | 28 19 7               |                     |
| May . . . . .              | 26 11 0               | 26 17 0               |                     |
| June . . . . .             | 25 0 7                | 27 6 7                |                     |
| July . . . . .             | 24 19 8               | 27 5 8                |                     |
| August . . . . .           | 25 0 7                | 27 6 7                |                     |
| September . . . . .        | 25 12 5               | 27 18 5               |                     |
| October . . . . .          | 25 13 3               | 27 19 3               |                     |
| November . . . . .         | 25 13 3               | 27 19 3               |                     |
| December . . . . .         | 25 10 8               | 27 16 8               |                     |
| Average for 1924 . . . . . | 25 18 4½              | 28 4 4½               |                     |

STATEMENT X (a)—*contd.**Imported Price of Welsh Tinplate per ton.*

| Period.                           | F. o. b.<br>S. Wales. | C. i. f.<br>Calcutta. | Landing<br>Charges. |
|-----------------------------------|-----------------------|-----------------------|---------------------|
|                                   | £ s. d.               | £ s. d.               | Rs. A. P.           |
| 1925—                             |                       |                       |                     |
| January . . . . .                 | 25 10 8               | 27 16 3               | 2 8 0               |
| February . . . . .                | 25 5 7                | 27 11 2               |                     |
| March . . . . .                   | 24 9 7                | 26 15 2               |                     |
| April . . . . .                   | 24 3 8                | 26 9 3                | 2 12 0              |
| May . . . . .                     | 23 5 0                | 25 10 7               |                     |
| June . . . . .                    | 22 1 5                | 24 7 0                |                     |
| July . . . . .                    | 21 6 2                | 23 11 9               | 2 12 0              |
| August . . . . .                  | 21 2 9                | 23 8 4                |                     |
| September . . . . .               | 21 9 6                | 23 15 1               |                     |
| October . . . . .                 | 21 17 2               | 24 2 9                |                     |
| November . . . . .                | 22 2 3                | 24 7 10               |                     |
| December . . . . .                | 22 3 1                | 24 8 8                |                     |
| Average for 1925 . . . . .        | 22 18 1               | 25 3 8                |                     |
| 1926—                             |                       |                       |                     |
| January . . . . .                 | 21 12 1               | 23 17 7               | 2 12 0              |
| February . . . . .                | 21 12 1               | 23 17 7               |                     |
| March . . . . .                   | 21 12 1               | 23 17 7               |                     |
| April . . . . .                   | 21 12 1               | 23 17 7               |                     |
| May . . . . .                     | 21 7 10               | 23 13 4               |                     |
| Average for January—May . . . . . | 21 10 3               | 23 16 9               |                     |

## STATEMENT X (b).

*Imported price of U. K. and Continental Sheet Bars.*

| Period.                    | F. o. b. Price per ton. |                |
|----------------------------|-------------------------|----------------|
|                            | U. K.                   | Continental.   |
| <i>1923.</i>               | <i>£ s. d.</i>          | <i>£ s. d.</i> |
| 1st Quarter . . . . .      | 7 15 4·8                | 6 9 9          |
| 2nd „ . . . . .            | 9 3 0                   | 7 7 11         |
| 3rd „ . . . . .            | 9 15 0                  | 7 8 1          |
| 4th „ . . . . .            | 8 13 3                  | 6 18 10        |
| Average for 1923 . . . . . | 8 11 8                  | 7 1 1·75       |
| <i>1924.</i>               |                         |                |
| 1st Quarter . . . . .      | 8 11 3                  | 6 10 3         |
| 2nd „ . . . . .            | 8 9 2                   | 7 4 11         |
| 3rd „ . . . . .            | 8 4 5                   | 6 10 0         |
| 4th „ . . . . .            | 8 2 8                   | 5 10 9         |
| Average for 1924 . . . . . | 8 6 10·5                | 6 11 2·75      |
| <i>1925.</i>               |                         |                |
| 1st Quarter . . . . .      | 7 15 7                  | 5 17 5         |
| 2nd „ . . . . .            | 6 14 7                  | 5 15 0         |
| 3rd „ . . . . .            | 6 8 9                   | 5 5 0          |
| 4th „ . . . . .            | 6 4 3                   | 5 0 8          |
| Average for 1925 . . . . . | 6 15 9·5                | 5 9 6·25       |
| <i>1926.</i>               |                         |                |
| 1st Quarter . . . . .      | 6 3 3                   | 5 3 3          |

*Present freight and landing charges per ton.*

|                                  | U. K.               | Continental.        |
|----------------------------------|---------------------|---------------------|
|                                  | <i>£ s. d.</i>      | <i>£ s. d.</i>      |
| Freight, insurance, etc. . . . . | 1 1 10              | 0 19 4              |
| Landing charges . . . . .        | Rs. A. P.<br>2 12 0 | Rs. A. P.<br>2 12 0 |

(We have not got particulars of freight rates in 1923 and 1924.)

## STATEMENT XI.

*Quantities of different kinds of raw material's required by the Company annually for the manufacture of Tinplate with an estimate of Customs Duty paid on Imported articles.*

| Material.                    | Quantity Cost C. I. P. Calcutta |           |        |           | Import Duty. |           |        |  | Quantity Cost C. I. P. Calcutta |           |                      |              | Import Duty. |           |            |  |
|------------------------------|---------------------------------|-----------|--------|-----------|--------------|-----------|--------|--|---------------------------------|-----------|----------------------|--------------|--------------|-----------|------------|--|
|                              | No. Unit.                       | Per Unit. | Total. | Amount.   | Rate.        | Per cent. | Rs.    |  | No. Unit.                       | Per Unit. | Total.               | Amount.      | Rate.        | Per cent. | Rs.        |  |
|                              |                                 |           | 1923.  |           |              |           |        |  |                                 |           | 1924.                |              |              |           |            |  |
| Palm Oil . . . . .           | 79                              |           | 710    | Rs. 7,754 |              |           |        |  | Tons.                           |           | 723                  | Rs. 1,28,034 |              | 15        | Rs. 20,799 |  |
| Pink Meal . . . . .          | 83                              |           | 60     | 4,960     | 15           |           | 747    |  | 350                             |           | 54                   | 19,141       |              | 15        | 2,871      |  |
| Zinc Chloride . . . . .      | 37                              |           | 358    | 13,958    | 15           |           | 1,988  |  | 89                              |           | 442                  | 39,327       |              | 15        | 5,899      |  |
| Hot Neck Grease . . . . .    | 40                              |           | 432    | 16,870    | 15           |           | 2,630  |  | 120                             |           | 344                  | 41,387       |              | 15        | 6,200      |  |
| Gear Grease . . . . .        | 4                               |           | 340    | 1,202     | 15           |           | 180    |  | 20                              |           | 339                  | 6,793        |              | 15        | 1,019      |  |
| Cold Neck Grease . . . . .   | 33                              |           | 468    | 15,351    | 15           |           | 2,307  |  | 30                              |           | 441                  | 13,246       |              | 15        | 1,958      |  |
| Carborandum Blocks . . . . . | 2,157 pcs.                      |           |        | 5,500     | 15           |           | 870    |  | 3,131 pcs.                      |           |                      | 10,037       |              | 15        | 1,613      |  |
| Tanned Pieces . . . . .      | 518 "                           |           |        | 3,954     | 15           |           | 554    |  | 1,562 "                         |           |                      | 14,598       |              | 15        | 2,143      |  |
| Brasses . . . . .            | ...                             |           |        | ...       | ...          | ...       | ...    |  | 607 "                           |           |                      | 1,45,081     |              | 2½        | 3,649      |  |
|                              |                                 |           | 1925.  |           |              |           |        |  |                                 |           | Up to 31st May 1926. |              |              |           |            |  |
| Palm Oil . . . . .           | 195                             |           | 652    | 1,27,002  | 15           |           | 10,083 |  | 86                              |           | 596                  | 61,250       |              | 15        | 7,657      |  |
| Pink Meal . . . . .          | 430                             |           | 47     | 18,723    | 15           |           | 2,806  |  | 100                             |           | 47                   | 4,617        |              | 15        | 696        |  |
| Zinc Chloride . . . . .      | 135                             |           | 392    | 72,611    | 15           |           | 10,890 |  | 20                              |           | 308                  | 7,162        |              | 15        | 1,074      |  |
| Hot Neck Grease . . . . .    | 246                             |           | 288    | 70,702    | 15           |           | 10,606 |  | 53                              |           | 281                  | 14,683       |              | 15        | 2,195      |  |
| Gear Grease . . . . .        | 11                              |           | 301    | 3,311     | 15           |           | 497    |  | 6                               |           | 302                  | 1,512        |              | 15        | 270        |  |
| Cold Neck Grease . . . . .   | ...                             |           |        | ...       | ...          | ...       | ...    |  | ...                             |           |                      | ...          |              | ...       | ...        |  |
| Carborandum Blocks . . . . . | 2,150 pcs.                      |           |        | 6,410     | 15           |           | 960    |  | 1,350 pcs.                      |           |                      | 3,268        |              | 15        | 492        |  |
| Tanned Pieces . . . . .      | 2,121 "                         |           |        | 17,143    | 15           |           | 2,571  |  | 1,680 "                         |           |                      | 12,215       |              | 15        | 1,833      |  |
| Brasses . . . . .            | 264 "                           |           |        | 47,947    | 2½           |           | 1,199  |  | 226 "                           |           |                      | 33,047       |              | 2½        | 801        |  |

## STATEMENT XII.

*Incidence of duty on tin per ton of tinplate.*

| Period.                    | Duty on tin<br>per ton. | Tin consumed<br>per ton of<br>tinplate. | Incidence of duty<br>per ton of<br>tinplate. |
|----------------------------|-------------------------|---|--|
|                            | Rs.                     | lbs.                                    | Rs.  |
| 1924 . . . . .             | 450                     | 52.65                                   | 10.58  |
| 1925 . . . . .             | 525                     | 48.94                                   | 11.47  |
| 1926 January, February . . | 555                     | 41.34                                   | 10.24  |
| 1926 March . . . . .       | 250                     | 41.34                                   | 4.61   |

## STATEMENT XIII.

*Covenanted and Uncovenanted Employees (Direct Labour).*

|                          | 1923.            |                    | 1924.            |                    | 1925.            |                    | 1926.             |                    |
|--------------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|-------------------|--------------------|
|                          | Cove-<br>nanted. | Uncove-<br>nanted. | Cove-<br>nanted. | Uncove-<br>nanted. | Cove-<br>nanted. | Uncove-<br>nanted. | Cove-<br>nanted.* | Uncove-<br>nanted. |
| Bar Yard . . . . .       | 1                | ...                | 1                | 32                 | 1                | 30                 | 1 (1)             | 22                 |
| Hot Mills . . . . .      | 56               | 512                | 57               | 565                | 44               | 840                | 30 (32)           | 846                |
| Millwright . . . . .     | 2                | ...                | ...              | 128                | ...              | 128                | ...               | 141                |
| Roll Turning . . . . .   | 1                | ...                | 1                | ...                | 1                | 14                 | 1 (1)             | 20                 |
| Shearing and Opening . . | 2                | 157                | 2                | 225                | 2                | 209                | 2 (1)             | 190                |
| S. B. Press . . . . .    | ...              | ...                | ...              | 94                 | ...              | 55                 | ...               | 55                 |
| Pickling . . . . .       | 1                | 20                 | 1                | 51                 | 2                | 100                | 2 (1)             | 73                 |
| Annealing . . . . .      | 3                | 54                 | 3                | 76                 | 3                | 102                | 2 (2)             | 114                |
| Cold Rolls . . . . .     | 2                | 73                 | 2                | 78                 | 2                | 89                 | 2 (1)             | 81                 |
| Tinhouse . . . . .       | 12               | 115                | 13               | 214                | 12               | 316                | 10 (9)            | 290                |
| Warehouse . . . . .      | 2                | 102                | 2                | 144                | 2                | 150                | 1 (1)             | 146                |
| Electricul . . . . .     | 1                | 122                | 1                | 134                | 1                | 110                | 1 (1)             | 96                 |
| Maintenance . . . . .    | 1                | 470                | 1                | 509                | 1                | 257                | ...               | 178                |
| Machine Shop . . . . .   | ...              | ...                | ...              | ...                | ...              | 21                 | ...               | 58                 |
|                          | 84               | 1,640              | 84               | 2,540              | 71               | 2,160              | 58 (50)*          | 2,323              |

Figures are average Nos. on books per month, taken over whole year.

Figures in brackets represent actual staff on 31st May, 1926.



## STATEMENT XIV.

*Production Uncovenanted Labour, (Indirect and Direct) Total Labour and Tonnage per head per annum.*

|          | Production Tons. | Indirect labour average per month. | Direct labour average per month. |            | Total Labour. | Tonnage per head.               |
|----------|------------------|------------------------------------|----------------------------------|------------|---------------|---------------------------------|
|          |                  |                                    | Un-covenanted.                   | Covenanted |               |                                 |
| 1923 . . | 9,071            | 766                                | 1,640                            | 84         | 2,490         | 3.84                            |
| 1924 . . | 20,763           | 532                                | 2,540                            | 84         | 3,156         | 6.58                            |
| 1925 . . | 29,555           | 470                                | 2,400                            | 71         | 3,001         | 9.85                            |
| 1926 . . | 14,557           | 462                                | 2,323                            | 58         | 2,843         | 5.12*                           |
|          |                  |                                    |                                  |            |               | (5 months ended 31st May 1926.) |

\* Figures for the full year, if this average is maintained, will be 12.29.

## STATEMENT XV.

*Total wages of Covenanted and Uncovenanted Employees and Wages Cost per ton.*

|          | Production Tons. | Indirect Un-covenanted labour. | Direct labour. |            | Total Labour. | Cost per ton.                   |
|----------|------------------|--------------------------------|----------------|------------|---------------|---------------------------------|
|          |                  |                                | Un-covenanted. | Covenanted |               |                                 |
| 1923 . . | 9,071            | 2,50,471                       | 6,80,685       | 6,65,878   | 13,97,034     | 176.06                          |
| 1924 . . | 20,763           | 1,82,093                       | 10,34,374      | 9,57,570   | 21,75,037     | 104.76                          |
| 1925 . . | 29,555           | 1,52,654                       | 10,27,971      | 9,05,297   | 20,85,922     | 70.58                           |
| 1926 . . | 14,557           | 70,506                         | 4,29,228       | 3,63,059   | 8,62,793      | 59.27                           |
|          |                  |                                |                |            |               | (5 months ended 31st May 1926.) |

## STATEMENT XVI.

*Number of Covenanted and Uncovenanted Employees.*

| Year.          |  |  |  |  |  | Covenanted Employees. | Uncovenanted Employees. |
|----------------|--|--|--|--|--|-----------------------|-------------------------|
| 1923 . . . . . |  |  |  |  |  | 84                    | 2,406                   |
| 1924 . . . . . |  |  |  |  |  | 84                    | 3,072                   |
| 1925 . . . . . |  |  |  |  |  | 71                    | 2,930                   |
| 1926 . . . . . |  |  |  |  |  | 58 (50)*              | 2,785                   |

\* The figure in brackets represents actual staff on 31st May 1926.

*Note on training of labour.*

In every Department of the Works, Indian labour is being trained with a view to reducing the number of covenanted hands. The measure of our progress to date is shown by our Statements giving the numbers of covenanted hands originally employed, compared with the number working to-day.

The replacement of covenanted hands may be by direct substitution, as in Departments like the Shearing and Opening, Pickling, Annealing and Warehouse, where a local hand takes the place of any covenanted man leaving, or going on furlough: or it may be by dilution, as in the Hot Mills and Tinhouse. Thus, whereas a crew of 56 men was originally brought from Wales to man one Hot Mill, no bigger number was used to man and control six Hot Mills, and the number has since been greatly reduced. At the same time, the tonnage rose from a little over 9,000 tons in 1923 to almost 30,000 tons in 1925.

We have no Indian in the Hot Mills capable of replacing an expert Welshman in charge of a mill, and we cannot expect to have one for many years. Indians of all creeds are doing the manual work in each "position" on the mills; but the judgment of temperature of the furnaces and of the steel, and a knowledge of the correct regulation of the rolls to suit different conditions of temperature and gauge, are things which can be learnt only by practical experience. Similarly, while a novice can soon learn to tend a tinning Machine, it takes an expert to control the temperature of the tin pot.

The Welsh tinplate trade has been fighting against our being aided to establish the industry in India, on the ground that we cannot make a tinplate worker within fifteen or twenty years. They have been proved quite wrong, as we have made tinplate workers, and many of them, within three years; but if they mean that it will take fifteen years for an Indian to learn how to superintend a mill, they may be right. Indeed, there are few technical industries in India, or in any country, where the technical operation is not directed by an expert, and there is no way to become expert in rolling steel except by years of experience.

Our method of training labour is to pick out likely men and to put them in charge of some part of the operation. In the Hot Mills the best men are appointed as Instructors, to learn by showing the rest of the crew how to do the work. In the tinhouse the best men are put in charge of one or more tinning machines, the covenanted hands acting as supervisors. In the intermediate Departments there are probationers or assistants learning the supervising work, under their Superintendent. In the Shearing and Opening, Pickling, and Annealing Departments, an Indian is taking a shift by himself.

Outside of the process departments, we have no covenanted Superintendents. The Time Office, Stores, Town Motor, Medical, Drawing Office, Watch and Ward, Machine Shop, locomotive and Traffic Departments are all superintended by uncovenanted hands.

---

#### STATEMENT XVII.

##### *Bonus.*

Outside the Hot Mills, a flat bonus rate of 35 per cent. of salary applies to all covenanted employees.

In the Hot Mills, bonus is based on production, different rates being paid to Rollers, Heaters and Roughers, the payment being made on each box produced above a certain limit. The original limit was 105 boxes, and a Roller was paid:—

|            |   |
|------------|---|
| Re. 0-9-0  | per box for each box between 106 and 125. |
| Re. 0-10-0 | Do. 126 and 140.                          |
| Re. 0-11-0 | Do. over 141 boxes.                       |

Subsequently, the bonus rate was reduced by increasing the box limit to 125, and paying a flat rate of Re. 0-9-0 only per box above that limit. The corresponding rate for Heaters and Roughers is Re. 0-6-11 per box. This is the scale in force now. The following are the percentages of salaries obtained during 1925:—

|                      | Salary. | Per cent. | Bonus. | TOTAL. |
|----------------------|---------|-----------|--------|--------|
|                      | Rs.     |           | Rs.    | Rs.    |
| Rollers . . . . .    | 785     | 42.73     | 335    | 1,120  |
| Heaters and Roughers | 600     | 43.28     | 260    | 860    |

## STATEMENT XVIII.

*Hot Mills Production.*

|                     | 1923.  | 1924.  | 1925.  | 1926.  |
|---------------------|--------|--------|--------|--------|
| January . . . . .   | 6,921  | 42,728 | 57,196 | 66,632 |
| February . . . . .  | 12,337 | 49,443 | 59,207 | 58,236 |
| March . . . . .     | 17,485 | 31,129 | 61,748 | 69,088 |
| April . . . . .     | 11,751 | 32,398 | 56,446 | 61,172 |
| May . . . . .       | 12,084 | 33,879 | 48,790 | 61,678 |
| June . . . . .      | 9,931  | 16,440 | 30,049 | ...    |
| July . . . . .      | 10,321 | 55,273 | 59,205 | ...    |
| August . . . . .    | 9,907  | 42,562 | 51,466 | ...    |
| September . . . . . | 27,405 | 34,272 | 50,878 | ...    |
| October . . . . .   | 27,850 | 34,433 | 61,397 | ...    |
| November . . . . .  | 33,129 | 24,710 | 55,539 | ...    |
| December . . . . .  | 42,330 | 44,997 | 47,728 | ...    |

## NOTE ON STATEMENT XVIII.

*Effect of climatic conditions on output.*

We enclose a Statement No. XVIII showing the figures of the number of boxes rolled in the Hot Mill since our Works have been in operation from which you will note the falling off during the hot months of the year.

High maximum temperatures prevail from about March to June, and high minimum temperatures prevail from April to September, all inclusive. A high maximum combined with a low minimum, as in March, does not cause excessive discomfort, and certainly not as much as is caused by a high mini-

mum combined with a moderately high maximum, as during the Monsoon months. It can therefore be said generally that the months of April to September are unfavourable.

Beginning from March or April, production falls until July, during which month, with the relief of the break of the Rains, production usually improves considerably, and drops again in August and September. Taking the year as a whole, the months of April to September inclusive are unfavourable, and the months of October to March are favourable. Leaving the year 1923 out of consideration as the year in which mills were being successively started up, the half-yearly figures are instructive, *viz.* :—

|                                    | 1924.    | 1925.    |
|------------------------------------|----------|----------|
| Jan., Feb., Mar., Oct., Nov., Dec. | 2,27,510 | 3,42,815 |
| April, May, June, July, Aug. Sept. | 2,14,824 | 2,96,834 |
| TOTAL                              | 4,42,334 | 6,39,649 |

#### STATEMENT XIX.

*Production and costs from 1923 to 1925 and estimated production and works costs up to 1936.*

| <i>Year.</i>   | Production.<br>Tons. | Works cost<br>per ton.<br>Rs. | Cost of steel |
|----------------|----------------------|-------------------------------|---------------|
| 1923 . . . . . | 9,071                | 576                           | ...           |
| 1924 . . . . . | 20,763               | 459                           | 127           |
| 1925 . . . . . | 29,555               | 481                           | 107*          |
| 1926 . . . . . | 34,700               | 316                           | 84            |
| 1927 . . . . . | 35,600               | 305                           | 83            |
| 1928 . . . . . | 36,100               | 300                           | 83            |
| 1929 . . . . . | 36,100               | 296                           | 83            |
| 1930 . . . . . | 36,100               | 293                           | 83            |
| 1931 . . . . . | 36,100               | 290                           | 83            |
| 1932 . . . . . | 36,100               | 288                           | 83            |
| 1933 . . . . . | 36,100               | 285                           | 83            |
| 1934 . . . . . | 36,100               | 284                           | 83            |
| 1935 . . . . . | 36,100               | 283                           | 83            |
| 1936 . . . . . | 36,100               | 282                           | 83            |

\* This figure differs from that of our application of 5th May 1926. This difference is due to adjustments made in our cost figures in our final accounts for the year.

## STATEMENT XX.

Yearly Expenditure on Capital Account 1920 to 1925.

|   | Dollar<br>Expendi-<br>ture. | Sterling<br>Expendi-<br>ture. | Rupee<br>Expendi-<br>ture |
|---|-----------------------------|-------------------------------|---------------------------|
| 1920.   | \$                          | £                             | Rs.                       |
| American Purchases of Machinery & Steel Work—   |                             |                               |                           |
| Cost f.o.r. American Port . . . . .   | 236,595                     | ...                           | ...                       |
| Freight and Sundries . . . . .  | 28,349                      | ...                           | ...                       |
| 1921.   |                             |                               |                           |
| American Purchases of Machinery & Steel Work—   |                             |                               |                           |
| Cost f.o.r. American Port . . . . .   | 1,007,571                   | ...                           | ...                       |
| Freight and Sundries . . . . .  | 141,022                     | ...                           | ...                       |
| Sterling Purchases of Machinery—  |                             |                               |                           |
| Cost f.o.r. U. K. Port . . . . .  | ...                         | 55,376                        | ...                       |
| Freight and Sundries . . . . .  | ...                         | 2,391                         | ...                       |
| Rupee Expenditure   |                             |                               |                           |
| Steel Erection . . . . .  | ...                         | ...                           | 662                       |
| Machinery . . . . .   | ...                         | ...                           | 1,57,962                  |
| Brickwork and Foundations . . . . .   | ...                         | ...                           | 6,22,313                  |
| Sundry Capital Accounts . . . . .   | ...                         | ...                           | 4,96,071                  |
| 1922.   |                             |                               |                           |
| American Purchases of Machinery & Steel Work—   |                             |                               |                           |
| Cost f.o.r. American Port . . . . .   | 614,116                     | ...                           | ...                       |
| Freight and Sundries . . . . .  | 83,600                      | ...                           | ...                       |
| Rupee Expenditure—  |                             |                               |                           |
| Steel Erection . . . . .  | ...                         | ...                           | 1,35,454                  |
| Machinery . . . . .   | ...                         | ...                           | 4,67,547                  |
| Brickwork and Foundations . . . . .   | ...                         | ...                           | 6,61,583                  |
| Sundry Capital Accounts . . . . .   | ...                         | ...                           | 2,27,369                  |
| 1923.   |                             |                               |                           |
| American Purchases of Machinery & Steel Work—   |                             |                               |                           |
| Cost f.o.r. American Port . . . . .   | 73,666                      | ...                           | ...                       |
| Freight and Sundries . . . . .  | 9,428                       | ...                           | ...                       |
| Sterling Purchases of Machinery—  |                             |                               |                           |
| Cost f.o.r. U. K. Port . . . . .  | ...                         | 2,657                         | ...                       |
| Freight and Sundries . . . . .  | ...                         | 218                           | ...                       |
| Rupee Expenditure—  |                             |                               |                           |
| Machinery . . . . .   | ...                         | ...                           | 5,91,011                  |
| Brickwork and Foundations . . . . .   | ...                         | ...                           | 6,70,804                  |
| Sundry Capital Accounts . . . . .   | ...                         | ...                           | 1,56,014                  |
| 1924.   |                             |                               |                           |
| Rupee Expenditure—  |                             |                               |                           |
| Machinery . . . . .   | ...                         | ...                           | 53,869                    |
| Brickwork and Foundations . . . . .   | ...                         | ...                           | 68,635                    |
| Sundry Capital Accounts . . . . .   | ...                         | ...                           | 27,111                    |
| 1925.   |                             |                               |                           |
| Rupee Expenditure—  |                             |                               |                           |
| Machinery . . . . .   | ...                         | ...                           | 1,12,015                  |
| Brickwork and Foundations . . . . .   | ...                         | ...                           | 1,562                     |
| Sundry Capital Accounts . . . . .   | ...                         | ...                           | 26,456                    |
|   | \$2,194,542                 | 60,642                        | R44,73,458                |
| Expenditure on Interest, Loans, Brokerage, Travel-<br>ing and Sundry Expense Accounts during the<br>period of construction, charged to capital.   | \$162,956                   | £55,949                       |                           |
|   | \$2,357,498                 | R116,591                      | R44,73,458                |
|   | R83,67,936                  | R16,41,021                    | R44,73,458                |
|   | \$2,456,936                 | R87,20,891                    | Total Rs.<br>1,44,82,415  |
| NOTE.—Dollar Expenditure shown on statements<br>III (b) and III (c) submitted on 20-5-1926 was<br>but included cost of materials purchased with<br>original plant, subsequently taken into stores<br>for operation use (e.g. rolls) . . . . . | \$99,436                    | R3,52,955                     |                           |
|   | \$2,357,498                 | R83,67,936                    |                           |

## STATEMENT XX (a) 1.

*Analysis of Capital Expenditure (Machinery Erection) 1921.*

| —                                | Wages.     | Contractors. | Local Stores,<br>etc. | Total.        |
|----------------------------------|------------|--------------|-----------------------|---------------|
|                                  | Rs. A. P.  | Rs. A. P.    | Rs. A. P.             | Rs. A. P.     |
| M. & P. General .                | 1,015 2 10 | 12,695 8 0   | 57 14 8               | 13,768 9 1    |
| Tinhouse . .                     | 200 1 6    | 15,368 0 0   | 155 7 0               | 15,723 8 6    |
| Hot Mills . .                    | 2 7 0      | 24,653 10 0  | 2,782 2 3             | 27,438 3 3    |
| Machine Shop . .                 | 1,339 14 0 | 10,441 0 0   | 214 1 0               | 11,994 15 0   |
| Cold Mills . .                   | ...        | 21,405 0 0   | 228 15 0              | 21,633 15 0   |
| Sheet and Pair Fur-<br>nace.     | ...        | 20,591 14 9  | 2,409 9 0             | 23,001 7 9    |
| Pickling . . .                   | ...        | 5,305 4 0    | 188 8 0               | 5,488 12 0    |
| Bar Storage . .                  | 8 1 4      | 2,671 0 0    | 479 2 0               | 3,158 3 4     |
| Shearing . . .                   | ...        | 10,272 5 0   | 315 5 0               | 10,587 10 0   |
| Power House . .                  | ...        | 4,862 10 10  | ...                   | 4,862 10 10   |
| Doublers . . .                   | ...        | 6,569 4 6    | ...                   | 6,569 4 6     |
| General Electrical<br>Equipment. | ...        | 549 0 0      | ...                   | 549 0 0       |
| 3 Ton Locomotive<br>Crane.       | ...        | 55 0 0       | ...                   | 55 0 0        |
| Portable Steam En-<br>gine.      | ...        | 126 0 0      | ...                   | 126 0 0       |
| Stiff Leg Derrick<br>Crane.      | ...        | 264 0 0      | ...                   | 264 0 0       |
| Scrap Press . .                  | ...        | 227 0 0      | ...                   | 227 0 0       |
| Annealing . . .                  | ...        | 12,187 13 6  | 875 14 0              | 12,513 11 6   |
| TOTAL .                          | 2,565 10 8 | 1,48,194 6 7 | 7,201 13 6            | 1,57,961 14 9 |

## STATEMENT XX (a) 2.

*Analysis of Capital Expenditure (Machinery Erection) 1922.*

| —                                | Wages.     | Contractors. | Local Stores,<br>etc. | Total.       |
|----------------------------------|------------|--------------|-----------------------|--------------|
|                                  | Rs. A. P.  | Rs. A. P.    | Rs. A. P.             | Rs. A. P.    |
| M. & P. General                  | 2,669 9 7  | 4,224 4 0    | 27,534 13 1           | 34,428 10 8  |
| Tinhouse                         | 3,500 13 1 | 9,074 13 0   | 3,311 0 0             | 15,886 10 1  |
| Sheet and Pair Fur-<br>nace.     | 6,015 5 8  | 9,601 10 3   | 9,842 6 6             | 25,459 6 5   |
| Hot Mills . . .                  | 20,353 2 4 | 10,267 10 6  | 64,017 14 11          | 95,138 11 9  |
| Machine Shop . .                 | 1,438 15 9 | 1,441 1 6    | 8,964 15 8            | 11,845 0 11  |
| Annealing . . .                  | 1,832 11 7 | 6,347 9 9    | 72,274 6 7            | 80,454 11 11 |
| Bar Storage . . .                | 1,946 13 4 | 5,096 2 0    | 808 1 0               | 7,850 0 4    |
| Boiler and Steam<br>Lines.       | 1,286 14 3 | 2,022 4 0    | 16,942 15 0           | 20,252 1 3   |
| Power House . . .                | 10,803 0 0 | 5,494 9 0    | 2,199 14 11           | 18,497 7 11  |
| Air Washer . . .                 | 644 3 9    | ...          | 13,590 8 1            | 14,235 0 10  |
| Warehouse . . .                  | 194 10 2   | 1,851 4 4    | 8,460 0 6             | 10,505 15 0  |
| Box Factory . . .                | 27 8 0     | ...          | ...                   | 27 8 0       |
| Cold Mill . . .                  | 4,043 12 5 | 7,715 0 6    | 25,215 0 10           | 36,973 13 9  |
| Doubler . . .                    | 737 2 10   | 7,536 0 6    | 770 10 1              | 9,044 6 5    |
| General Electrical<br>Equipment. | 6,455 15 4 | 148 10 6     | 20,848 11 7           | 27,453 5 5   |
| Grease House . . .               | 85 6 0     | ...          | 8,385 7 6             | 8,470 13 6   |
| Ice Plant . . .                  | 2,026 0 0  | ...          | 8,786 8 0             | 10,762 8 0   |
| Ton Locomotive<br>Crane.         | ...        | ...          | 18,912 13 7           | 18,912 13 7  |
| Portable Steam En-<br>gine.      | 188 1 0    | ...          | 11 6 7                | 199 7 7      |
| Shearing . . .                   | 2,262 1 11 | 5,646 8 0    | 289 12 5              | 8,192 1 4    |
| Stiff Leg Derrick<br>Crane.      | 1,348 6 3  | ...          | ...                   | 1,348 6 3    |
| Scrap Press . . .                | 135 12 10  | 82 11 0      | 4,920 0 4             | 5,138 8 2    |
| Tin Supply House .               | 188 0 0    | ...          | 2,705 13 9            | 2,893 13 9   |
| Pickling . . .                   | 664 14 2   | 3,500 0 0    | 4,411 2 0             | 8,576 0 2    |
| TOTAL . . .                      | 69,348 9 3 | 80,050 6 10  | 3,18,148 6 11         | 4,67,547 7 0 |

STATEMENT XX (a) 3.  
*Analysis of Capital Expenditure (Machinery Erection) 1923.*

|                                     | Wages.       | Contractors. | Local Stores,<br>etc. | Total.       |
|-------------------------------------|--------------|--------------|-----------------------|--------------|
|                                     | Rs. A. P.    | Rs. A. P.    | Rs. A. P.             | Rs. A. P.    |
| M. & P. General .                   | 4,186 0 6    | 23,868 10 0  | 1,989 4 1             | 30,043 14 7  |
| Tinhouse . .                        | 16,893 6 3   | 37,600 15 6  | 8,032 6 6             | 62,526 12 3  |
| Hot Mills .                         | 32,497 7 6   | 84,564 10 0  | 24,152 2 7            | 1,41,124 4 1 |
| Machine Shop .                      | 8,522 1 2    | 36,441 2 0   | 4,620 13 4            | 44,584 0 6   |
| Sheet and Pair Fur-<br>nace.        | 5,987 14 8   | 43,130 8 6   | 3,049 11 6            | 52,168 2 8   |
| Annealing                           | 8,594 6 4    | 46,104 14 0  | 4,420 3 2             | 59,119 7 6   |
| Pickling . .                        | 1,748 0 8    | 22,029 10 0  | 2,884 1 11            | 26,661 12 7  |
| Bar Storage . .                     | 62 7 7       | 1,215 0 0    | 248 6 2               | 1,525 13 9   |
| Boiler and Steam<br>Lines.          | 1,064 13 3   | ...          | 2,054 15 6            | 3,119 12 9   |
| General Electrical<br>Equipment.    | 4,309 14 0   | 11,500 0 0   | 6,015 7 0             | 21,825 1 0   |
| Grease House . .                    | 308 5 0      | ...          | 1,033 12 4            | 1,392 1 4    |
| Gas Engine . .                      | ...          | ...          | 7,522 8 7             | 7,522 8 7    |
| Hydraulic Pump and<br>Accumulation. | 476 14 3     | 2,301 9 0    | 364 10 6              | 3,143 1 9    |
| Shearing . . .                      | 3,054 2 9    | 3,500 0 0    | 173 4 8               | 6,727 7 5    |
| Scrap Press . .                     | 519 0 9      | 2,833 14 0   | 419 2 3               | 3,772 1 0    |
| Tin Supply House .                  | 2,814 14 0   | 1,466 12 6   | 4,052 13 1            | 8,334 7 7    |
| Water Tower . .                     | 247 4 9      | 2,341 9 4    | 4,218 9 4             | 6,807 7 5    |
| Power House . .                     | 5,137 12 11  | 1,178 6 9    | 1,318 14 10           | 7,635 2 6    |
| Air Washer . .                      | ...          | 526 5 6      | 984 3 0               | 1,510 8 6    |
| Warehouse . .                       | 899 6 7      | 2,181 2 11   | 2,604 10 2            | 5,685 3 8    |
| Box Factory . .                     | 9 8 9        | ...          | ...                   | 9 8 9        |
| Cold Mills . .                      | 7,352 12 8   | 29,183 14 4  | 9,343 0 5             | 45,879 11 5  |
| Doublers . .                        | 1,075 11 7   | 39,487 1 7   | ...                   | 40,562 13 2  |
| Ice Plant . .                       | 2,246 7 5    | ...          | ...                   | 2,246 7 5    |
| Pump and Filter<br>House.           | ...          | 505 10 0     | 6,129 7 10            | 6,635 1 10   |
| 3 Ton Locomotive<br>Crane.          | ...          | 78 4 6       | ...                   | 78 4 6       |
| Portable Steam En-<br>gine.         | ...          | 370 1 0      | ...                   | 370 1 0      |
| TOTAL .                             | 1,02,918 9 4 | 3,92,410 1 5 | 95,682 8 9            | 5,91,011 3 6 |



## STATEMENT XX (a) 4.

*Analysis of Capital Expenditure (Machinery Erection) 1924.*

|                                    | Wages.     | Contractors. | Local Stores,<br>General. | Total.        |
|------------------------------------|------------|--------------|---------------------------|---------------|
|                                    | Rs. A. P.  | Rs. A. P.    | Rs. A. P.                 | Rs. A. P.     |
| M. & P. General .                  | 48 5 3     | ...          | ...                       | 48 5 3        |
| Tinhouse .                         | 1,452 10 0 | ...          | 25,901 7 6                | 27,354 1 6    |
| Hot Mills . .                      | ...        | ...          | 8,171 9 0                 | 8,171 9 0     |
| Machine Shop .                     | ...        | ...          | 2,962 15 11               | 2,962 15 11   |
| Sheet and Pair Fur-<br>nace.       | ...        | 20 2 6       | 61 11 10                  | 81 14 4       |
| Pickling . . .                     | 2,159 14 0 | ...          | 7,920 4 9                 | 10,080 2 9    |
| General Electrical<br>Equipment.   | ...        | 27 12 0      | 3,498 0 3 Cr.             | 3,470 4 3 Cr. |
| Grease House . .                   | ...        | 5 15 0       | ...                       | 5 15 0        |
| Annealing . .                      | ...        | ...          | 7,134 1 3                 | 7,134 1 3     |
| Doubler . . .                      | 446 9 6    | ...          | ...                       | 446 9 6       |
| Portable Steam En-<br>gine . . .   | ...        | 251 15 0     | ...                       | 251 15 0      |
| Power House . .                    | 259 0 9    | ...          | 167 8 9                   | 446 9 6       |
| Hydraulic Pump and<br>Accumulator. | ...        | ...          | 375 0 2                   | 375 0 2       |
| TOTAL .                            | 4,866 7 6  | 305 12 6     | 49,216 10 11              | 53,888 14 11  |

## STATEMENT XX (a) 5.

*Analysis of Capital Expenditure (Machinery Erection) 1925.*

|                      | Wages.     | Contractors. | Local Stores. | Total.        |
|----------------------|------------|--------------|---------------|---------------|
|                      | Rs. A. P.  | Rs. A. P.    | Rs. A. P.     | Rs. A. P.     |
| M. & P. General .    | 50 15 0    | ...          | 7,750 5 0     | 7,801 4 0     |
| Tinhouse . .         | 3,506 7 3  | ...          | 1,061 10 6    | 4,568 1 9     |
| Pickling . . .       | 2,808 4 2  | ...          | 66,069 15 0   | 68,878 3 2    |
| Palm Oil Tank .      | 136 11 6   | 863 14 0     | 523 15 1      | 1,524 8 7     |
| Power House . .      | ...        | ...          | 10,368 12 3   | 10,368 12 3   |
| Warehouse . .        | ...        | ...          | 5,213 4 4     | 5,213 4 4     |
| Cold Mill . . .      | 1,211 7 3  | ...          | 2,238 9 5     | 3,450 0 8     |
| Scrap Lifting Magnet | ...        | ...          | 3,326 8 0     | 3,326 8 0     |
| Welding Plant .      | ...        | ...          | 6,884 2 3     | 6,884 2 3     |
| TOTAL .              | 7,713 13 2 | 863 14 0     | 1,03,437 1 10 | 1,12,014 13 0 |

## STATEMENT XXI.

*Output figures—April 1923—March 1926.*

| Period.                         | Tonnage Produced. |
|---------------------------------|-------------------|
| April 1923—March 1924 . . . . . | 14,590            |
| April 1924—March 1925 . . . . . | 23,262            |
| April 1925—March 1926 . . . . . | 30,410            |

## STATEMENT XXII.

*Coal Consumption—January-April 1926.*

| Department.               | Coal consumed. | Cost          | Lbs. consumed per ton of tinplate. | Cost Rs. per ton of tinplate. |
|---------------------------|----------------|---------------|------------------------------------|-------------------------------|
|                           | Tons.          | Rs.           |                                    |                               |
| Sheet and Pair Furnaces . | 4,898          | 45,513        | 937                                | 3·889                         |
| Boilers and Steam Lines . | 1,591          | 14,827        | 305                                | 1·267                         |
| Hot Mills . . . . .       | 185            | 1,722         | 35                                 | ·147                          |
| Annealing . . . . .       | 2,288          | 21,377        | 438                                | 1·827                         |
| Tinhouse . . . . .        | 1,297          | 12,153        | 248                                | 1·039                         |
| Loco . . . . .            | 276            | 2,544         | 51                                 | ·217                          |
| <b>TOTAL</b> .            | <b>10,530</b>  | <b>98,136</b> | <b>2,014</b>                       | <b>8·386</b>                  |

Output of tinplate—11,702 tons.

सत्यमेव जयते

## STATEMENT XXIII.

Distribution of Sales and Freights incurred (January-June 1926).

| Place of sale.        | PRIMS.                                     |       |  | UNASSORTED.                                |          |                                 | WASTERS.                                   |                        |        | Total. | Percentage. | Freight per ton. |
|-----------------------|--|-------|--|--|----------|---------------------------------|--|------------------------|--------|--------|-------------|------------------|
|                       | The Tank Storage Company, (India) Limited. | Tons. | The Tank Storage Company, (India) Limited. | Tea Packers and Biscuit man-<br>facturers. | Dealers. | The Burma Oil Company, Limited. | The Tank Storage Company, (India) Limited. | Camnakers and Dealers. | Tons.  |        |             |                  |
| Shalimar . . . . .    | 12,332                                     | ...   | ...  | ...  | ...      | ...                             | ...  | ...                    | ...    | 12,332 | 74.55       | 10.94            |
| Calcutta . . . . .    | ...  | ...   | ...  | 491  | 274      | ...                             | ...  | 877                    | 877    | 1,642  | 9.84        | 13.21            |
| Budge Budge . . . . . | ...  | 141   | ...  | ...  | ...      | 769                             | 27   | 8                      | 8      | 945    | 5.68        | 13.35            |
| Bombay . . . . .      | ...  | 62    | ...  | ...  | ...      | 71                              | 13   | 241                    | 241    | 387    | 2.35        | 25.68            |
| Karachi . . . . .     | ...  | 15    | ...  | ...  | ...      | ...                             | 5  | 363                    | 363    | 383    | 2.34        | 46.23            |
| Chittagong . . . . .  | ...  | ...   | ...  | ...  | ...      | 257                             | ...  | ...                    | ...    | 257    | 1.57        | 34.19            |
| Ernakulam . . . . .   | ...  | ...   | ...  | ...  | ...      | ...                             | ...  | 232                    | 232    | 282    | 1.41        | 38.30            |
| Madras . . . . .      | ...  | 18    | ...  | ...  | ...      | 104                             | 4  | 39                     | 39     | 165    | 1.02        | 25.03            |
| Delhi . . . . .       | ...  | ...   | ...  | ...  | ...      | ...                             | ...  | 138                    | 138    | 138    | 0.85        | 27.24            |
| Bangoon . . . . .     | ...  | ...   | ...  | ...  | ...      | ...                             | ...  | 62                     | 62     | 62     | 0.39        | 33.00            |
| TOTAL . . . . .       | 12,332                                     | 236   | 491  | 274  | 1,201    | 49                              | 1,960                                      | 16,543                 | 100.00 | ...    | ...         | ...              |

The average freight paid is Rs. 13.64 per ton.

The average freight paid on unassorted and wasters is Rs. 21.54 per ton.

## STATEMENT XXIV

*Cost per ton of the disadvantages resulting from the location of the Plant in India  
(1925 figures).*

| Article.                        | Charges and Freight<br>f.o.b. to c.i.f. | Duty.  | Total.   |
|---------------------------------|---|--------|----------|
|                                 | Rs.                                     | Rs.    | Rs.      |
| Rolls . . . . .                 | 38,347                                  | 6,147  | 44,494   |
| Annealing Boxes and Bottoms . . | 14,321                                  | 3,721  | 18,042   |
| Brasses . . . . .               | 2,426                                   | 1,199  | 3,625    |
| Palm Oil . . . . .              | 9,777                                   | 19,063 | 28,840   |
| Pink Neal . . . . .             | 7,788                                   | 2,808  | 10,596   |
| Zinc Chloride . . . . .         | 6,348                                   | 10,890 | 17,238   |
| Imported Greases . . . . .      | 12,550                                  | 11,102 | 23,632   |
| Carborundum Blocks . . . . .    | 280                                     | 950    | 1,230    |
| Tanned Fleeces . . . . .        | 1,109                                   | 2,571  | 3,680    |
| TOTAL                           | ...                                     | ...    | 1,51,377 |

Incidence per ton on 23,555 tons production Rs. 5.12  
Incidence per ton of duty on tin at Rs. 250 per ton 4.61

Rs. 9.73

*Scrap—*

On 8,000 tons Wales would realise 25 per cent. of the  
cost of tin bar, i.e.,  $\frac{1}{4} \times \text{Rs. } 90 =$  . . . . . Rs. 22 8 0  
Actual price realised by us after deducting baling  
charges . . . . . Rs. 8 0 0  
Loss per ton . . . . . Rs. 14 8 0  
Total Loss . . . . . Rs. 1,16,000 0 0

Incidence per ton of tinplate on 29,555 tons pro-  
duction . . . . . Rs. 3.92

## STATEMENT XXV.

*Statement showing difference in prices charged per two tins from 1914 to date.*

| <i>Date.</i>                 | <i>Price per two tins.</i> |
|------------------------------|----------------------------|
| 3rd January 1914 . . . . .   | 0 10 0                     |
| 17th March 1917 . . . . .    | 1 4 0                      |
| 15th December 1917 . . . . . | 1 12 0                     |
| 1st October 1921 . . . . .   | 1 8 0                      |
| 11th March 1922 . . . . .    | 1 4 0                      |
| 21st June 1924 . . . . .     | 1 5 0                      |
| 1st May 1926 . . . . .       | 1 4 0                      |

## NOTE.

The War did not affect prices until 1917. We are informed that despite their increased costs the Oil Companies did not alter their prices until the India Office, at the instance of the Home Ministry of Munitions, informed the Government of India of the desirability of curtailing the consumption of tinplates in India, as economy in steel consumption had become vital. The two increases in 1917 were made at the instance and with the approval of Government. We are informed that the Oil Companies' correspondence in this matter was with the Department of Commerce and Industry.

Prices declined again in 1921 and 1922 and in spite of the increased tariff on tinplates later imposed are the same now as they were at that date, the drop in the world price having compensated for this increased tariff.



## STATEMENT XXVI.

## THE TINPLATE COMPANY OF INDIA, LIMITED.

*Letter, dated the 12th August 1926.*

We have the honour to submit herewith, as requested by the Board, Statement XXVI showing the estimated cost of extending our present plant by the addition of (a) 2 double Hot Mills, (b) 4 double Hot Mills with the necessary extensions and additions to enable other departments to deal with the increased production from the Hot Mills. The increase in production would be (a) 33½ per cent. and (b) 66½ per cent. so that the total outputs would be 48,000 tons and 60,000 tons with the addition of 2 and 4 Mills respectively.

The figures of cost shown have been calculated on the basis of original invoices so that to arrive at the probable actual cost they are reducible by whatever percentage the Board decides that our original cost is reducible to give the replacement value at present-day prices. Comparing them with Rs. 1,60,00,000, the original total cost of the factory and town, *i.e.*, the total outlay which was necessary to erect our present plant and commence manufacture, the cost of a one-third extension is 16.5 per cent. and of a two-thirds extension 31.3 per cent. The reason for the cost of these extensions being so small compared with the original cost is, as explained in our oral evidence, that provision was made in the original layout and design of the buildings for extensions to be made at a minimum expense.

## STATEMENT XXVI.

*Cost of extending the plant (a) by 2 Mills and (b) by 4 Mills.*

|                      |                   | (a) 2 MILLS. | (b) 4 MILLS.    |           |
|----------------------|-------------------|--------------|-----------------|-----------|
|                      |                   |              | Extra over (a). | TOTAL.    |
|                      |                   | Rs.          | Rs.             | Rs.       |
| Bar Yard . . .       | { Building . . .  | ...          | 1,31,000        | 1,31,000  |
|                      | { Equipment . . . | ...          | 89,000          | 89,000    |
| Hot Mills . . .      | { Building . . .  | 4,10,000     | 4,10,000        | 8,20,000  |
|                      | { Equipment . . . | 12,45,000    | 9,98,000        | 22,43,000 |
| Furnace . . .        | { Building . . .  | 77,000       | 77,000          | 1,54,000  |
|                      | { Equipment . . . | 65,000       | 1,08,000        | 1,73,000  |
| Shearing and opening | { Building . . .  | 72,000       | 72,000          | 1,44,000  |
|                      | { Equipment . . . | 40,000       | 40,000          | 80,000    |
| Pickling . . .       | { Building . . .  | ...          | ...             | ...       |
|                      | { Equipment . . . | ...          | ...             | ...       |

|                       |             | (a) 2 MILLS. | (b) 4 MILLS.    |           |
|-----------------------|-------------|--------------|-----------------|-----------|
|                       |             |              | Extra over (a). | TOTAL.    |
|                       |             | Rs.          | Rs.             | Rs.       |
| Black Annealing       | { Building  | ...          | ...             | ...       |
|                       | { Equipment | 1,16,000     | ...             | 1,16,000  |
| Cold Rolls            | { Building  | ...          | ...             | ...       |
|                       | { Equipment | 43,000       | 2,000           | 45,000    |
| White Annealing       | { Building  | ...          | ...             | ...       |
|                       | { Equipment | 2,59,000     | ...             | 2,59,000  |
| Tinhouse              | { Building  | ...          | 1,50,000        | 1,50,000  |
|                       | { Equipment | 1,04,000     | 93,000          | 1,97,000  |
| Warehouse             | { Building  | ...          | ...             | ...       |
|                       | { Equipment | 20,000       | 20,000          | 40,000    |
| Powerhouse            | { Building  | ...          | ...             | 28,000    |
|                       | { Equipment | 14,000       | 14,000          | 28,000    |
| Electrical            | Equipment   | 50,000       | 50,000          | 1,00,000  |
| TOTAL                 |             | 25,15,000    | 22,54,000       | 47,69,000 |
| <i>Miscellaneous.</i> |             |              |                 |           |
| Water Supply Pumps    |             | 9,000        | 9,000           | 18,000    |
| Sewers and Drains     |             | 30,000       | 30,000          | 60,000    |
| Latrines              |             | 2,000        | 4,000           | 6,000     |
| Railway Tracks        |             | 25,000       | 25,000          | 50,000    |
| Roll Lathe and Motor  |             | 30,000       | ...             | 30,000    |
| Boilers               |             | 35,000       | 35,000          | 70,000    |
| TOTAL                 |             | 26,46,000    | 23,57,000       | 50,03,000 |

## STATEMENT XXVII.

## THE TINPLATE COMPANY OF INDIA, LIMITED.

*Letter dated the 19th August 1926.*

As requested yesterday we attach a statement showing the average price obtained by us for various qualities of tinplates for the years 1924, 1925 and January-June 1926.

In regard to 1926 figures you will observe that our price for firsts has come considerably nearer the Primes price than it was previously.

In connection with price for unassorted this is lower than it would ordinarily be and is due to the fact that we made a contract with one of our largest buyers at the beginning of the year before the extra duty had been imposed, deliveries against which constitute a large proportion of our sales.

## STATEMENT XXVII.

*Average Gross Selling Prices obtained.*

|                  | 1924.    | 1925.  | 1926 Jan.-June. |
|------------------|----------|--------|-----------------|
| Primes . . .     | 454.01   | 397.25 | 401.75          |
| Wasters . . .    | 399.07   | 328.00 | 348.50          |
| Unassorted . . . | No Sales | 367.00 | 370.50          |





(10) *Letter from the Tinsplate Company of India, Limited, dated the 5th July, 1926.*

### *The Tinsplate Industry.*

In sending herewith the statements for which you have asked, we take leave to give you a resumé of the circumstances under which our Plant was started, of our progress to date, and of our hopes for the future.

The idea of starting a Tinsplate Industry in India was mooted towards the end of the War, as a result of the acute shortage of tinsplate experienced in India at that time and to make India in the future independent of outside countries for a very necessary article of every day use and military necessity which in times of stress such as the war or strikes might not be available. It should also be borne in mind that with the agricultural development of India tinsplates will be required to an increasing extent for the manufacture of containers. The industry also gave an outlet for a large quantity of steel from the Tata Iron and Steel Company's Greater Extensions.

Tinsplate is used in India, as in every other country to-day, for making containers, particularly for perishable goods, as well as for making articles of general utility such as lamps, boxes and the like. Consisting as it does of a thin sheet of steel, coated evenly with a fine coating of the purest tin obtainable, it gives maximum service at a minimum cost, the steel being for strength, the tin for preventing the steel from rusting.

The biggest use to which tinsplate is put is the tinning of petroleum and its products, viz., kerosene oil, petrol, lubricating oils and greases, and it has been estimated that one-third of the total tinsplate production throughout the world is used for this purpose. In India the proportion is probably four-fifths, of which all but a fraction goes to make the four-gallon kerosene tin, India's universal container. Upwards of forty million kerosene tins are distributed annually throughout India by the Oil Companies, filled on their first journey upcountry with kerosene and thereafter emptied and used as a container for vegetable oils, ghee, molasses and other products, to finish up in the hands of the tinsmith in the bazaar or as the roof or the wall of a house.

It was therefore natural that the first tinsplate factory in India should concentrate principally on the two sizes of "30 Gauge" tinsplate required by the oil trade, which had the additional advantage of being two of the sizes most in demand by bazaar dealers.

Once the factory was established, and production began to outstrip the demands for 30 gauge "Oil Size" plates, the demands of other users could be met, and to-day Indian tinsplate is being used as well by the tea packers, biscuit manufacturers and others. The familiar 2-gallon petrol tin is also to-day being made exclusively from "Golmuri" tinsplate.

The Factory at Golmuri took two years to build, and occupies 40 acres of land that previously had been virgin jungle. The buildings themselves comprise 7½ acres. Adjacent was laid out a village for the workmen, and about a mile away a town for the accommodation of the necessary staff.

This staff consisted principally of close on a hundred expert tinsplate workers from Wales, the Home of the industry and the parent of practically every successful tinsplate plant that is operating to-day. It is noteworthy that although steel is made in very large quantities in all the highly industrialised countries of the world although, in fact, "highly industrialised" is almost synonymous with the manufacture of steel—tinsplate is largely manufactured only in two,

*viz.*, the United States of America and Great Britain, and in Great Britain its manufacture is confined to only a small area—South Wales. There are tinplate works in Germany, in France and in Italy, but all these countries import largely from Wales.

The reason underlying this is the inherent difficulty of the process of rolling steel into thin sheets. Unlike

Inherent difficulty of rolling sheets. most of the steel processes, progressive mechanical development has so far been found impossible, and intrinsically the process remains the same as it did when it was founded a century and a half ago in Wales. Equipment has been improved (particularly during the last few years in America), but human skill and experience remain the governing factors; no electrical or mechanical device has been found that will replace the

The human factor. brains of the man superintending the rolls and the furnaces. The Welshman serves many years of apprenticeship before he is even allowed to roll a pack of "blackplate," and although it has been proved in India that totally unskilled labour can, with the proper equipment, be taught the mere manual process, it will be long before Welsh supervision can be dispensed with entirely.

With unlimited supplies of skilled labour at its disposal, the Welsh trade has never needed, nor tried, to develop mechanical devices which would lessen the requisite skill. It is fortunate for India that America did develop these mechanical appliances, just because she also had no reserves of skilled labour

American equipment. on which to draw, or the operation of a tinplate plant in India would have been impossible. Fortunately for us the Americans also had to face and overcome a difficulty unknown in Wales, *viz.*, high temperatures; and it has been by copying and improving on their methods of combating climatic disabilities that we have been able to operate throughout the Indian hot weather.

The first sheet of steel less than  $\frac{1}{8}$ " in thickness was rolled in India in the Golmuri factory on 18th December 1922, when the first of our six mills started to operate with a full crew of 54 Welshmen and two Foremen. Before the

The start. second mill was started up, over a hundred Indians were in training, and the process was continued as each of the remaining four mills were started up,

1923. with the result that by the 12th December 1923, when the sixth mill was put into operation, enough Indian workmen had been sufficiently trained for the manual process to enable all six mills to be operated by them, the Welsh supervision being now reduced to three men per mill per shift.

It had been a matter for considerable speculation as to how many novices would be required to replace each skilled

The size of the crew. man, and how far the bodily strength of the individual Indian workman would compare with that of men whose physique had been developed by years of this manual labour- and picked men at that. The experience of other industries was adduced to show that we should need three or four Indians to replace each Welshman, but it was not long before we found that, on the average, only two were required. There are forty Indians to fill these positions to-day, this being on the basis of two men for each position, *plus* a few spares to take the places of men absent. With crews on this basis, we have attained an average output per mill equal

The volume of output. to 80 or 90 per cent. of the output of similar mills in the United States.

The year 1924 was devoted to training up the new crews on a progressive increasing output, and by the end of the year we could look back to having produced over 20,000 tons of plate of excellent quality. Practical results had

1924. so far outstripped estimates that we used all the steel that had been contracted for or could be obtained, and yet had to work short time for most of the year.

If sufficient steel supplies had been available there is no doubt that the 1924 output would have been largely increased. Larger supplies of steel were available under our 1925 contract, although still not sufficiently large for our needs, and we had to contract at higher prices for 8,000 tons extra steel from The

1925.

Tata Iron and Steel Company, Limited, and over and above that had to buy from Europe 4,500 tons more to make good the gap which the local Steel Works could not fill. The result was that we turned out almost 30,000 tons of finished tinplate, as against the 28,000 tons which our existing factory was designed to produce. As will be seen from the statements submitted to the

Future output.

Board, we hope to reach this year a production of almost 35,000 tons; with slight increases during the following two years. We cannot look to an output of more than 36,000 tons with our present plant, so that it will be seen that this year we hope to be approaching the maximum possible output both of our Hot Mills and of our Finishing Departments.

The actual rolling of steel into thin sheets being the process most calling for trained manual effort, difficulties in the finishing processes were not anticipated. There were experts to supervise

The finishing process.

the pickling of the sheets, i.e., for cleaning them with sulphuric acid; their annealing (or softening) to give back the original elasticity to the steel that is impaired in the process of rolling; their "cold rolling," that gives them a finely polished surface in preparation for their coating with tin; and the tinning process proper.

In fact, however, these difficulties had been underestimated. The effect of a tropical climate on the process itself had not been sufficiently foreseen, and many unexpected troubles caused by the heat had to be successively overcome. For example, it was found that in the hot weather—when the shade temperature rises to as high as 120° F.—the process of cooling the plates after annealing took very much longer than had been anticipated, and many more annealing boxes and stands had to be installed. Again, and more harmfully, the high temperature of the water required for pickling and tinning was

Climatic disabilities.

found to cause the plates to dry almost immediately they were taken out of the bath, the result being "Water Stains" or large dry patches that would not properly tin and that ruined the plates following them in the tinning machine, by carrying zinc chloride through to the tin. This difficulty was

The tinning process.

eventually overcome by the lavish use of water sprays. Again, our palm oil, which is a necessary adjunct to the tinning process, was found to deteriorate in the heat, and in 1924 ruined the quality of our plates for weeks, until extra fresh supplies could be ordered by cable and shipped from England.

Similar difficulties still arise to-day and have to be surmounted, but each

Difficulties overcome.

year the ill effects of a tropical climate are progressively less, although doubtless the high temperatures during six months of the year will always affect the volume of output. To sustain a high rate of production under the conditions obtaining, the number of pickling machines has had to be doubled since operations started, the cold rolls have been increased by 20 per cent., and the tinhouse has had to be entirely remodelled. The result, however, is a plate whose appearance we believe to be comparable with any.

The past three years may be said to have been a period of (a) training of labour, (b) reduction of imported staff and (c) overcoming of climatic disabilities, accompanied by the increase of output necessary to reduce costs and

Reduction of costs

thus to enable this industry to fulfil the Tariff Board's proviso that we must eventually be able to meet world competition without protection.

Progress during the period in this respect, as shown by the Statements submitted, is as follows:—

|                                   | 1923.       | 1924.          | 1925.          | JANUARY<br>TO MARCH.<br>1926. |
|-----------------------------------|-------------|----------------|----------------|-------------------------------|
| Production . . . Tons.            | 9,071       | 20,763         | 29,555         | 8,863                         |
| <i>Costs above metal per ton.</i> |             |                |                |                               |
| Hot Mills . . . Rs.               | 244*        | 127,123        | 90,350         | 75,011                        |
| Intermediate . . . "              | 49*         | 30,370         | 27,893         | 23,587                        |
| Tinhouse . . . "                  | 53*         | 55,592         | 48,037         | 37,473                        |
| <b>TOTAL</b>                      | <b>346*</b> | <b>213,085</b> | <b>166,280</b> | <b>135,974</b>                |

\* These are approximate figures only.

The very high cost in 1923 will be understood if it is realised how expensive a matter it is to keep a factory working at one-fourth capacity for a year, but it illuminates the saying in the trade that it takes two or three years to get a tinsplate factory going. The 1923 figures are also of interest as illustrating, by comparison, the great strides that have already been made on a "mass production" basis towards the reduction of costs; and will, we hope, go far to show that this industry is worthy of protection.

#### Mass production.

Any industry in India that asks for protection is met with the criticism that it is already protected by the ocean freight paid by its competitors abroad. So far as this industry is concerned, this geographical protection is

more apparent than real. In our previous evidence before the Tariff Board, we gave figures to illustrate the high cost of essential raw materials that can at present only be obtained from abroad, and we assessed our financial disadvantage in this respect at Rs. 1-8-0 per box, which works out at over Rs. 30 per ton, which is far more than the freight per ton on Welsh tinsplate. In other

words, our geographical advantage in respect of the finished product is offset by our geographical disadvantage in respect of the specialised stores we need in our process. As India develops industrially, subsidiary industries for such processes as ours will doubtless spring up, and thus remove this handicap under which we work. Before that date, however, there is no question but that we will have dispensed with the need for a protective tariff.

It is here to be noted that before tinsplate was ever manufactured in India, a duty on it of Rs. 40 per ton was already in force. The measure of protection given after the industry had started up was Rs. 45 per ton, making a

#### The degree of protection.

total Customs duty of something between 20 and 25 per cent. on the tariff valuation. This does not seem a very excessive rate when compared with the standard 15 per cent. of the revenue tariff, and it would be interesting to

#### Protection elsewhere.

compare it with the degree of protection deemed necessary at the start by other countries for this particular industry. We know that America started hers with about 70 per cent. ultimately lowered to 15 per cent.

As things have turned out, the cost of tinsplate to the Indian users has progressively fallen since a protective duty was imposed, the fall in world

prices having more than balanced the incidence of the duty. This of course

*Cheaper tinplate.*

doubtless not in the minds of the Legislature that other products would be cheapened by the start of a tinplate industry, but this also has happened; and although it is not of supreme importance, it is noteworthy as an illustration of the indirect advantages of having industries inside a country, instead of outside. We refer to the fact that subsidiary industries in the bazaar are being fed and developed by what may be called the bye-products of this process. Thus, the bazaar tinsmith has available to-day the small pieces of

*Subsidiary industries.*

tinplate that he needs for his work, at a far less cost than he ever had before; the strips that we bundle off and sell, as unsuitable for our direct customers, give him tinplate at a price at which it would never have paid to import from abroad. Similarly, the bazaar now absorbs each year tons of steel sheets which we regard as scrap but for which there are users who could never previously have afforded to import.

The result of starting this industry in India has already shown itself in the saving of a crore of rupees per year that previously went abroad to pay

*The future.*

for foreign tinplate and in the expenditure in India of this sum of money in the form of wages and the like. A large output is necessary for the Factory to operate efficiently, but a large output is already being obtained. The other necessity—a skilled labour force—is being gradually built up. It is surely not undue optimism to anticipate for this industry a steady measure of progress and its ultimate ability to meet world competition on level terms and to supply the bulk of India's requirements at a cost less than the cost of imported plates.

We will now refer briefly to the statements we have submitted. As requested we have given statements of costs for 1923, 1924, 1925 and January/March 1926, and the statements are divided into three processes, (a) Cost of manufacture of blackplate, (b) Cost of the intermediary process of pickling, annealing and cold rolling and, (c) Cost of tinning, packing and despatching.

We have also sent you a statement giving a comparison of our selling price with Works' cost *plus* Overhead Charges based on a Capitalisation of Rs. 1,50,00,000 and would refer you in this connection to our letter to you No. T. P.-6145-29 of 24th June. Our present Capital is as you know divided into—

|                           | Rs.         |
|---------------------------|-------------|
| Ordinary Shares . . . . . | 75,00,000   |
| Debentures . . . . .      | 1,25,00,000 |
|                           | <hr/>       |
| TOTAL . . . . .           | 2,00,00,000 |

in addition to which we have obtained loans and are in arrears with Debenture interest.

On the presumption that our reduced capital will be divided between Ordinary Shares and Debentures in the same proportion we shall then have the following:—

|                           | Rs.         |
|---------------------------|-------------|
| Ordinary Shares . . . . . | 56,00,000   |
| Debentures . . . . .      | 94,00,000   |
|                           | <hr/>       |
| TOTAL . . . . .           | 1,50,00,000 |

Of this amount of Rs. 1½ crores, Block is represented by Rs. 1,20,00,000 and Working Capital by Rs. 30,00,000. This latter figure is based on our balance sheets which show the value of stores, stocks in process, sundry debtors, etc., at about this figure, which is the minimum necessary and may even be too little when our production has reached its maximum.

We have based our Depreciation charge on the figure allowed by you to others, i.e., 6½ per cent. On Working Capital we have taken 7½ per cent. on Debentures 6 per cent. and on Ordinary Share Capital 10 per cent. These latter figures also have already been accepted by you in your consideration of other industries.

These statements show that during the first three months of this year costs have been reduced to Rs. 368-12 per ton, some Rs. 75 per ton less than the 1925 figure. The price realised has included duty at Rs. 60 per ton for two months and Rs. 85 per ton for one month. Until March 1927 and assuming that prices remain unchanged we shall receive a return of Rs. 363 per ton which is Rs. 5 only below our fair selling price.

We show the anticipated results for the future in our Statement No. XIX, and you will note that we expect to reach the maximum production of which the present plant is capable in 1928. In our application to you dated the 5th May 1926 we estimated our production during the current year at 700,000 boxes. When making this estimate we had allowed for a shut-down during June as shut-downs during the hot weather have previously been found necessary, but although production has slowed up the efficiency of the arrangements for keeping the Works cool has avoided the necessity for closing and an outturn of 720,000 boxes should be obtained over the year.

We have shown our costs for this year as slightly higher than for the first three months, as our average monthly outturn will be less: the difference however is slight.

During the years 1927 and 1928 our production should continue to increase and costs show a further fall both on this account, and on account of improved yields. From that date onwards we look to improved working to obtain for us our reduction in costs.

Our yields throughout the Works have improved rapidly, except in the case of steel in the Hot Mills, where improvement has been delayed by various causes. Firstly it was apparent that the quickest way to reduce costs was to increase output, and we have concentrated on this rather than on improvement in yield. Now that this increase in output has been virtually obtained it will be possible to give more attention to the yields; and with increasing experience we are confident that our labour can gradually effect considerable savings and that we shall bring returns down to the level of Works elsewhere.

Then as our Labour Statements No. XIII and XVI show the number of imported hands has been considerably reduced. This reduction in the number of experienced workers necessarily affects results, particularly in the early years of the industry, but here again we look for a gradual improvement in the yield with a steadily diminishing number of "imported" hands.

The question of the extension of the Works to cater for a larger proportion of the requirements of India has not so far been considered fully in view of the unsettled period through which we have been passing. With the assurance of an adequate protection for a period of years during which the Industry may be firmly established and put on a remunerative basis, it would obviously be to the interest of all parties to investigate the possibilities of the extension of the Industry. In the natural order of events it may be expected that the present Works will be extended with, as above, subsidiary plants for supplying the raw materials of the industry such as have been developed in the United Kingdom to cater for the trade and the existence of which in India will necessarily still further reduce the cost of producing Tinplates.

Examples that can be cited are the refining of palm oil and possibly the cultivation of the West African palm, the local manufacture of rolls, annealing boxes and stands and the specialised tinplate greases all of which are now imported, also the utilisation of our bye-products such as scrap and tin dross which should give us a better return than we now get by shipping to the United Kingdom or the Continent.

We have under consideration the following capital improvements to the plant but those are designed towards an increase in efficiency and a saving in costs rather than to an increase in production :—

1. A Cupola for the manufacture of small castings.
2. A largely extended Machine Shop.

There are other improvements which must later be taken in hand such as a further train of coal rolls, a second annealing furnace, a filtration plant for the tinhouse and possibly for the pickler, an acid disposal plant and extra crantage, all of which will at some time be necessary if the plant is to be brought up to its maximum efficiency.

We have applied to you for the continuation of the present scale of protection and in our statement No. XIX we show our estimated costs over the coming ten years. We request that the period of protection should be for at least seven years and preferably for ten, since uncertainty as to the future cannot but have an unsettling effect on the industry.

Finally, in considering our application, we would ask you to bear in mind that we are still at a disadvantage in comparison with Tinplate Works in Wales from the Indian import duty on tin which, although reduced to Rs. 250 per ton, still represents some Rs. 4 to Rs. 5 per ton of tinplates.



- (11) *Letter from the Tinplate Company of India, Limited, dated the 14th July 1926.*

THE TINPLATE INDUSTRY.

We are forwarding to you copies of statements received from London in connection with the replacement value of our plant. We would draw your attention to the fact that in many cases there is an increase in cost and that the total decrease is considerably less than the figure which you advised us had been taken in the case of the Tata Iron and Steel Company. Replies have not yet been received from eight firms but we hope to send these to you next week.

We regret we have only one copy of these invoices which we trust will meet with your requirements.

- (12) *Letter from the Tinplate Company of India, Limited, dated the 19th July 1926.*

We have the honour to refer you to our letter No. T. P. 6223/29 of the 14th instant and now send you herewith copies of the remaining replies regarding the present day cost of our plant. We also enclose one original and five copies of a letter No. P. C. 24883, dated 18th June 1926, from Messrs. Perin and Marshall, New York, to Messrs. The Burmah Oil Company, Limited, London, with which is enclosed a Statement\* of Ocean Freight and a detailed comparison\* of original costs with present prices against each order. We hope that you will now have all the information you require on the matter.

*Copy of a letter No. P. C. 24883, dated 18th June 1926, from Messrs. Perin and Marshall, New York, to The Burmah Oil Company, Britannic House, Finsbury Circus, London, E. C. 2, England.*

We are mailing herewith the last lot of twelve letters with replies from manufacturers giving present day prices of material furnished previously to the Tinplate Company of India. You will please note that in this last lot are included some letters to which no replies could be obtained. The reason for this is that some concerns had gone out of business and could not be reached; others advised that their records of the original purchase had been destroyed, etc. The total of these items, however, is small, and will hardly affect the grand total. We have assumed present day figures from similar material for which present day prices had been obtained using in most cases the same cost as originally.

We cabled to-day the total results of these inquiries as per copy attached herewith, and are enclosing† in triplicate a tabulation showing the original cost and present day prices indicating an increase or decrease as the case may be, and briefly summarizing the manufacturers reasons. This tabulation lists all orders issued from T-101 to T-348 inclusive covering material up to the completion of the mill.

|  | \$           |
|--|--------------|
| It shows a total original cost . . . . . | 2,176,215·71 |
| Against to-day's price of . . . . .      | 1,918,484·11 |
| A decrease of . . . . .                  | 257,731·60   |

or 11·84 per cent.

\* Not printed.

† Not printed.



The decrease in ocean freight is shown on the attached tabulation. Material was shipped at various periods at different base rates and the tabulation indicates what the actual cost of ocean freight was per ton of weight in percentage of base rate and consequently in dollars per ton, taking into consideration extra charges for shipment by volume, heavy lifts, etc. The costs compare as follows:—

|  | \$         |
|--|------------|
| Original amount paid for ocean freight . . . . . | 106,403.20 |
| Present day cost . . . . .                       | 74,396.34  |
| A decrease of . . . . .                          | 32,006.86  |

or 30 per cent.

There were various charges in connection with the shipping which would to-day practically remain the same. These are:—

|                                    | \$               |
|------------------------------------|------------------|
| Boxing Charges . . . . .           | 7,749.81         |
| Inland Freight . . . . .           | 14,344.83        |
| Storage and Trucking . . . . .     | 679.26           |
| Lighterage and Demurrage . . . . . | 1,192.60         |
| Brokerage . . . . .                | 675.25           |
| <b>TOTAL</b> . . . . .             | <b>24,641.75</b> |

Insurance paid on material shipped . . . . . 17,609.50

This represents .8092 per cent. on the original cost of material of \$2,176,215.71. Since that time insurance rates have decreased about 2 per cent. making the present day percentage .793 per cent. Applying this to the new total material cost of \$1,918,484.11 amount to . . . . .

15,213.58

A decrease of . . . . . 2,395.92

or 13.6 per cent.

To summarize the above we arrive at the following total:—

|                                    | Original.<br>\$     | Present.<br>\$      |
|------------------------------------|---------------------|---------------------|
| Material . . . . .                 | 2,176,215.71        | 1,918,484.11        |
| Boxing Charges . . . . .           | 7,749.81            | 7,749.81            |
| Inland freight . . . . .           | 14,344.83           | 14,344.83           |
| Storage and Trucking . . . . .     | 679.26              | 679.26              |
| Lighterage and Demurrage . . . . . | 1,192.60            | 1,192.60            |
| Brokerage . . . . .                | 675.25              | 675.25              |
| Ocean Freight . . . . .            | 106,403.20          | 74,396.34           |
| Insurance . . . . .                | 17,609.50           | 15,213.58           |
| <b>TOTAL</b> . . . . .             | <b>2,324,870.16</b> | <b>2,032,735.78</b> |
| A total decrease of . . . . .      |                     | 292,134.38          |

or 12.57 per cent.

(13) *Letter, dated the 21st July 1926, from the Tariff Board, to the Tinplate Company of India, Limited.*

I am directed to forward a copy of a letter received by the Tariff Board from the Imperial Tobacco Company of India, Limited, and to say that the Board would be glad if you would examine the proposal made by the Company, and express your opinion on this question of the exemption from the protective duties of the types of tinplates not at present manufactured by your Company.

(14) *Letter from the Tinplate Company of India, Limited, dated the 26th July 1926.*

We have the honour to acknowledge receipt of your letter No. 518 of 21st instant forwarding a copy of a letter received by the Tariff Board from the Imperial Tobacco Company of India Limited.

We would like to point out in the first place that we have applied for no additional protection. Assuming however that additional protection were contemplated we anticipate that at a later date our production will be sufficient to permit us to supply the Imperial Tobacco Company with their requirements. The quantities of Tinplate used by this Company are small in comparison with those of other industries such as the Tea packing industry, and it would not require any material increase in the output of our works to permit us to quote.

We have already booked up our total production for this year but we would contemplate the manufacture of the plates required by this and other similar concerns requiring this gauge in our next year's programme provided they were prepared to contract with us for a regular offtake of a reasonable quantity of these plates. We have already advised the Imperial Tobacco Company to that effect.

We would like to take this opportunity of pointing out that since supplies of Tinplates from Wales have been considerably restricted on account of the Strike we have received enquiries from firms who have previously purchased only imported plates. You will, no doubt, have read in the Trade Papers that the great majority of the Welsh Tinplate Works have been closed on account of the Coal strike and that various packing industries especially on the Continent have consequently been forced to close also. It is, therefore, fortunate for this country at this juncture that it has indigenous supplies for a large proportion of its requirements.

(15) *Letter from the Tinplate Company of India, Limited, dated the 18th August 1926.*

We have the honour to give you below as requested figures showing the cost of casing our tinplate production in tin linings. During the whole of the years 1924 and 1925 the sheets used for this purpose were charged against the Warehouse at Rs. 21 per box but from January 1926 they have been charged at the actual cost per box (excluding Administration on-cost) in the previous month.

*Cost of sheets used for casing.*

|                                | Per ton of packed<br>tinplate produced. | Per box. |
|--------------------------------|---|----------|
|                                | Rs.                                     | Rs.      |
| 1924 . . . . .                 | 10-253                                  | 0-494    |
| 1925 . . . . .                 | 10-253                                  | 0-494    |
| 1926 (January-March) . . . . . | 7-849                                   | 0-378    |

(16) *Letter from the Tinsplate Company of India, Limited, dated the 7th September 1926.*

We take leave to reply to the printed evidence submitted by Sir Edgar Rees Jones, K.B.E., on behalf of the Welsh Plate and Sheet Manufacturers.

## SECTION B.

The Welsh manufacturers have taken great pains to warn India against the difficulties of manufacturing tinplates, and they quote in support of their contention their own failure in Canada, the failure of Japan, the partial failure of Continental nations and the refusal of any manufacturer to start a Works in Australia.

Para. 7.  
Foreign failures.

India, however, will be encouraged, not depressed, by her own progress where so many others have failed. With her much shorter experience in general steel manufacture, it admittedly was not to be expected that she should successfully specialise in the highly technical process of finishing steel into tinplates, more especially as she had extreme climatic difficulties to overcome. The fact that India has succeeded, despite the expectations of Wales, may be attributed to the advantages she possessed of having modern machinery, both for the manufacture of tinplates and steel, good workmen, and above all, a determination to succeed. The Canadian Factory may not have been so fortunate, nor may it have had the supreme advantage that the Indian factory possesses of being allied alike to a steel works producing first class steel and to the largest single canning interest in the country.

Para. 8.  
India's success.

The reasons.

In this, as in so many other ways, the Indian industry may be likened to the American. The Welsh manufacturers have criticised our reading of the history of the tinplate industry in the United States of America and we deal with their remarks later on. It is certainly true that the increase in the demand for tinplate in the United States was due to the application of modern machinery to canning, but it cannot be denied that America would have been unable to start manufacturing tinplates for herself without the help of a protective tariff.

Para. 9.  
The American parallel.

Protection necessary. The effect of the expansion would otherwise have merely led to an increase in the trade of Wales. In support of this view, we quote a Welsh authority, the late Mr. R. Beaumont Thomas, who (in his well-known lecture on "The

Welsh confirmation.

Manufacture of Tinplates") said: "Notwithstanding all difficulties, South Wales continues to hold the premier position as the cheapest district for producing tinplates of a satisfactory quality; but, on reference to table 7 (page 530), it will be seen that, by the help of the McKinley and succeeding tariffs, America produced as much as 9,870,000 cwts. of tin and terneplates in 1905. If it were not for these and other tariffs it might fairly be claimed for South Wales that in 1905 it should have supplied America with the whole of these 9,870,000 cwts. as well as Germany, France, Italy, Spain and Russia with most of their domestic requirements."

Effect of Tariffs.

(The above will be found on pages 500-501 of the Excerpt Minutes of Proceedings of the meeting of the Institution of Mechanical Engineers in Cardiff, South Wales, on 1st August 1906, published by the Institution, Storey's Gate, St. James' Park, Westminster, S.W.)

Wales was as strongly opposed to the starting of the Tinplate industry in America as she has shown herself to the industry in India. The immediate effect was that she lost her American market, just as she is losing her Indian market to-day. History

Loss to Welsh trade.

is thus repeating itself. India's demand for tinplates increased owing to the development of canning by the oil companies, and rose from 4,500 tons in 1892 to 44,150 tons in 1905. This tenfold rise in thirteen years has not continued, the total consumption eighteen years later, in 1923-24, having reached only 58,440 tons.

History repeated.  
In all the years that Wales has been exporting to India, she has done nothing to promote the extension of canning in India or the use of tinplates in any other way. The Indian factory has been operating for only 3½ years, during which time it has been expanding its output and building up a business in the trade that already exists in the country. It has not conducted a commercial campaign for educating Indian traders in the practice of packing commodities in tinplates, but it will be time for that, when the production of Indian tinplates begins to outstrip Indian demands. The Welsh manufacturers themselves show that in other countries it has been left to the Government, and not to an individual factory, to promote such campaigns, and if the British Ministry of Agriculture has waited until March 10th, 1926, to inaugurate a campaign of this kind in England—after the Welsh tinplate industry had been in existence for about a century and a half—it is difficult to understand why the Tinplate Company of India should be criticised for not starting a similar campaign within 3½ years.

By Governments.  
It is not contended that Wales has to date manipulated prices in the Indian market, and their view that it is unsound to grant higher rates of protection periodically, except to combat price manipulations, is warmly supported by the Indian industry, to whom a settled tariff policy is most important. The Indian industry needs protection to enable it to grow sufficiently to be able to compete with Wales and America. The statements that it has submitted show that costs have already been brought down to a figure which gives every hope that it will soon be able to compete, and if protection is guaranteed for a definite term of years, it will be possible to consider the question of extending the plant and thus bringing down our costs still lower.

### SECTION C (1).

The Welsh manufacturers contend that the Tinplate Company of India has not proved its capacity as a "general manufacturer" of tinplates. In particular, they complain that it is not yet in a position to accept every order it receives for all sizes and gauges.

Para. 13.  
Manufacturing policy.  
That is perfectly true, because our output is not yet big enough to meet all demands, but the Welsh manufacturers and ourselves appear to view the problem from the entirely opposite standpoints. Theirs is the typical British "Make to Order" attitude: ours is the American Mass-Production attitude. Our policy is to meet, first, the demands of customers who require thousands of boxes of a particular size or gauge, and then only to undertake orders for smaller customers. For this reason the Tinplate Company of India was founded with the intention of confining its operations at the start to the manufacture of oil plates, and it was only when the immediate market for oil plates had been satisfied that the manufacture of other sizes and gauges was commenced.

Large customers first.  
It is quite incorrect to say that the Indian factory can only make one gauge of tinplate. With a single exception—that of the DX or 25 gauge item—for which there has been no demand, the Indian factory has already successfully worked orders similar to all those listed in the "Typical Order" on page 19 of the Welsh booklet. As a matter of fact, this imposing list really consists of six orders only, excluding the "odds and ends" item at the end. Thus, items 1, 5 and 9 are the same order; so are items 2, 6 and 10; so are items 3, 7 and 11;

and so are items 4, 8 and 12. All these orders would be worked in this mill  $28'' \times 20''$ , to be packed off either full-size or cut in half, as

112 sheets  $28'' \times 20''$   
or, 56 sheets  $28'' \times 20''$   
or, 112 sheets  $14'' \times 20''$

and the list reduces itself to the following:—

| Symbol.       | Size worked.                   | Weight—lbs. |
|---------------|--------------------------------|-------------|
| CTL . . . . . | $28'' \times 20'' \times 56''$ | 95          |
| CL . . . . .  | $28'' \times 20'' \times 56''$ | 100         |
| IC . . . . .  | $28'' \times 20'' \times 56''$ | 108         |
| IX . . . . .  | $28'' \times 20'' \times 56''$ | 136         |
| DC . . . . .  | $25'' \times 17'' \times 50''$ | 94          |
| DX . . . . .  | $25'' \times 17'' \times 50''$ | 122         |

The Welsh manufacturers say that suitable labour anywhere could be trained on modern machinery to reproduce two fixed sizes and one gauge of plate. While this is interesting, in that the Welsh trade has hitherto not admitted that Indian labour is suitable, the fact remains that Indian labour has not yet been proved incapable of making any size or gauge of tinplates, and that eighteen distinct orders have to date been made without any difficulty at all. The Tinplate Company of India did not slow down production when the demand for oil plates had been met; the factory has been worked at full pressure and has executed suitable fresh orders as expanding production permitted.

Basing their argument on the mistaken idea that only two sizes and one gauge have so far been manufactured, except for demonstration purposes, the Welsh manufacturers petition for all other sizes and gauges to be excluded from the operation of protective duties. The declared policy of the Government of India and of the Tariff Board is to exclude from a protective duty those kinds of goods that are not manufactured or are not likely to be manufactured in India, but "Kinds" means "kind"—not "sizes" or "thicknesses." Thus, all sizes of steel channels or angles that are imported into India are subject to the same rate of duty, whether or not they are manufactured by the Tata Iron and Steel Company. If a buyer imports a  $10'' \times 4''$  channel—which is a size that Tatas do not roll—he still has to pay the same duty as on a  $10'' \times 3\frac{1}{2}''$  or a  $12'' \times 4''$  channel, which are sizes that Tatas do roll. Similarly, if he wants a  $3\frac{1}{2}''$  angle, which is not being made in India, he must pay the same duty as on a  $3''$  or  $4''$  angle, which are made in India. On the other hand, tool steels and alloy steels, as being different "kinds" of steel, are not subject to the protective duty.

The same applies to tinplates. The fact that they differ in size or thickness does not make them different "kinds", and if any were excluded from the operation of the duty, there would be a great danger of duty-free plates competing with the indigenous article. The attraction of cheapness would certainly turn buyers from one gauge of plate to another.

If 108-lb. plates only were subject to duty, users would buy 90-lb. plates, or 100-lb. plates, or for that matter 106-lb. plates. Alternatively they would buy heavier gauges, up to 136-lb. plates. And similarly with any gauge, or range of gauges.

"Taggers", as representing a distinct type of tinplate, might be excluded, more especially as their use in India must be negligible, but "Charcoal" plates are in a different category. The Glossary of the Welsh Propaganda Booklet states that

Charcoal tinplate.

"Charcoal plates are proportionately dearer (than Coke Plates) according to thickness of coating and amount of tin applied", and the Welsh representation states that the coating on Charcoals varies from 2½ lbs. to 6 lbs. per basis box, as compared with 1½ lbs. to 2 lbs. for cokes.

A 2½-lb. Charcoal plate would therefore bear an extra cost, compared with a Coke plate, of 1½ lbs. of tin per box at the most, and ½ lb. per box at the least. This is equivalent per ton of tinplate to between 10½ lbs. and 26 lbs. of tin, or to between 25s. and 65s. with tin at the high price of £280 per ton.

Therefore, with the rupee at 1s. 6d., 2½-lb. Charcoal plates could be put into India at a cost of only Rs. 16 to Rs. 43 per ton more than coke plates, and if they were freed or partially freed from duty, they would be actually cheaper than cokes. India would then become a buyer of charcoal plates exclusively. Even if the duty was adjusted so that charcoal plates came in at a higher price, but only a slightly higher price, than coke plates, many buyers would prefer to pay the slightly increased price to get the more heavily coated plate.

As the use of Charcoal plates in India must be negligible—to the best of our belief, they are used solely by the Government, who presumably pay no duty—the hardship imposed by a duty would not appear to justify their exclusion, or the elaborate arrangements for inspection and test that would

Difficulties of exemption. be necessary at the Custom Houses to prevent fraud. It is here to be noted that the exclusion

of any grade, size or quality of tinplates from the operation of the protective duties would necessitate some degree of expertness on the part of the Indian Customs officials. It is not at first sight obvious that a box of tinplates—

13½" × 10¾" × 112 sheets = 80 lbs.

is of a heavier gauge than

20" × 10" × 112 sheets = 90 lbs.

or than

30" × 20" × 75 sheets = 156 lbs.

but under a system of varying duties every Custom House would need to know how to work such calculations out.

Paragraph 16 has been written under a certain misapprehension. Purchasers of second hand kerosene tins do not buy them in order to cut them up. The second-hand tin is used as a tin so long as it will hold liquids or even solids, and then only is it cut up. Any village industries that need new tinplates can and do buy wasters of various gauges.

### SECTION C (2).

The facts are that, within 3½ years, the output of tinplate has exceeded

Para. 17. the designed capacity of the Golmuri factory; that this tinplate is of as good a quality as any imported from either Wales or America; that the Indian

workmen have not proved incapable of working any size or any gauge; and that the cost has been brought down to such a figure as gives every promise of the industry competing within a reasonable period on level terms with its competitors.

The Welsh manufacturers base their remarks on estimates made three

Para. 18. years ago, at which time the factory had only been working a few months. Since that date, as our statements show, the labour charges per ton have

fallen largely, and costs generally have come down enormously.

It is here to be noted that the Welsh manufacturers cannot speak from experience regarding the output of mills such as

Output per head. those installed in the Indian factory, nor regarding the physical strength and experience required, because there are no similar mills in Wales. There is no doubt whatever that the Welsh trade expected

that Indians would be incapable of making tinplates at all. The fact is that, with a much decreased imported staff, the average production per head this year is one-third more than that of 1925, almost twice that of 1924 and almost four times that of 1923. There is obviously a limit to the increase, but the limit has not yet been reached.

It is certainly a handicap to this, as well as to every other Indian industry, that industrial labour is not so settled as in a country like Wales, and the excess number of employees compared to a Welsh factory is largely attributable to this cause. On the other hand, a settled population is gradually being attracted to the metallurgical industries centered round Jamshedpur, drawn there by the good wages and by housing conditions that are probably not equalled anywhere in India, and there is no reason why a settled skilled labour force should not ultimately be built up.

Again, it is an admitted handicap that certain specialised stores have to be imported, but the prices given by the Welsh manufacturers should be read with caution. Their prices are based on different exchange rates, and probably on different dates and therefore cost levels from those quoted by us at the previous Enquiry.

As the Welsh manufacturers say, "Wasters" are a handicap to every tinplate mill, but there is no reason to expect that the Indian factory will be handicapped by a higher percentage of Wasters than are obtained in the average Welsh Works. As to the disposal of Wasters, the Indian Factory is fortunate in that India (outside the oil trade) is primarily a "Waster" market; that is to say, the biggest demand is for Wasters. No connection with the general world trade is necessary to dispose of Wasters at economic prices.

India is using to-day about 60,000 tons of tinplate every year, and this factory was designed to produce less than half that quantity. It would be hard to imagine any specialised industry requiring a bigger margin than this before starting up. If India were to follow the advice of her foreign suppliers, the inception of industries would be indefinitely postponed.

### SECTION C (3).

It is most misleading to say that only half of the materials necessary for the manufacture of tinplates are produced in India. Palm Oil and Tin have to be imported just as they must be imported into Wales, and certain other specialised stores have to be imported, but the most important essentials—steel, coal, sulphuric acid, power and the like—are produced in India.

### SECTION C (4).

Mention is made of extravagant wages given to imported men. The Tariff Board may rest assured that imported hands are not paid any more than is necessary. The fact of the matter is that good wages must be paid in any industry to induce experts to leave their own country and go abroad. This is true of Jute Mills, Cotton Mills and Cement Factories, and it is particularly true of highly specialised industries such as the manufacture of tinplates.

The comparison given by the Welsh manufacturers is, however, inaccurate and misleading. The comparison purports to be with the salaries we pay to men working in a supervisory capacity, and the table of wages would have it appear that a Superintendent of Cold Mills in a large Welsh Works earns only Rs. 57 per month, or less than £1 a week; and that a Black Pickling Superintendent

earns about £1-10-0 a week. In fact, they probably earn four or five times as much.

So far as the Tinsplate industry is concerned, Europeans are only employed for their experience, and when Indian employees are equally experienced, they will certainly have to be paid wages as high as the Welshmen would earn if in Wales. As to any appalling sweated labour conditions in modern mechanical industry, this does not apply to the industrial settlement of Jamshedpur, and the rates of wages paid by the Tinsplate Company to its Indian workmen will challenge comparison with any throughout the country.

#### SECTION C (5).

It happens that the Tinsplate Company of India has found its capital from two large industrial companies, both of them accustomed to found industries in India. It is not unknown even in Wales for a steel works to help to found a tinsplate factory, and to-day in Wales a big Oil Company is combining with a big steel-works in starting a new tinsplate plant. It is not in the slightest degree likely that either the Oil Company or the steel-works will be content to run their tinsplate factory at a loss, recouping the loss from their profit on oil and steel respectively.

#### SECTION C (7).

The suggestion that by withdrawing protection, India will be "free" to develop a "legitimate" industry, is ingenious but unconvincing. If Wales can get the present factory closed down by a withdrawal of the protective duties she may rest content that no one else will try and start one. The amount of capital required and the revenue loss that has to be faced in the preliminary years would be sufficient deterrents. India, however, may not be so content to continue indefinitely importing from Wales, or even to rely on the check on prices imposed by those keen manufacturing rivals in France, Germany, Italy, and Spain, none of whom export tinsplates to India.

The Welsh manufacturers suggest that in war time, the Indian plant will be closed down, whereas if the regular commercial avenues are kept open, she may still be able to import tinsplates from Wales. If the regular commercial avenues are kept open, India will more easily be able to import the relatively negligible tonnage of subsidiary raw materials than she will the much bigger tonnage of tinsplates; and if the regular commercial avenues are not kept open, the Welsh factories will close down long before the Indian, for want of food alone. The Welsh manufacturers refer to the preferential treatment accorded to Indian purchasers of tinsplates during the war. We may point out that the Welsh manufacturers had nothing to do with this. All supplies were rationed by the Allied Governments, who openly recognised India's dependence upon tinsplate supplies as greater than that of Great Britain or the Dominions. This emphasises the value to India of an indigenous tinsplate industry in time of war.

#### SECTION D.

The management of the Indian factory can sell as Primes just those plates that other firms sell as Primes, and no others. Quality of tinsplate. If the quality is not up to the standard, the consumers can, and do, complain at once. The "thousands of workers in tinsplate scattered throughout India who have built up their business on the tinsplate in the second-hand kerosene cans" are astute ghee merchants who can appraise the value of an empty kerosene tin as quickly as any sampler in Swansea and the Oil Company which used inferior tins would suffer in its kerosene business; there is no opportunity for the Indian factory to sell as Primes plates that are not Primes, either to an Oil Company or to anyone else



The difference between tinplates and rails is that the worth of a tinplate can be judged by the buyer directly he sees it or makes it into a container, whereas the worth of a rail is judged by its ability to withstand many years of work. This is the reason for a British Standard Specification for rails, and this is the reason for posting a Metallurgical Inspector at Jamshedpur. If, however, the market ultimately requires them, firms of samplers will no doubt start up, and a buyer (like buyers in England) will pay the samplers to go to the Tinplate Works to inspect his tinplate for him.

#### SECTION E.

We oppose the application by the Welsh manufacturers for exemption from duty of--

- (a) all tinplates other than the two oil sizes,
- (b) all charcoal qualities of tinplates.

on the ground that any such exemption would be damaging to the Indian industry: and we oppose the exclusion of charcoal plates from duty on the further grounds of--

1. Likelihood of fraud.
2. Negligible hardship of the protective duty to *bond fide* charcoal users.

We do not oppose the exemption from duty of Taggers.

#### SECTION H.

The Welsh manufacturers state that our representations regarding the history of the American industry were misleading and historically inaccurate. We took our facts from Jones's History of the Tinplate Industry, which is a publication that anyone can buy and the accuracy of which we have no reason to doubt.

So far as duties are concerned, the Welsh manufacturers imply that protectionist duties have been enforced since 1861. Speaking without the book, we believe that until the McKinley Tariff was passed, America had no intention of protecting tinplates, but simply of raising revenue. In any event, the implication that the incidence of the duty has varied but little since 1861 is certainly misleading, as the following figures will show:—

| Year.      | Duty.   |                  | Swansea* selling price per box. | Percentage of duty to selling price. |
|------------|---------|------------------|---------------------------------|--------------------------------------|
|            | Per lb. | Per 108-lb. box. |                                 |                                      |
|            |         | <i>s. d.</i>     | <i>s. d.</i>                    | %                                    |
| 1861 . . . | 2 c.    | 9 0              | 21 7                            | 41.7                                 |
| 1883 . . . | 1 c.    | 4 6              | 16 1½                           | 27.9                                 |
| 1890 . . . | 1 c.    | 4 6              | 14 4                            | 31.4                                 |
| 1891 . . . | 2.2 c.  | 9 11             | 14 4                            | 69.2                                 |
| 1894 . . . | 1.2 c.  | 5 5              | 9 10¾                           | 54.6                                 |
| 1897 . . . | 1.5 c.  | 6 8              | 9 8¼                            | 69.7                                 |
| 1922 . . . | 1 c.    | 4 6 say          | 25 0                            | 17.0                                 |

\* From "The Manufacture of Tinplates." By R. Beaumont Thomas.

Where the Welsh manufacturers obtain their idea that the American parallel teaches the opposite lesson to that suggested by us, we are at a loss to imagine, and we leave the Tariff Board to draw their own conclusions from the figures of production and imports into the United States of America for the years 1890 to 1900, given in the statement attached to this representation. Our reading of the figures is that America was importing from South Wales about 330,000 tons every year, until the McKinley Tariff of almost 70 per cent. enabled the indigenous industry to start up in 1891. Having started producing her own tinplates, America took just seven years to reach the 330,000 tons previously imported from Wales. During these seven years, the consumption of tinplates expanded by under 70,000 tons, as is shown by the figures of imports for 1893. This expansion of 10,000 tons per year on a consumption of over 300,000 tons does not need any abnormal circumstances to explain. The simple lesson of the figures is that the McKinley Tariff Act was successful in enabling America to build up in seven years an indigenous industry with an output as large as was previously imported.

It does not appear, in fact, that she tried to compete with the remaining 60,000 tons of business, because each year up to 1910, when her own production had reached a total of over 700,000 tons, she still went on importing an average of 60,000 tons from Wales. It would seem that this figure for imports, which very likely continues to this day, represents a class of plate which the American manufacturers were content to leave to Wales. (After 1911 her exports exceeded her imports, and the latter are not given in the table from which the figures were copied.)

India in 1920 was just in the same position as America in 1890. She was importing all her tinplates from abroad and making none for herself. As it is very difficult to make tinplates, and as it is very difficult for a new country to make them at a cost sufficiently low to compete with old-established countries, India has done precisely what America did—she has imposed a duty on foreign tinplates. There is every reason to believe that the result of imposing a protective duty will be to establish the industry firmly in the country, and an industry which will quickly expand to produce (like America) all but perhaps a small percentage of her requirements.

The Welsh manufacturers refer to India as not already possessing a canning industry. India possesses a very big canning industry, for kerosene, and if the lesson of the American parallel is that success will follow if there is a general market and favourable conditions as to materials, then India's success is certain.

## SECTION I.

The practice in the Golmuri Works is the same as the Welsh practice, *viz.*, to endeavour to arrive at costs by equating all production to that of the basis box of "1C" or 30 gauge tinplate, containing 112 sheets each measuring 20" x 14", and weighing 108 lbs. The formula adopted by the Tariff Board in their report was 100 boxes—4·82 tons.

There was no confusion shown in the substantial difference in the cost figures of January 13th, 1925, and those of April 30th, 1925: the two statements of cost were based on different periods. The first was based on the period January-September 1924, during which an average of 37,900 basis boxes were produced monthly in the Hot Mills—as shown in statements given to the Board: and the second was based on the period January-March 1925, during which an average of 59,384 basis boxes were produced monthly. The enormous difference in cost in so short a time was due to the enormous increase in the rate of production.

The calculations on page 57 of the Evidence of September 10th, 1923, were estimates only: they were certainly unreal, in that sense. The estimated addition of 10 per cent. to allow for wastage was replaced in the statement of May 16th, 1924, by figures based on actual experience.

As to any "confusion" between basis and selling boxes, the confusion was more apparent than real. When the witness stated that 20 (basis) boxes weighed 1 ton, he was speaking inaccurately: he should have said about 20½ boxes. There was, however, no confusion in the minds of the Board as to which box he meant, or as to the correct calculation to be taken. At any rate, the Board's report bears no evidence of confusion on this or any other point concerned with boxes.

The Welsh basis box was throughout taken as the basis of comparison, because that was the box on which all the calculations were based. In the Company's financial accounts, the prices received for all selling boxes are of course recorded, whatever their size or gauge. But for the purpose of the Tariff Board's Enquiry, all production and all prices are equated to the same standard "basis box".

*Statement of American Production and Welsh Prices.*

|                 | UNITED STATES.** |          | Average selling ***<br>price of Tinplates<br>per box f.o.b.<br>Swansea. |     |
|-----------------|------------------|----------|---|-----|
|                 | Production.      | Imports. |   |     |
|                 | Tons.            | Tons.    | s.  | d.  |
| 1890 . . . . .  |                  | 329,450  | 14  | 4   |
| 1891* . . . . . |                  | 327,900  | 14  | 4   |
| 1892 . . . . .  | 18,800           | 268,460  | 11  | 11  |
| 1893 . . . . .  | 55,200           | 253,150  | 11  | 2½  |
| 1894 . . . . .  | 74,250           | 215,050  | 9   | 10½ |
| 1895 . . . . .  | 113,650          | 219,550  | 9   | 4½  |
| 1896 . . . . .  | 160,350          | 119,350  | 9   | 5½  |
| 1897 . . . . .  | 256,600          | 83,850   | 9   | 8½  |
| 1898 . . . . .  | 326,500          | 66,800   | 9   | 9   |
| 1899 . . . . .  | 360,800          | 58,600   | 13  | 1   |
| 1900 . . . . .  | 379,020          | 60,400   | 14  | 4½  |

\* Year in which McKinley Tariff Act started to operate.

\*\* From the "Iron and Coal Trade Review" dated 2nd April 1926, page 578.

\*\*\* From "The Manufacture of Tinplates." By R. Beaumont Thomas.

(17) *Letter from the Tinplate Company of India, Limited, dated the 21st September 1926.*

Our works have passed on to us certain queries made to them by you regarding our hot mill cost statements and we now have the honour to explain the apparent discrepancies.

The original statements which you required were for the years 1924, 1925 and for the first quarter of 1926 and we decided that the most accurate method of giving our costs was to divide the various expenditure figures by the actual outturn of tinplates in the tinhouse. In our works cost sheets the hot mill costs are obtained by dividing expenditure in the hot mills by production in the hot mills and this gives a more accurate idea of costs for one particular month. The method adopted by us, however, is the more accurate for a longer period. The yield of good blackplate in our statements is the actual yield of good blackplate in the hot mills and will not therefore work out to the same figure if the tinhouse production is taken as the divisor. It does, however, give the correct percentage for production of good blackplate in the hot mills. The figures for steel consumed per ton of blackplate have been obtained for each month excepting June by dividing the total steel used by the tonnage of tinplates produced. As explained above this is accurate over a period but not necessarily for one month as the hot mill production might be considerably more or less than that of the tinhouse. This difficulty was experienced when we came to submit our costs for June when the hot mill output was 55,445 boxes and the tinhouse output, swelled by the tinning of blackplate rolled in previous months (*see the note at the bottom of Statement IV a IV*), was 58,252 boxes. This gave the steel consumed per ton of blackplate as 1.2851 tons whereas actually the steel consumed per ton of blackplate on the hot mill production was 1.3685 tons, the yield of good blackplate being 73.06 per cent. As it had not occurred to us to compare figures for steel consumed per ton of blackplate with the figures for steel cost per ton of blackplate and per ton delivered to mills, we thought it best to submit a figure which would show the actual working of the mills. Provided, however, it is remembered that the hot mill output was much less than usual the correct figure on the previous basis of working may be substituted, i.e., 1.2851 tons of steel consumed per ton of blackplate.

We find that there is an error in Statement IV a III where the steel cost per ton of blackplate should be Rs. 118.517 in place of Rs. 119.224 and we will send you as soon as possible revised cost statements for May and June. We presume that you will not require the January-June statement as the statements for July and January-July are almost ready.

We hope that this explanation will be clear to you but if any further information is required we think that our works will be able to furnish it after seeing this letter of which we are sending them a copy.

---

(18) *Letter from the Tinplate Company of India, Limited, dated the 5th October 1926.*

With reference to the undertaking given you in Shillong that this Company and the Tata Iron and Steel Company would endeavour to come to an arrangement regarding their present contract for the supplies of steel, we have the honour to inform you that an agreement has been made for the purchase of this Company's requirements of steel from the Tata Iron and Steel Company, Limited, at Rs. 83 per ton during the period of protection. A further agreement has been made regarding subsequent supplies for the remaining period of the present contract. We have written to Messrs. The Tata Iron and Steel Company, Limited, requesting them to confirm to you that this arrangement has been made.

## II. THE WELSH PLATE AND SHEET MANUFACTURERS' ASSOCIATION, LONDON.

(1) *Letter, dated the 11th May 1926, from the Secretary, Tariff Board, to the Welsh Plate and Sheet Manufacturers' Association, London.*

In reply to your letter, dated the 15th of April 1926, I am to confirm the following cable which was despatched to you on May the 8th.

“Your letter fifteenth April last date for submission written representation thirtieth June for appearance of delegation seventh August—Letter follows.”

I am further to enclose copies of correspondence on the subject matter of your letter which has already passed between this office and that of His Majesty's Trade Commissioner in India. It will be seen therefrom that the Tariff Board have fixed the 30th June 1926 as the latest date for submission of any written representation your Association may wish to make and August the 7th as the latest date for the hearing of oral evidence. I am to request that intimation may be given as soon as possible and if convenient, by cable of the date on which the special delegation your Association proposes to send will arrive in India in order that arrangements may be made to hear its evidence immediately after its arrival. I am to add that the Board will be glad to give the delegation every assistance in regard to the provision of copies of such evidence from the Tinplate industry as may have been taken before it reaches India.

2. In regard to the question raised in the third and fourth paragraphs of your letter, I am to emphasise the point already raised in the correspondence with His Majesty's Trade Commissioner in India that the general question of the fitness of the Tinplate industry in India for protection is only before the Board in their present enquiry to a limited extent. The Board have already held that the industry satisfies two of the conditions which were laid down by the Indian Fiscal Commission as essential to a successful claim for protection, *viz.*, that it possesses natural advantages and that it is an industry which, without the help of protection, either is not likely to develop at all or is not likely to develop so rapidly as is desirable in the interests of the country. There will, therefore, be no further examination of these two points, but subject to the qualifications mentioned in paragraph 106 of the Fiscal Commission's Report and in paragraph 29 of Chapter II of the First Report of the Tariff Board on the Steel Industry, the Board's enquiry will primarily be directed to ascertaining whether the industry now satisfies the third condition laid down by the Fiscal Commission that it is an industry which will eventually be able to face world competition without protection. In this connection I am to explain that whilst the Board will welcome from your Association the fullest and most detailed criticism of the methods by which their previous conclusions as to the amount of assistance required by the industry were reached and in particular will be glad to be given the specific instances referred to in paragraph 8 of your letter, it is obviously out of the question that they should make any statement as to the methods that will be followed in the present enquiry. All that can be said is that the information in the form suggested in the fifth paragraph of your letter will undoubtedly be of great use to the Board and that arrangements will be made to obtain it.

3. In paragraph 4 of the Board's letter to His Majesty's Trade Commissioner in India, he has been informed that one of the points to which the Board have to direct their attention, when dealing with applications for protection is the cost of production. If the Association's representative, when he appears before the Board, is able to give detailed information of the cost of production in a tinplate factory in the United Kingdom reasonably comparable in size and equipment with that of the Tinplate Company of India at Golmuri, he will give the Board valuable assistance which will be of very material help in the forming of their conclusions. I am to say that the form in which this information has been called for from Indian manufacturers is attached to this letter. The Board would be glad if the information as to costs of produc-

tion in such a factory could be furnished in this form, and also if they could be supplied with copies of the cost sheets maintained by it in the ordinary way.

4. In reply to the penultimate paragraph of your letter, I am to say that the Board would be glad to have copies of the written statements it is proposed to submit at the earliest possible date. It would be of material assistance to the Board if at least twenty copies could be submitted in print and also if the paragraphs of all future communications from your Association were numbered. I may mention that in addition to the First Report regarding the grant of protection to the Steel Industry, the Board have published:—

1. Report of the Indian Tariff Board regarding the increase of the duties on Steel, with evidence volume and
2. Report of the Indian Tariff Board regarding grant of supplementary protection to the Steel Industry, with evidence volume.

These publications can be obtained from the Office of the High Commissioner for India and at the usual book-sellers in London.

(2) *Letter, dated the 24th May 1926, from the Secretary, Tariff Board, to the Welsh Plate and Sheet Manufacturers' Association, London.*

I am directed to acknowledge receipt of your letter of the 29th April 1926 and to say that on the 11th instant the Tariff Board sent you a copy of the correspondence which had passed between them and His Majesty's Trade Commissioner, Calcutta, in connection with your enquiries together with a letter which will explain the cables sent to you by the Trade Commissioner and the Board. This letter which should reach you on or about the 31st instant, will inform you of the arrangements made for the reception of any written representation your Association may wish to make and for the hearing of any delegation you propose to send.

2. I am to explain that the usual procedure of the Indian Tariff Board when dealing with an application for protection from an industry is that outlined below. When the Board is directed by the Government of India to examine the claim of an industry to protection, it invites firms and persons concerned to submit representations. These are published with an invitation to all persons interested, who favour or oppose the grant of protection, to send in representations containing their views and, if they so desire, to give oral evidence before the Board. In the meantime if it is found necessary, detailed questionnaires are issued to the firms or persons who have signified their intention of taking part in the enquiry, and dates are fixed for the hearing of their oral evidence. It is not the practice of the Board to call for proofs of the oral evidence to be submitted, the oral examination of the parties being directed mainly to the elucidation of points arising out of the representations and the replies received to the detailed questionnaires. The examination is not, however, confined to such points and any relevant matters may be touched upon by the Board. This procedure appears to differ somewhat from that which, you state in your letter, is commonly followed by Royal Commissions in England but the Board will be glad to receive a proof of the oral evidence you propose to submit as soon as it can conveniently be sent. Copies of the representations submitted by the Tinsplate Company in the former enquiries conducted by the Tariff Board will be found on page 16 of Volume II of the evidence recorded during the first steel enquiry and on page 120 of the volume of evidence recorded during the enquiry regarding the grant of supplementary protection to the Steel Industry and a copy of that sent in by the Company for the present enquiry is enclosed. Copies of any further representations dealing with the question of the protection of tinsplate manufacture which are received will be forwarded to you.

(8) *Letter, dated the 16th June 1926, from the Welsh Plate and Sheet Manufacturers, London, to the Secretary, Tariff Board.*

In reply to your communication No. 233, dated May 11th, 1926, and your further communication No. 292 of May 24th, 1926, we beg to submit as follows:—

- (1) It was not possible to reply to the former until the latter was received in London on June 14th, 1926.
- (2) This communication is being despatched by the first available mail, and a cable was despatched on the 14th as follows:—

“Your letter 292 May 1924 received to-day mailing further representations this week. Representative arranging attendance Calcutta for oral evidence August 3rd or subsequent days. Welsh Tinplate Manufacturers.”

- (3) Further to our original representation of April 15th, 1926, 25 copies of a printed statement dealing with the representation dated 5th May 1926 of the Tinplate Company of India to hand on June 14th are forwarded herewith.
- (4) Proofs of the oral evidence to be submitted will be forwarded as soon as it has been completed.
- (5) Efforts have been made to collect from the fifty separate firms of tinplate manufacturers the most accurate and authentic particulars of costs of production so as to arrive at the representative average in the trade. These particulars will, as requested, be forwarded as soon as possible, it is hoped by the next mail.
- (6) Any further information requested by cable up to July 9th will be answered by cable or brought by our representative Sir Edgar Rees Jones K.B.E.

*Representation by the Welsh Plate and Sheet Manufacturers, dated 16th June 1926, dealing with the representation submitted by the Tinplate Company of India, Limited, dated 5th May 1926, received in London on 14th June 1926.*

The representation now made by the Tinplate Company of India, Limited, in support of their request for a renewal of protection for tinplates for a further period, beyond the three years for which protection was originally granted as a temporary measure, has been considered by the Welsh Plate and Sheet Manufacturers, and they respectfully submit the following representation to the Tariff Board:—

A careful study has been made of the statements and evidence submitted by the Tinplate Company of India, Limited, in connection with the previous inquiries by the Tariff Board, and the facts have been considered in relation with the knowledge and experience of the Welsh Manufacturers.

After two years' working on a substantial scale, and a year's working on practically full capacity, it is now established that the operations of the Tinplate Company of India since 1923 have not demonstrated the ability of the Company to comply with the basic conditions governing the grants of protection as laid down by the Government of India and the Tariff Board, and more particularly as to the “eventual ability of the industry to dispense with protection altogether” or that it has “satisfied the third condition laid down by the Fiscal Commission that it is an industry which will eventually be able to face world competition without protection.”

This failure is manifested in the facts relative to the costs of production, and far more seriously in the facts relative to the tinplates and their marketing.

As to costs, the only hope of compliance with the basic conditions lay in a substantially lower "Labour Cost" in view of the enormous disparity between the wages in the Golmuri works and those paid in Wales. The "Labour Cost" is higher, and must continue to be higher than in Wales, if the basic conditions are to be fulfilled.

All other costs are substantially higher, and must of necessity continue to be higher.

The percentage of waste and the loss on such waste is very serious.

As to the tinplates and their marketing, there is no proof of capacity as general manufacturers of tinplates in the various commercial varieties. Up to the present the statements as to the capacity of the workmen and the organization are all unreal. They would be vitiated if and when the general manufacture of tinplates on commercial lines were undertaken, and the costs of production would be so considerably increased that all present financial statements would have to be drastically revised.

The problem of "Wasters" is a fundamental handicap to success.

The ownership and control of the works, the nature of the production, and the conditions of the disposal of the production show that the Tinplate Company of India has not started an "industry" in the accepted commercial sense of the term, and is therefore not properly qualified to receive further protection.

In the meantime, owing to the protected operations of the Company the use of tinplates in India is being checked, and injury on various Indian trades and agriculture is being inflicted.

Contrary to the principle laid down that articles not manufactured in India shall not be subject to protection, the Tinplate Company of India, Limited, has obtained protection for three years covering such articles which it has not produced, and which if produced would have entirely altered the statements they put forward as to their progress.

The present representation of the Company, by the method of comparison adopted, adds to the confusion as to the situation that exists in the previous statements.

The falling prices set forth in paragraph 3 were before the Tariff Board at the previous inquiry, and were fully taken into account when the last increase in the duty was recommended. The reduction in the cost of steel and other materials mentioned do not reveal an improvement in the position because such reductions in world prices have been greater than those shown.

It seems clear to the Welsh Plate and Sheet Manufacturers from the statement that this Company has not become a commercial undertaking either in its constitution or operations, and that any further temporary period of protection will not prevent eventual failure to continue, and therefore involves serious injury to Indian interests without compensating benefits, and a check and disorganization of the tinplate trade, on which so many other trades depend.

---

(4) *Letter from the Welsh Plate and Sheet Manufacturers' Association, London, dated 24th June 1926.*

In further reference to your communication No. 233 of May 11th, 1926 and our reply thereto dated June 16th, 1926 despatched by last week's mail, I herewith, as promised, deal with the information desired by the Tariff Board as to costs of tinplate production and of tinplate works and equipment.

1. It has not been found possible to supply the information in the precise form suggested in the enclosures with your communication, and even if it had been possible to follow the form there would have been very little real value in the information because of the danger that comparisons drawn from them would be most misleading. There is no single works in South Wales in its size and equipment approximating sufficiently to the works in India to provide for sound comparison. There are 68 different works in South Wales



varying in their equipment, output, methods of operation, and age. Details of costs vary considerably in these works. As to overhead charges, depreciation and capital, the variation is so fundamental that particulars supplied from any individual works would convey a misleading impression of the circumstances of the industry as a whole. Many of the works, for instance, have repaid their original capital years ago, and all depreciation of plant and equipment has been entirely written off in the course of time. Again, many of the works have no head office charges strictly so called, because they sell their whole output to merchants, and have only a very small clerical staff at the works. On the other hand, a large number of the works are grouped in large companies, but those large companies are also producing their own steel and owning their own coal mines. Interest on working capital and manufacturers' profit is therefore merged in the general wider operations of such large concerns. Several other points of difficulty might be cited, but the above are probably sufficient to show the danger of misapprehension.

2. There is one important effect arising from the difference between a single works as in India which is practically a "tied" house to a large consumer and an "industry" as in South Wales. The costs of production and the selling prices of Welsh tinplates are governed by two competitive factors:--

- (a) the large number of individual concerns of considerable age with practically no overhead charges and very few shareholders to be provided with dividends in times of bad trade keep down costs of production and the selling prices,
- (b) there is the counterbalancing competition of the larger and newer concerns which have heavy overhead charges and large numbers of public shareholders to be satisfied.

These concerns compete as to costs of production and selling prices with the advantage of being themselves producers of their own steel and coal and with such advantages as may arise from superior equipment, staff and organization.

3. Although not in the form suggested, all the information on various points required for the Board has been obtained, and it is respectfully submitted, for the considerations set forth above, that this information is absolutely sound and reliable for the purposes of the Board, and is in the best form for authenticating the oral evidence that will be submitted by the Welsh Manufacturers' representative.

4. The Secretary of the Welsh Plate and Sheet Manufacturers' Association has specially collected particulars from various works, and has then applied his long experience and knowledge, so as to arrive at the best average figures that can be vouched for as sound and incontestable. The independent character and high esteem of the Secretary is a guarantee of scrupulous accuracy, but for the purpose of presenting the facts on his authority in a formal manner they have been incorporated in a document in the form of a sworn declaration before a Commissioner of Oaths, which will be put in as part of the Welsh Manufacturers' evidence. The items included in the declaration on oath are forwarded herewith. The separate items will appear in the appropriate sections of the proof of oral evidence, and all necessary points in that evidence are covered by these particulars without the need for imposing any reservations as to privacy.

5. If the Board will, during the inquiry, wish to elicit more detail as to how some of these figures are made up, the representative may be able to supply such information from individual works by way of illustration.

6. On the question of the cost of working to-day a works of similar equipment and capacity to those at Golmuri one of the Welsh firms that has been making extensions recently has from items of cost, actually incurred by them, supplied a complete estimate in detail. They have also supplied in detail the figure of stocks that a similar works has to carry. It will be observed that the actual cost of a works comes out at £189,000 and that the stocks to be carried work out at about £7,000 per mill, or £56,000 for the whole works. These experienced manufacturers therefore arrive at a figure of £250,000 as the total capital required for all the operations of a business of that size.

These estimates have been considered by a Committee of the manufacturers in conjunction with the inquiry carried out by the Secretary, and in view of the more general experience the total capital required for all production and treating purposes for a works and output of the size in question, it was agreed that £300,000 would be the safer figure to take as the total capital required. In reply to the question put for the purpose of argument advanced in the evidence as to the maximum figure on which Welsh Manufacturers considered they could hope to pay any reasonable dividend, the Secretary has assessed it at the outside as £350,000. With reference to the enclosed details\* as to stocks, there will be no objection to the total figure being published, but it is desired that the details should be treated confidentially. There is, however, no objection under the condition of confidence to the whole of the details being examined by the representatives of the Tinplate Company of India.

7. With reference to the question of interest on working capital and manufacturers profit, the position to-day is that practically none of the steel works in this country have been able to pay much in the way of interest on working capital. Practically all the fixed preference shares have their interest in arrears. An enormous writing down of capital has had to be made in the case of most firms producing steel and tinplate. The most useful information therefore that can be given in this connection is that the manufacturers would consider themselves very fortunate if they could make an average profit of 1s. per basis box of tinplates, but very few, if any, have been making such a profit during the past few years.

8. As to head office charges, as has been explained above, many of the works have no separate head office. The selling corporation of the largest combination of manufacturers has to carry on its operations and meet all charges and profits from 1½ per cent. on the sales turnover, and it is understood in the trade that the merchant firms who dispose of the output of the independent manufacturers also have to operate between 1 and 1½ per cent. on turnover.

It is hoped that the Members of the Tariff Board will appreciate that the Welsh Manufacturers have made every effort to supply the fullest possible information, and to take the utmost pains to ensure that the information will as far as possible impartially represent the actual facts, and that the facts should be presented to the Tariff Board in a form that will ensure as far as possible the elimination of any misunderstanding or misconception. So far as it is at all possible the representative of the manufacturers at the inquiry will be prepared to furnish any further elucidation or supplement.

*Contents of sworn declaration on oath of Secretary of Welsh Plate and Sheet Manufacturers' Association.*

The statements made herein are to the best of my knowledge and belief as correct as it is practicably possible for such particulars to be.

I. Average gross weekly wages *per operative* per shift of 8 hours throughout all Departments of the Tinplate Trade is 10s. 7d.

Made up in the following departments:—

|  | s. | d. |            |
|--|----|----|------------|
| Bar Department . . . . .   | 14 | 4  | per shift. |
| Hot Mills . . . . .  | 13 | 10 | do.        |
| Shearers and Openers . . . . .   | 8  | 1  | do.        |
| Black pickling . . . . .   | 6  | 5  | do.        |
| Annealing . . . . .  | 13 | 10 | do.        |
| Cold Rolling . . . . .   | 4  | 0  | do.        |
| Tinhouse . . . . .   | 11 | 1  | do.        |
| Maintenance Department, including all labour not enumerated above and including Engine Drivers and Firemen . . . . . | 9  | 9  | do.        |

\*Not printed.

II. The average wages cost of tinplates for the 3 months ending 31st March, 1926 was 4s. 1-3d. per basis box.

III. From 3 firms in our Association the following is the length of service of the men at present employed:—

*Works "A."*

- (1) 21.6 per cent. of males have over 30 years length of service.
- (2) 17.1 per cent. of males have over 20 years length of service.
- (3) 28.0 per cent. of males have over 10 years length of service.
- (4) 15.4 per cent. of males have over 5 years length of service.
- (5) 17.0 per cent. of males are under 21 years of age.

*Works "B."*

- (1) 13.6 per cent. of males have over 30 years length of service.
- (2) 17.0 per cent. of males have over 20 years length of service.
- (3) 26.0 per cent. of males have over 10 years length of service.
- (4) 22.2 per cent. of males have over 5 years length of service.
- (5) 19.3 per cent. of males are under 21 years of age.

*Works "C."*

- (1) 17.4 per cent. of males have over 30 years length of service.
- (2) 8.5 per cent. of males have over 20 years length of service.
- (3) 22.2 per cent. of males have over 10 years length of service.
- (4) 22.0 per cent. of males have over 5 years length of service.
- (5) 23.0 per cent. of males are under 21 years of age.

IV. From the reports from works of the cost delivered to them during 1925 of the following materials, the prices appeared to average as follows:—

|                                   | £   | s. | d. |            |
|-----------------------------------|-----|----|----|------------|
| Rolls . . . . .                   | 34  | 0  | 0  | per ton.   |
| Annealing pots . . . . .          | 16  | 7  | 2  | „          |
| Mill top brasses . . . . .        | 113 | 11 | 6  | „          |
| Mill Bottom Brasses . . . . .     | 113 | 11 | 6  | „          |
| Mill Side Check Brasses . . . . . | 106 | 15 | 9  | „          |
| Cold Roll Brasses . . . . .       | 107 | 18 | 4  | „          |
| Sulphuric Acid . . . . .          | 4   | 7  | 3  | „          |
| Pink Meal . . . . .               | 2   | 1  | 5  | „          |
| Zinc Chloride . . . . .           | 12  | 5  | 0  | „          |
| Palm Oil . . . . .                | 41  | 7  | 1  | „          |
| Cold Roll Grease . . . . .        | 15  | 15 | 7  | „          |
| Hot Neck Grease . . . . .         | 13  | 6  | 1  | „          |
| Lubricating or Gear Oil . . . . . | 0   | 2  | 4½ | per gallon |
| Sheepskins . . . . .              | 0   | 9  | 4  | each.      |

V. The average number of operatives employed per mill in all Departments is 59.

Made up as follows:—

|  | per mill. |
|--|-----------|
| Bar Department . . . . .   | } 19      |
| Hot Mills . . . . .  |           |
| Shearers and Openers . . . . .   | 4         |
| Black Pickling . . . . .   | 2         |
| Annealing . . . . .  | 2         |
| Cold rolling . . . . .   | 8         |
| Tinhouse . . . . .   | 13        |
| Maintenance Department including engine drivers<br>and firemen . . . . . | 11        |
|  | <hr/> 59  |

VI. For a 6 Mill equipment similar to the Indian works operating full 3 shifts and producing 30,000 tons of tinplates per annum, I give the total number of employees required for 3 mills as between 710 and 720.

VII. In South Wales the total capital on which firms would expect to pay reasonable dividends for a works with a 6 mill capacity for about 36,000 tons of tinplates per annum, I estimate at £350,000.

VIII. The number of odd sizes worked by the various tinplate works in South Wales is very considerable, as will be seen from the following examples:

- (a) One works during 1925 manufactured no less than 1950 different sizes and substances.
- (b) Another works during the last 12 months have manufactured 581 different sizes and substances.
- (c) Another works manufacture on an average 60 different sizes and substances per week.

IX. The number of rates which have been fixed to cover the various operations, sizes, substances, etc., worked in the Tinplate Trade number over 1,800, and these are embodied in a list of Wages drawn up from time to time and issued to the employers and employees.

COPY.

RICHARD THOMAS AND COMPANY, LIMITED.

Bush House (North Block).

Aldwych, W. C. 2.

Copy to Sir Edgar Jones, K.B.E.

R. Mather, Esq.,  
44, Alley Road,  
Dulwich S. E. 21.

3rd June, 1926.

DEAR MR. MATHER,

Referring to our conversation last week, I now have pleasure in sending you a rough estimate, compiled by our Chief Engineer, of the cost of building a Tinplate Works in South Wales with 8 American Mills, equipped with modern machinery and with Melingriffith Tinpots similar to those erected by the Tinplate Company of India.

VOL. VII.

D

Such a plant should have a weekly output of at least 700 tons of tinplates, in South Wales, or say 35,000 tons a year. In the United States where the men work harder than they do in South Wales, the output should be considerably larger.

I may say that I had the opportunity of discussing this estimate with other Tinplate Manufacturers in South Wales last week and some of them considered that this figure was considerably below what the actual cost would be. I think I can safely say, however, that if you take the figure of £250,000 as the necessary capital expenditure, it would be ample.

I also enclose figures showing the actual value of the stocks we held in our Tinplate works at the end of March 1926. These were the stocks held by 94 mills and they work out at an average of £6,600 per mill. In regard to this figure, I would point out that it is not necessary for us to carry higher stocks of such materials as Palm Oil, Flux, Hot Neck Grease, Annealing Pots, Rolls Castings and Repairs, because there are Works or Stores in South Wales from which we can constantly draw them at short notice. As you will else our figures work out at about £7,000 per mill at present market value.

You also asked me to supply a detailed Cost Sheet for South Wales. After giving this matter a great deal of thought I feel that such a Cost Sheet might be very misleading to the Tariff Commission of India without some one to explain the details. Sir Edgar Jones will be present at the Enquiry and he will be in a position to supply the Commission with any figures they may require to enable them to come to a fair decision on the matters they have before them.

I trust the information I have given you will be useful.

Yours truly,

HENRY BOND.

*General summary of estimated cost of 8-Mill Tinplate Works.*

|  |                |
|--|----------------|
| Buildings, including excavations and all foundations . . . . .                           | 41,000         |
| Mill plant, including mills, furnaces and auxiliaries . . . . .                          | 28,000         |
| Cold Rolling Plant . . . . .   | 14,500         |
| Black Annealing furnace complete with all gear and boxes . . . . .                       | 7,400          |
| White Annealing furnace complete with all gear and boxes . . . . .                       | 5,500          |
| Black pickling plant complete with cradles . . . . .                                     | 5,000          |
| Tinhouse complete . . . . .  | 22,800         |
| Scruff house and furnace, assorting and packing rooms furnished . . . . .                | 1,050          |
| Electrical plant including substation, motors, lighting and complete equipment . . . . . | 13,700         |
| Cranes . . . . .   | 8,200          |
| Conveyors, etc. . . . .  | 5,300          |
| Gas Plant . . . . .  | 3,500          |
| Sidings . . . . .  | 1,200          |
| Water supply . . . . .   | 2,500          |
| Plant and tools including roll grinder . . . . .   | 12,000         |
| <b>TOTAL . . . . .</b>   | <b>171,650</b> |
| <b>Contingencies 10 per cent. . . . .</b>  | <b>17,350</b>  |
| <b>TOTAL . . . . .</b>   | <b>189,000</b> |

(5) *Letter from the Welsh Plate and Sheet Manufacturers' Association, London, dated the 1st July 1926.*

I beg to enclose herewith eight printed copies of the proof of oral evidence with enclosure copies of declaration on oath as to facts and eight copies of booklet referred to in proof of evidence.

I beg to confirm the previous communication that Sir Edgar Jones is arranging to be in Calcutta from August 2nd, available for tendering evidence on behalf of the Welsh Plate and Sheet Manufacturers.

*Proof of Oral Evidence submitted by Sir Edgar Rees Jones, K.B.E., on behalf of the Welsh Plate and Sheet Manufacturers.*

#### NOTE ON ARRANGEMENT OF EVIDENCE.

- A.—Quotation for convenience of reference of conditions laid down by the Government of India, the Fiscal Commission, and the Tariff Board governing the grant of protection.
- B.—Introductory statement defining the attitude of the Welsh Manufacturers, and their general view of the effect on the community of the operations of the Tinplate Company of India, Limited.
- C.—A technical and historical examination of the facts relevant to the future production of tinplates in India on a commercial basis illustrated from the statements made in evidence by the Tinplate Company of India, Limited.
- D.—Statement as to the absence of independent inspection for the protection of the public.
- E.—Application in the event of a renewal of protection for the exemption of goods not actually manufactured in India.
- F.—Application in the event of a renewal of protection for preferential rates of duty for Welsh tinplates.
- G.—Comparative statement as to the equitable basis for capital charges in the event of a renewal of protection.
- H.—Statement as to misleading historical statements in the 1923-24 Evidence relating to the manufacture of tinplates in America.
- I.—Statement as to confusion in the calculations based on the 1923-24 Evidence.

#### A

#### THE CONDITIONS GOVERNING GRANTS OF PROTECTION.

1. In the Report of the Indian Tariff Board regarding the grant of protection to the Steel Industry, published in 1924, the basic conditions as laid down by the Fiscal Commission are given in Chapter II, paragraph 17, page 10, as follows:—

“(1) The industry must be one possessing natural advantages, such as an abundant supply of raw material, cheap power, a sufficient supply of labour, or a large home market. Such advantages will be of different relative importance in different industries, but they should all be weighed and their relative importance assessed. The successful industries of the world possess certain comparative advantages to which they owe their success. No industry which does not possess some comparative advantages will be able to compete with them on equal terms, and therefore the

natural advantages possessed by an Indian industry should be analysed carefully, in order to ensure as far as possible that no industry is protected which will become a permanent burden on the community.

- (2) The industry must be one which without the help of protection either is not likely to develop at all or is not likely to develop so rapidly as is desirable in the interests of the country. This is an obvious corollary from the principles which have led us to recommend protection. The main object of protection is either to develop industries which otherwise would not be developed or to develop them with greater rapidity.
- (3) The industry must be one which will eventually be able to face world competition without protection. In forming an estimate of the probabilities of this condition being fulfilled the natural advantages referred to in condition (1) will of course be considered carefully. The importance of this condition is obvious. The protection we contemplate is a temporary protection to be given to industries which will eventually be able to stand alone."

2. In succeeding paragraphs the Board give reasons why in their opinion the three conditions seemed to be fulfilled in the case of the general rolled steel industry.

3. Later in paragraph 39 an important principle is enunciated:--

"The policy laid down for our guidance is that of discriminating protection, which restricts the burden on the consumer to the minimum necessary to attain its object. It follows that those kinds of steel which are not produced in India at present, or are not likely to be produced in the near future, should, so far as possible, be left untouched. We mention the point here because we desire to make it plain that this consideration has been present to our minds throughout our Enquiry; there is no need for protection unless there is something to protect." This principle is further emphasised in the Summary of Conclusions in paragraph 93, from which may be quoted the sentence:—"Throughout our Enquiry we have had the question before us, and we have endeavoured to frame our proposals so as to avoid interfering with products which will continue to be imported because there is no one in India to make them."

4. With reference to the specific case of tinplates, this principle is referred to in the Second Report, Chapter IV, paragraph 31:—

"It would be premature to express a confident opinion, when the manufacture has been carried on for only one year, as to the eventual ability of the industry to dispense with protection altogether, but the success hitherto attained is sufficient to justify the hope that it will do so. . . . In one or two years' time it should be possible to form a definite opinion on the subject, but meanwhile the prospects are sufficiently favourable to warrant some assistance from the State."

5. In the official report of the Council of State Debate for Tuesday, 23rd February 1926, the Commerce Secretary stated (page 288):—

"I wish to point out to the House that the question of giving protection to the tinplate industry is not now in question. That is settled up to the 31st March 1927. It is only a question of meeting a present need over the next year. Next year an Inquiry will be held to consider whether this industry should or should not be protected."

6. The submission of the Welsh Manufacturers is that the operations of the Tinplate Company of India since 1923 have not demonstrated its ability to

comply with the above basic conditions, and more particularly as to: "the eventual ability of the industry to dispense with protection altogether," or that it has "satisfied the third condition laid down by the Fiscal Commission that it is an industry which will eventually be able to face world competition without protection."\*

## B

### THE ATTITUDE OF THE WELSH TINPLATE MANUFACTURERS.

7. Welsh Manufacturers have from time to time carefully considered the question of manufacturing tinplates in all processes, or part of the processes, in other parts of the British Empire. A few years ago one of the largest firms, under strong inducements by the Government of Canada, including protection, erected a substantial modern works in Canada, and conveyed there a large number of Welsh officials and workmen. After a few years the attempt had to be abandoned with a very heavy financial loss to the firm concerned. Considerable pressure has been exerted by the Government of Australia to establish tinplate manufacture. Since January 1922, the Government has maintained on its Tariff Schedules a protective duty for tinplates of a minimum of 76 shillings per ton and a maximum of 100 shillings per ton. The Welsh Manufacturers have taken steps in Australia to investigate costs, etc., but neither they, nor any other manufacturer in the world have been able to see any prospects of success. The Australian Government has therefore every few months since 1922 had to postpone the operation of the protective duties. The great industrial countries of Germany, France, Italy, and Spain have carried on, under cover of protection, the manufacture of tinplates for 30 to 40 years, and although some progress is made from year to year, those countries have only attained up to date a partial and limited success, and the quality of tinplates required for valuable purposes, such as packing food-stuffs, has still to be imported from Wales.

8. The possibilities of the general commercial manufacture of tinplates in India by Welsh Manufacturers has been reviewed most sympathetically again this year, but the factors against success are conclusive. The reasons for the above historical facts are fundamental technical and commercial peculiarities that govern the tinplate industry. All the abovementioned countries have made a success of general steel manufacture. So has Japan. In most varieties of steel manufacture she has achieved a competitive commercial success. But although she has tried, no serious progress has been made in the manufacture of tinplates. On these comparable historical facts it was not to be expected that India, with a much shorter experience in general steel manufacture, could successfully specialise in the highly technical extreme end of finishing into tinplates, and do what all the other countries have failed to do. When therefore the first Inquiry was held by the Tariff Board in 1923, a memorandum was forwarded to the Board by the British National Federation of Iron and Steel Manufacturers, including a statement relating to tinplate, which gave warning of the difficulties of manufacture, and the general effect of probable failure on the community of India. It was, however, decided by the Tariff Board with some reluctance, as the works at Golmuri were completed and operating, to grant protection as a declared temporary measure for the restricted period of three years, and the Welsh Manufacturers regretfully decided to await the inevitable results. Those results are dealt with in the sections of Evidence below.

9. At this point the Welsh Manufacturers wish to repeat the statement made in that memorandum of their attitude towards the application of the Tinplate Company of India for protection. The statement has been made in the Legislative Assembly that the only purpose of the Welsh Manufacturers is to prevent any manufacture of tinplates in India, and that motive may be assigned to them in the minds of responsible persons. That is not the attitude

---

\* Letter of Secretary of Tariff Board to Welsh Plate and Sheet Manufacturers, dated 11th May 1926, paragraph 2.



of the Welsh Manufacturers. If any manufacturers of tins in India were successfully operating on a proper commercial basis, and making the various varieties of tins; and, as a result of their organisation for seeking and extending business, they promoted a progressive expansion in the volume of tins consumed in India then the Welsh Manufacturers would have no serious cause for opposition even if there was a reasonable degree of protection for the local manufacturers. The grounds upon which such an attitude is founded are:—

- (a) That any expansion of the world consumption of tins means an increased market for Welsh tins.
- (b) The example of the United States of America is a pertinent illustration. The American Tinplate Manufacturers, seconded by the great organisation of the American Can Company, has fostered the extension of canning so that not only is 90 per cent. of the American production used in United States territory; but the successes in canning have stimulated an increased consumption of tinplate all over the world.

In the statements and evidence of the Tinplate Company of India at the 1923 Enquiry much emphasis was laid on the development of the tinplate industry in the United States, but the point that manufacture of tins in that country was brought to success by the high protection of the McKinley Tariff of 1891 (*see First Report*) is incorrect as historical fact. The import duty on tins in the United States of America of the McKinley Tariff of 1891 was 2·2 cents per lb. But as far back as 1861 there had been an import tariff of 2 cents per lb. The factor that brought a large expansion of manufacture of tins in the United States of America was the application to canning of modern machinery about 1890, and the rapid building of canning establishments. The evidence of the Tinplate Company of India did not mention the fact that tins have always been free of duty for the great export canning trade. The facts are set out in Section H. The significant lesson from the American example is that their manufacture under high protection made poor progress for thirty years from 1860 to 1893. But by intensively promoting their home consumption on commercial lines they raised the capacity for absorption of their production and importation from 274,665 tons in 1892 to 1,550,000 tons in 1925. From the example of the progress made by them the world consumption has steadily increased, so that, in spite of an estimated production to-day of about 250,000 tons in other European countries, the Welsh Manufacturers found a world market in 1925 for 496,135 tons. It is roughly true that, apart from plates for the foreign agencies of the American Oil Companies, the export of United States of America plates is very small.

- (c) The view of the Welsh Manufacturers is that India is more backward than almost any progressive country in the general use of tins, and that she has arrived at a point when a substantial expansion of use should begin.

10. During the past three years the Tinplate Company of India has practically confined itself to the class of tins required by the Burmah Oil Company. It has not conducted a commercial campaign for educating Indian traders in the practice of packing commodities in tinplate and thus increasing their home and export business, like the Japanese, who are doing a large trade in a wide variety of commodities. It has not actively promoted the establishment of canneries for the development of Indian agriculture and fisheries, as the Japanese, with 800 canneries, and Chinese are already doing for their special native foods and products. On the contrary, it has by means of high protection added to the price of tins and checked and restricted such development. There is too much emphasis on the idea that the distribution of oil is the only thing that matters. The crying need of Indian agriculture is neglected in this important connection. Australia and South Africa, like South America, have, since the war, resorted to an expansion of canning as the means for

extending agriculture and employment, and the cans are enabling them to find profitable, increasing markets in various parts of the world. Exports of tinplates to Australia from Great Britain were, in 1913: 28,961 tons; in 1919, 36,033 tons; in 1925, 52,249 tons. The Ministry of Agriculture for England and Wales has recently awakened to a realisation of the part that canning can play in reviving agricultural production. A conference of Canners, Growers, Distributors, and others was held at the Ministry of Agriculture in London on March 10th, 1926, and a National Food Canning Council was formed. Already this season there is to be a doubling of the pack of fruits, and next year plant will be working for canning vegetables. The Welsh Manufacturers have called the attention of the Royal Commission recently appointed to investigate the problems of agriculture in India to this movement, and if that Commission explores the possibilities of canning in India it will undoubtedly be surprised at the range of products that can be grown and marketed on modern lines with the aid of tinplates. For success, the supply of guaranteed cans of uniform quality at low prices is indispensable. This basic fact has always guided the policy of the Welsh Manufacturers. They have striven to supply tinplates as cheap as possible, because the volume of consumption, and the increase of canning, and the agricultural production conditional upon it is profoundly dependent on even slight differences in the cost of cans. For this reason, the Welsh Manufacturers regret that costs have kept tinplates as high as nineteen shillings and three pence basis, as compared with a pre-war price of twelve to fourteen shillings basis.

11. There are fifty separate and independent firms of tinplate manufacturers in South Wales. Their prices are determined by a free world market, and the price is the same for all countries. They have not dumped, or specially cut prices for any ulterior motives for India. Neither have they ever consorted to raise prices for India on any differential rates. They have always given India the fullest fair advantages of their open world market prices by maintaining their merchanting connections and by procuring the most advantageous freight conditions. The applicants for protection have never been able to allege that the Welsh Manufacturers ever raised or ever reduced prices for differential manipulations of the Indian market. They have complained of the fall in the prices of Welsh tinplates from over 23s. 6d. in 1925 to about 19s. 6d. at present. But that was a general achievement in reducing costs of production in which India could have benefited like other countries. Pursuing their long-established policy, the Welsh Manufacturers will seek every opportunity to further improve the costs of production, which are still about 50 per cent. above pre-war costs, and India will always receive the benefit of such improvement. It is submitted that even in a country where a protection policy is operating it is a bad practice for manufacturers to obtain higher rates of protection periodically, because normal and permanent world prices have been improved for the benefit of the consumer. The Welsh Manufacturers believe that there is a prospect in India of the adoption of new agricultural and trading methods, provided tinplate is available in the right quantities and varieties at the lowest possible prices, and that it is detrimental to the general interests of India for policy to be distorted for the convenience of Oil Distributors. The Welsh Manufacturers contend that the general interests upon which the future of the tinplate trade in India depend are prejudiced by the continuance of protection for the Tinplate Company of India.

## C

**A TECHNICAL AND HISTORICAL EXAMINATION OF THE FACTS RELEVANT TO THE FUTURE PRODUCTION OF TINPLATES IN INDIA ON A COMMERCIAL BASIS ILLUSTRATED FROM THE STATEMENTS MADE IN EVIDENCE BY THE TINPLATE COMPANY OF INDIA, LIMITED.**

12. This examination is arranged under the following propositions:—

- (1) That the Tinplate Company of India has not proved its capacity as a general manufacturer of tinplates.

- (2) That even for "oil plates" assent to the application of the Tinsplate Company of India involves protection permanently and a permanent burden on the community.
- (3) That the Tinsplate Company of India has failed to promote a permanent profitable increased production of Indian materials.
- (4) That it has not satisfactorily opened new permanent avenues for Indian labour.
- (5) That it has not become an "industry" in the accepted commercial sense of the term, and is therefore not properly qualified to receive further protection.\*
- (6) That any further temporary period of protection will not prevent eventual failure to continue, and therefore involves serious injury to Indian interests without compensating benefits.
- (7) That no serious disadvantage to India will follow from the non-renewal of protection.

**C. (1) THAT THE TINPLATE COMPANY OF INDIA HAS NOT PROVED ITS CAPACITY AS A GENERAL MANUFACTURER OF TINPLATES.**

13. There are fifty separate independent Tinsplate Manufacturers in South Wales. Each and all of them are prepared to accept, and do regularly receive orders in various sizes and gauges, as shewn in the booklet of the Propaganda Agency of the Welsh Manufacturers handed in herewith, which they have been issuing since 1920. The "typical order" shewn on page 19 illustrates the varied character of the business of a real commercial tinsplate works. † It will be observed that there are over fifty varieties of standard sizes and gauges (special specifications are additional to these varieties). In addition to the varieties of size and gauge there are the varieties of coating. The common standard type of plate is known as coke plate carrying about  $1\frac{1}{2}$ —2 lbs. of tin to the basis box. There are, however, regular commercial varieties known as charcoal, best charcoal, best best charcoal, varying from  $2\frac{1}{2}$  lbs. to 6 lbs. per basis box. Works often produce to specification of a specified weight of tin to the basis box. Further, they supply varieties, as specified in customers' orders, in deep stamping quality steel, or special deep stamping quality steel. In short, a Welsh tinsplate works supplies customers' specific requirements in a great number of varieties.

14. The reports available shew that the Tinsplate Company of India has practically confined its operations to what are known as "oil plates." (A statement has been made that some sales have been effected recently to Tea and Tobacco Companies in India. Stray performances such as this do not substantially affect the main fact, and the variety of gauge and coating is important.) The "oil plates" are in two fixed sizes  $20 \times 10$  inches or  $18\frac{1}{2} \times 14$  inches, and in one gauge or thickness. Much boast has been made of the training of Indian labour under the care of the seventy-nine skilled Welsh workmen to produce these tinplates. But there is nothing remarkable in that. Suitable labour, anywhere, could be intensively trained on modern machinery by constant repetition to reproduce two fixed sizes and one gauge of sheet, and to always coat with about the same quantity of tin. But workmen in a commercial tinplate works must have the experience and skill to make all the many varieties as they come forward through the order book. The fact that the Tinsplate Company of India has succeeded in producing the simple type of plate required by the Burmah Oil Company for distributing oil is not proof of capacity in the general manufacture of tinplates.

15. In view of the definite declared policy of the Government of India and of the Tariff Board, not to impose protective duties on classes of steel good

---

See Chapter I, paragraph 1 (a).

Some of the smaller works are not equipped to roll the large wide sheets.

not actually being manufactured in India [see Section A (3)], it has always been a matter of great surprise to us that all the varieties of manufacture have been taxed to cover only one gauge and two sizes of coke plate. Even taggers, a highly specialised and exceptional type of plate, have been included. An application is made herewith for exemption of these varieties in the event of a continuance of protection. It may be contended that the plant and machinery is adaptable to the production of these varieties. Of course it is, like that of every other tinplate works. But that does not signify that the workmen and organization are competent to carry on such manufacture on regular commercial lines. The fact that on occasions of demonstration the management or the Welsh workmen can turn out a sample of such varieties is not a relevant point in this connection. It must be obvious that if frequent small orders in many varieties were manufactured and marketed, the whole of the costs of production would be changed. This is admitted in Evidence 1925, page 140. The present statements as to finance would be entirely vitiated as evidence. The thinner gauges of plates call for much greater skill and experience, without which failures and costs would be clamitous. The fact is that during the period under review the production has in substantial effect been limited to the repetitive manufacture of "oil plates," and therefore, according to the declaration referred to above, the protective duties should be strictly limited to those classes of plates. The declaration does not refer to "capacity" or "possibilities of future manufacture," but to actual past proof of regular production.

16. There arises in this connection a commercial question of some importance. It seems to be generally agreed that of the present consumption of new tinplates in India only about 12,000 tons per annum are imported for general purposes. Two questions are involved in this. (a) There is a large universally distributed use of the "oil plates" second hand. The Oil Companies receive for the empty kerosene can according to their evidence 8 Annas each. The cost of the tinplate in that can is slightly less than 8 Annas without duty. So the Oil Companies can distribute their oil in containers that involve them only in the small net cost of making the can, say about 3 Annas. Where the purchaser of a second-hand kerosene can uses it as it is, or cut into two parts and only affixes a handle or other attachment he saves a little in his cost of manufacture. But immediately he cuts up the tin to use it as a plate for making various articles he is doing himself an injustice, because he could purchase brand new tinplates in gauges and sizes more economical for his articles of manufacture at the same price as the damaged plate he cuts from a can. Tin workers who buy the right variety of tinplate can make unsoiled articles of better quality and lower price than those now made from the second-hand can. It is a misfortune to village industries that the local availability of second-hand cans has created a mistaken idea of economy, and blocked the regular development in India of the use of tinplates. The knowledge of the availability of tinplates affording a selection of sizes and gauges is of value for many thousands of workshops in India. This point about selection is important. The cost of articles made from tinplate depends materially on the avoidance of waste and the possibilities of repeating forms and designs without further labour or adjustment expenses. It is, therefore, the practice of all modern users of tinplate to order sizes that will cut out as nearly as possible to the shapes required with the minimum of trimmings making waste, and to order the lightest gauges that afford the strength required. Slowly but nevertheless gradually Indian workers in the metal will learn this economic fact, and there is reason for anticipating an acceleration of this process which will not only benefit the large numbers of workers, and the public who are consumers of the articles; but will, as in other countries, encourage the expansion of many new trades. The continuance of a general high protective tariff for a works producing mainly oil plates, and not in a position to make, and by a commercial selling organization to push the trade and knowledge of the varieties will be a serious check to the progress referred to. Since the net charge for the tinplate in the kerosene cans to the Burmah Oil Company is so small, the difference to them of a continuance or with-

drawal of protection does not appear to justify a wholesale general punishment of all the Indian trades and consumers.

**C. (2) THAT EVEN FOR "OIL PLATES" ASSENT TO THE APPLICATION OF THE TINPLATE COMPANY OF INDIA INVOLVES PROTECTION PERMANENTLY, AND "A PERMANENT BURDEN ON THE COMMUNITY."**

17. The claim that is made is for sufficient protection to enable the tinplate works to charge a price for tinplates high enough to cover the costs of production and interest on the capital expended. The question of capital will be dealt with separately. It is represented that if the protection is granted for a further period the works can bring down the cost of production to a competitive commercial basis and supply tinplates to the Indian consumer at approximately world prices for equal quality. According to the basic condition laid down, which has already been referred to, this representation must be proved by the applicants to be well founded. There is ample evidence to the contrary. The manufacture of all varieties of tinplates for the general consumer will vitiate all the existing cost figures and facts as to labour, as has already been shewn above.

18. The following points shew their incapacity even for their present type of production. These are the sort of facts that influence the Welsh Manufacturers to the view that they could not succeed to run a works commercially in India. (a) Their labour cost alone, as set out in Evidence 1924, page 27, Statement IX, for full scale production appears to be on an average higher than that in South Wales works. The all-in labour cost in South Wales averages between 3s. 9-94d. and 4s. 1-3d. The one and only expectation for reaching a commercial basis of manufacture in India was substantially cheaper labour costs. It has been admitted in Evidence 1924, page 53, that imported skilled workmen will be required for at least twenty or thirty years. This is obvious to any technical person who observes the organisation of the works. The prospects of a reduction cost of native labourers per ton of finished tinplates appear very remote. Some of the reasons for this are:—

The output per mill is already up to the high level of similar mills in good works.

The physical strength and experience required for such output will remain the same.

A percentage of the Indian labour will be fluid, and not settled to such arduous industrial work for a lifetime as in Wales. This has already been manifested, and will be more in evidence as the men get tired and drawn back to their land and villages. Such changes would put any Welsh works out of the competitive market. The case of the Indian works is worse, because it means training of raw labour unskilled in industrial work. In any case, to achieve economy thirty native labourers would have to be dispensed with for one imported labourer. The general unreality of the labour question in the Indian works, with about 2,500 workmen, can be appreciated, from the fact that the total number of employees for the output of 30,000 tons per annum in South Wales works would be 720, including women and boys. In a works provided like the Indian works with the latest labour-saving mechanical devices the number would be less. The number given is for a general works producing varieties of plates. For concentrated production of "oil plates" the number would be less.

19. (b) The materials costs are insuperable and permanent. These are given in evidence by the Works Manager, Evidence 1925, page 132, Statement VII. It will be observed that the general burden of these costs is summed up by the Works Manager as Rs. 1-8 per basis box. This is 12 per cent. on the present Welsh f.o.b. price. Such an extra is impossible in the tinplate trade. Merchants have to cover costs of doing business and any profits out of a charge of 1 or 2 per cent. on the business. The Manufacturers in Wales

would be very glad if they could make an average profit of one shilling per box. It will be seen, therefore, that an extra cost charge for essential materials of (Rs. 1·8) 2s. 3d. per box is fatal. The Welsh Manufacturers have compared the invoice prices of the Works Manager's list and they give their prices in the following schedule as for the year 1925. It will be seen that the handicap is greater than that given in the Manager's estimate.

| Materials.                    | Golmuri cost. |    |    | Cost at Welsh Works<br>Rupees at 1s. 6d. |          |
|-------------------------------|---------------|----|----|--|----------|
|                               | Rs.           | A. | P. | Rs.                                      | A.       |
| Hot Neck Grease . . . per ton | 361           | 10 | 6  | per ton                                  | 177 6    |
| Cold Roll Grease . . . „      | 526           | 8  | 6  | „  | 210 6    |
| Gear Grease . . . „           | 382           | 8  | 6  | „  | ...      |
| Palm Oil . . . „              | 767           | 4  | 6  | „  | 551 6    |
| Zinc Chloride . . . „         | 438           | 8  | 6  | „  | 183 5    |
| Pink Meal . . . „             | 66            | 1  | 6  | „  | 27 11    |
| Tanned Fleeces . . . each     | 8             | 14 | 6  | each                                     | 6 4      |
| Brasses, Hot Mills, Top . . „ | 183           | 3  | 0  | per ton                                  | 1,514 5  |
| Bottom . . „                  | 239           | 8  | 6  | „  | 1,514 5  |
| Side . . „                    | 83            | 8  | 0  | „  | 1,423 13 |
| Cold Roll . . . „             | 271           | 4  | 3  | „  | 1,438 14 |
| Annealing Boxes . . . „       | 1,245         | 8  | 0  | „  | 218 2    |
| Rolls . . . „                 | 1,814         | 6  | 0  | „  | 453 5    |
| Sulphuric Acid . . . per ton  | 90            | 0  | 0  | „  | 58 3     |

20. (c) The fundamental difficulty of the Indian works is that of wasters. An important aspect of the question of wasters is dealt with later in Section D. The figures given in Evidence 1925, pages 138-139, of the volume of wasters and the prices obtained are overwhelming. Take the 1924 figures (the 1925 set are not complete for comparison, though prices appear to have been even lower). Out of a total sale of 384,739 boxes wasters sold were to the—

|                              | Boxes. |
|------------------------------|--------|
| Burmah Oil Company . . . . . | 26,230 |
| Others . . . . .             | 52,080 |

The average prices obtained were:

|   | Rs. | A. |
|---|-----|----|
| Primes to Burmah Oil Company . . . . .  | 20  | 9  |
| Wasters to Burmah Oil Company . . . . . | 17  | 15 |
| Wasters to Others . . . . .             | 14  | 12 |

Wasters sold to the Burmah Oil Company were, therefore, Rs. 2·10 less than the price of primes, and to the public Rs. 5·13 less than the price of primes. It will be observed from the *London Metal Bulletin* that when the world price of primes was:

In June 1925, Primes 19s. 6d. to 19s. 9d. Wasters were 17s. 6d.

In December 1925, Primes 19s. 6d. to 19s. Wasters were 18s. to 18s. 6d.

Generally throughout the years Welsh makers count on obtaining a price for their wasters only from 8 per cent. to 12½ per cent. below the current price of primes. But on the above quoted 1924 figures of the Tinplate Company of India they sold 6½ per cent. of their make at 12½ per cent. below the

price of primes and 12½ per cent. at 29 per cent. below the price of primes. This is utter suicide for any commercial enterprise. Although to some extent these figures may be somewhat improved in course of time, the Welsh Manufacturers emphatically declare from their experience that the waster problem will continue to be fatal to these works. It should be borne in mind that a "waster" is merely an imperfect plate. One spot is enough to cause a plate to be rejected as a prime. The above figures do not appear to account for all the wasters made, as the evidence shows that the percentage of wasters is about 22 per cent. This is not high, and probably would be higher under the conditions referred to in Section D. Although the Welsh Manufacturers manage to keep within about 15 per cent. it is understood that in America it is about 22 per cent. A question and answer on page 138 where the question of wasters occurs is correct and instructive.

*President.*—"If you tried to make a variety of sizes it would cost you more, would it not?"

*Mr. Bateman.*—"Yes."

21. The problem of the disposal of wasters at economical prices is a fundamental one for Tinsplate Manufacturers. Many projects by Oil Companies or other large consumers for establishing their own tinsplate works in South Wales have had to be abandoned because of this problem of "wasters" disposal. The American Manufacturers are finding great difficulty in this, and there is at the present time an acute controversy between the associations of American Cannery and Tinsplate Manufacturers, because the latter have to try to force the former to take a percentage of wasters with the primes. At times even the Welsh Manufacturers are inconvenienced by having to hold stocks of wasters for a time until the world market can absorb them. That absorption is only possible because the Welsh Manufacturers have a multitude of miscellaneous merchants and agencies distributed in every country, who can find consumers of wasters. A single concern like an Oil Company, without knowledge of and connections with such a general world trade cannot from Wales, America, or India deal successfully with wasters. This is a peculiar commercial problem that novices to the trade are prone to leave out of account, and, like the Burmah Oil Company, when they go thus blindly into this intricate business they discover the fatal barrier to the commercial success of tinsplate manufacturing.

22. They have started in India too precipitately and too soon. There may come a day when the trade in India will have developed on general lines in such a way as to solve this problem. Obviously what needs to be done is to push in every way the expansion of the general use of tinsplates by a variety of Indian trades. Then there may be a business in tinsplates in India, able to maintain local manufacture. When that time arrives the Welsh Manufacturers may be even more eager than the Burmah Oil Company to establish works in India for the trade. It is not a sound policy for the development of Indian trade and employment to hamper and check development and tax the community because works have started many years too soon for the business. By cheapness and independent trading, gradually bringing in large numbers of Indian merchants to foster the multifarious openings for the trade, the point of success may be reached in fifteen or twenty years. But by chaining India to a monopoly manufacturer like the Burmah Oil Company under the repressive control of protection, it may be fifty or sixty years before the point is reached.

23. To sum up:—The Welsh Manufacturers see failure inevitable for many years, because the two years' operation of the Tinsplate Company of India shows that it cannot comply with the basic condition laid down for a grant of protection because of:—Dear labour, extra cost of essential materials, the calamitous factor of wasters. Those factors taken together are fatal and irremovable. The Indian market for tinsplates must develop as a contributory to various expanding trades and agriculture, before conditions of successful local manufacture become possible. Such a development will

be held up for an indefinite period of years by continuing protection to cover the insuperable obstacles of the existing works of the Tinplate Company of India.

**C. (3) THAT THE TINPLATE COMPANY OF INDIA HAS FAILED TO PROMOTE A PERMANENT PROFITABLE INCREASED PRODUCTION OF INDIAN MATERIALS.**

24. Of the materials necessary for the manufacture of Tinplates about half (the steel bar and coal) are Indian production. The other half have to be imported. Coal is about 2 per cent. of the cost of manufacture. As to the steel bar, the 25-year contract of the Tata Iron and Steel Company, Limited, with the Burmah Oil Company is a detriment to Indian steel production, and in view of the operations up to now it is reasonable to expect that the Steel Company would be glad to be released from the contract. The other essential materials have to be imported. Some are given in the Works Manager's schedule already quoted.

**C. (4) THAT THE TINPLATE COMPANY OF INDIA HAS NOT SATISFACTORILY OPENED NEW PERMANENT AVENUES FOR INDIAN LABOUR.**

25. The restriction of general labour due to the check imposed by protection has been dealt with. This entirely outweighs the labour employed in manufacturing dear tinplates.

26. The table of labour and wages given in evidence, 1924, page 27, shews : that 79 imported Welsh workmen are being paid many times the wages they would receive to-day in Wales, as the subjoined comparative table shews:—

COMPARISON OF AVERAGE WAGES, PER HEAD, PER MONTH.

|                                | Imported | Wales | Indian |
|--------------------------------|----------|-------|--------|
|                                | Rs.      | Rs.   | Rs.    |
| Bar Department . . . . .       | 1,000    | 204   | 30     |
| Hot Mills . . . . .            | 1,222    | 197   | 35     |
| Shearing and Opening . . . . . | 1,400    | 115   | 37     |
| Black Pickling . . . . .       | 1,150    | 91    | 42     |
| Annealing . . . . .            | 1,150    | 197   | 77     |
| Cold Mills . . . . .           | 1,050    | 57    | 35     |
| Tin House . . . . .            | 1,150    | 158   | 36     |
| Maintenance . . . . .          | 1,700    | 139   | 30     |

Reasons have been given why a number must continue to be imported on the same extravagant basis. Those 79 workmen are paid more than the whole 2,410 Indian workmen. If the works are to succeed, this lopsided extravagance must continue, and they will not be able to afford a more reasonable remuneration to the Indian workmen. It may be said that 30 Indian workmen are at present only equal to one imported workman. This is inconsistent with the boast that in some cases two Indian men at the rolls have developed the necessary skill and have displaced the imported workman. Why, then, should those two Indians be only paid Rupees 36 (or less) per month each, and the imported man they displaced be paid Rupees 1,222 per month for the same performance? Even if the two are still inferior, and even if the imported man is paid three times too much, is there any commercial justification for the wide margin between Rupees 1,222, even divided by three into Rupees 407 and the total of Rupees 72 for two Indians? In this matter, as in so many others, there is an element of unreality about the whole organization of the Tinplate Company of India that would not be permitted in any British Colony. Elected Indian members of the Legislative Assembly on the two occasions when this tinplate question was debated,



asked why when protection was afforded for the purposes of a rich monopolistic company, some protection was not afforded to labour. This, under the startling circumstances, is a perfectly reasonable question to raise. The Indian consumer on 60,000 tons of tinplate, with a protectionist duty of Rupees 85 per ton, pays an extra Rupees 51,00,000 per annum. The 79 imported Welsh workmen take between them Rupees 11,52,000 per annum. And the Indian labourer, even when his attainment of skill and production is admitted, gets less than Rupees 3 per day. The average pay of the 2,410 is Rupee 1 annas 5 per day.

27. When the Welsh Manufacturers consider the question of the possibility of the permanent establishment of the commercial manufacture of tinplates in India, the labour costs appear to them to be dangerously unreal. As experienced industrial employers they have to reckon on the inevitable logic of the speeches already made in the Legislative Assembly. They anticipate that if protection is continued by the State, the State will be forced to stipulate protective conditions for the Indian workmen. The State will not be able to resist the force of the comparison between the wages of the European and Indian employees doing the same work with equal skill and output. In any event, they see that the foundations of wages are unsound, and must inevitably breed discontent and strikes, until there is a substantial levelling-up of the Indian wages. They must have regard to the fact that the International Conventions on Labour conditions in industries of this kind are gaining authority and influence in Asiatic as well as Western countries. They see that the attempt to found modern mechanical industries in India on terms that would be regarded as appalling degraded sweated labour conditions in Western countries is doomed to failure. They quite appreciate that to some extent wages in India will be substantially lower than those in the West for many years; but the existing rates paid by the Tinplate Company of India are far below any such comparison. They repeat that the present basis is unreal and unsustainable. They respectfully submit that the Tariff Board and the Government of India must attach considerable importance to the protests already made, and to the considerations herein that the Welsh Manufacturers, as prudent men of business, cannot leave out of account. There would be a powerful consensus of opinion amongst industrial and social leaders in all the industrial countries of the world that until India can found new industries with reasonable labour conditions, it would be better for her to wait, and not set up new elements that must breed unrest and revolution. These observations, however, are not based on such general grounds; but on plain business calculations that the present basis is indefensible, risky and unsure. Holding such views as to the inevitableness of a different scale of wages from the present, it is submitted that the present cost of production figures cannot be taken as the basis of proof of the success of the industry. The bearing of the fact that the Indian workmen have so far only been trained to repeat the production of one gauge, etc., has already been explained. They are not in a works which is engaged in the general manufacture of tinplates, and the men are not in a position to go elsewhere and offer their services to other manufacturers as tinplate workers.

C. (5) THAT IT HAS NOT BECOME AN "INDUSTRY" IN THE ACCEPTED COMMERCIAL SENSE OF THE TERM, AND IS THEREFORE NOT PROPERLY QUALIFIED TO RECEIVE FURTHER PROTECTION.

28. Originally the works were regarded as a joint venture of the Tata Iron and Steel Company and the Burmah Oil Company. It is implied in the early evidence of the 1923 Inquiry that the works would be an independent enterprise for the service of the general consumer on commercial lines. As events have developed, the Tata Iron and Steel Company, Ltd., have ceased to take any real participation in the business. The management of the works, the purchase of materials, and the sale of the product are in the hands

of the Agents of the Burmah Oil Company. The situation as to capital, dealt with elsewhere, is such that the original shares of the Tata Iron and Steel Company, Ltd., appear to have no value, and are to all intents and purposes wiped out. The character of the plates made are those required by the Burmah Oil Company. With almost negligible exceptions the plates have been sold to the Burmah Oil Company. It was admitted in Evidence 1924, page 65, that the works and the Tinplate Company of India were really mere subsidiaries of the Burmah Oil Company. In the section dealing with wasters and inspection, a serious public aspect of this situation is dealt with. The Burmah Oil Company as manufacturers, and the Burmah Oil Company as debenture holders and consumers are in effect one and the same. It happens that through trade understandings and agreements, the Burmah Oil Company occupies a monopolistic position in the distribution of oil in India, and they are in a position to pass any losses in the manufacture of tinplates through their general financial balances, and if needed, to pass on such losses, or higher costs of tinplate to the consumers of oil, either in an increase of the price of oil, or in a neglect to reduce such price when the conditions of their trading profits might otherwise justify such reduction. As has been shewn above, the net cost of the cans to the Burmah Oil Company is only about three Annas. The Burmah Oil Company by securing high protective duties on tinplates do not pay any of those duties on the 30,000 to 36,000 tons of tinplates they are making for themselves. The protective duties are paid by other consumers, so that the Burmah Oil Company as manufacturer can be linked with the Burmah Oil Company as consumer to work out their private scheme with the assistance of the Government to prevent other Oil Companies distributing oil in cans made from cheaper tinplates. Obviously the *ad misericordium* financial pleas of the Burmah Oil Company as manufacturers cannot be detached from the financial accounts of the Burmah Oil Company as consumers when those financial pleas are made the basis of an appeal to the State to penalise their competitors in the oil business for their benefit. It seems a reasonable guess to make that in this intricate business the Burmah Oil Company arranges that "what it loses on the swings it gains on the roundabouts." It is submitted that the whole financial affairs of the Burmah Oil Company are relevant to the consideration of their claim. The main point of submission on this head, however, is that in no country can a precedent be found where a firm in a monopolistic position like the Burmah Oil Company, having chosen to control works to manufacture for its own purposes, has been able to penalise its business competitors by the aid of the State through the imposition of tariff duties on the manufactures carried on in that works.

29. The extension of that punishment to importers of varieties of the goods not produced at that works surely carries the matter outside the range of any precedent, and becomes entirely incomprehensible. If the Burmah Oil Company, or any other firm, wishes to complete the monopoly control of every requirement of its business by having its own works, surely that is a private affair. That is not an "industry" as generally understood.

30. The Burmah Oil Company has enormous financial resources, and it is in a position to spread any alleged losses on the tinplate containers very thinly over its general business. If any added cost has to be collected from the Indian consumer the Company can do it quite easily itself without asking the State to collect it as a tax imposed on business competitors, and also on consumers outside such competition. It is submitted that this enterprise, as it has now revealed itself in operation, is not a proper one for "protection" in the form applied for. Suppose the figure of this protection were raised so high as to force all users of tinplate to purchase from the local Indian works. Then competing oil distributors would be forced to reveal the ups and downs of their trade by revealing their barometer of sales (the tinplates) to their rivals, the Burmah Oil Company. This is obviously undesirable. And what of the requirements of those who need varieties of tinplate unobtainable at the Burmah Oil

Company's Works? This eventuality again enforces the point that this is not a proper case for "protection" by any Government.

- C. (6) THAT ANY FURTHER TEMPORARY PERIOD OF PROTECTION WILL NOT PREVENT EVENTUAL FAILURE TO CONTINUE, AND THEREFORE INVOLVES SERIOUS INJURY TO INDIAN INTERESTS WITHOUT COMPENSATING BENEFITS.

31. It is submitted that sufficient evidence on this point is already revealed in the various considerations under preceding heads.

- C. (7) THAT NO SERIOUS DISADVANTAGE TO INDIA WILL FOLLOW FROM THE WITHDRAWAL OF PROTECTION.

32. It appears to outside observers that the Burmah Oil Company can carry on its own manufacture by its own resources and commercial position, if it wishes to do so for purely commercial reasons. The tinplate trade in India can then be free to develop to the best advantage side by side with the development of the general trades and agriculture, as already represented. The field will be open for independent firms in India or other manufacturers to begin, perhaps in a smaller way at first, to set up works of a genuine commercial type like that of every other country, for the supplying of all or any consumers with various varieties of tinplates. These works would be a legitimate "industry" like the Tata Steel Works, or Cotton, or Jute Mills. In the meantime, the Welsh Manufacturers will guarantee the most favoured terms and consideration for Indian consumers of all kinds. Their keen rivals manufacturing tinplates in America, France, Germany, Italy and Spain will check and compel such a policy in any case. The big point in this connection made in their 1923 application by the Tinplate Company of India was that of the recent great war. That point has no substance in it, and can be ruled out by the Tariff Board. Suppose for the sake of argument the present works had existed in India during the last war. The same difficulties of shipping that reduced the supply of tinplates to India would have made manufacture impossible in India. The supplies of tin, of palm oil, of sulphur, and other materials as well as of rolls and repair parts would have been cut off. As a matter of historical fact India received throughout the war a "ration" of tinplates higher than that of any British Dominion or of Great Britain itself, and at a fixed government controlled price—an immense benefit. The imports in 1914 were, from the United Kingdom 52,747 tons, United States of America, 37 tons, other countries, 12 tons. Not a single box of tinplates was supplied to the Oil Companies in Great Britain in the last two years of the war for the distribution of oil for civilian purposes. There were very serious shipping difficulties in procuring even a partial supply of tin, palm oil, etc., for the Welsh works. Does the Burmah Oil Company think that if they choose to make their own tinplates, and cease all purchases from Wales for a period of years, and then, when similar difficulties to the last war make their own operations impossible, and hamper shipping facilities, that they can come to Wales in the emergency and get better treatment than in the last war? And if, as appears to be suggested by the trend of the 1923 Evidence, this question of war is to be taken seriously as a reason for and against "protection" for tinplates, it may be asked in what quarter of the globe is such a war most likely to break out? If the regular commercial avenues are kept open to all countries, India may get the tinplates she requires in such an emergency, but if they have been closed, the works of the Burmah Oil Company in India will be a very poor security to rely on for supplies. The same agencies that will have to be relied upon to keep open the essential materials for production in India will be able more surely to keep open supplies of Tinplates from Wales. During the last war, as during peace, Welsh tinplates were shared out fairly to all her customers at a uniform price as low as possible. India will not suffer any disadvantage in future.

## D

## STATEMENT AS TO THE ABSENCE OF INDEPENDENT INSPECTION FOR THE PROTECTION OF THE PUBLIC.

33. In every tinplate works "sorters" form a fixed element of the *personnel*, and the "sorting room" is a vital part of the organisation. The sorters are instructed by the management from time to time as to the factors they are to take into account when sorting plates into primes and wasters. Extra strict sorting would lead to plates being put amongst the wasters for the slightest mark, spot, or gauge variation, etc. Less strictness of sorting would lead to such plates being packed as primes. In short, the management can, as it may choose, vary the percentage of wasters very considerably, or ship as Prime plates what other firms would exclude. There is, however, an independent check on this important matter of quality in Wales. There is a large number of regular independent professional "samplers." It is the practice for purchasers to nominate firms of "samplers" to inspect consignments of plates before they are shipped. These "samplers" usually take a number of boxes as average tests, and sort out the plates. If there is a substantial percentage of plates they consider to be below the standard of primes; or if in their opinion for any reason the consignment is not "good delivery" according to specification, they reject the consignment. In this way the purchaser is protected, and a proper standard is maintained which governs the "sorting room" of the various works. When, for instance, the Burmah Oil Company buys plates from Wales they have them inspected by independent "samplers." By this means they are protected against the undue inclusion in boxes of "primes" of plates that should be "wasters." In view of the thousands of workers in tinplate scattered throughout India who have built up their businesses on the tinplate in the second-hand kerosene cans this is a very important matter. The cans made from Welsh tinplate are from "Primes" that have been subjected to the inspection of the "samplers." But in the works in India the agents of the Burmah Oil Company as manufacturers are those of the Burmah Oil Company as consumers. They sort into primes and wasters without any standards laid down by independent "Samplers," and without such inspection of each individual consignment. They can make a low or a high percentage of wasters as it suits their purpose. Their figures as to wasters have, therefore, for the calculations of the Tariff Board an element of uncertainty. The purchaser of kerosene cans has no protection as to quality from independent inspection. Much more important is the general consumer, especially if he buys tinplate for packing perishable goods. Surely if the State intends to force upon the Indian public under the pressure of high tariffs the purchase of the tinplates of the Tinplate Company of India that public should be protected as they have been in the past, by independent inspection similar to that provided by the "samplers." The Tata Iron and Steel Company have their rails, etc., tested and inspected and the Tinplate Company have their steel bars inspected. It is respectfully submitted that a condition of any grant of protection should be submission of all consignments of tinplates to independent inspection.

## E

## THE EXEMPTION FROM THE PROTECTIVE DUTIES OF THE VARIETIES OF TINPLATES NOT REGULARLY MANUFACTURED DURING THE TEMPORARY PERIOD BY THE TINPLATE COMPANY OF INDIA.

34. Exemption is hereby applied for:—

- (a) For all tinplates other than the two "oil" sizes,  $18\frac{1}{2} \times 14$  and  $20 \times 10$ , which are those constituting almost the entire production of the works of the Tinplate Company of India. In order to meet any question of evasion it is suggested that a further qualification may be added by such words as "or any double

size of such lengths and widths." No other attempts at evasion would be economical. The extra cost should prohibit manipulation of sizes. This exemption would be simple for customs purposes, as the shape and size of the boxes are characteristic and easily identified.

(b) For all charcoal qualities of tinplates.

(c) For taggers.

If any further regulations to prevent evasion are required power might be vested in the Customs authorities to claim the duties on any tinplates that have been made up into five gallon cans similar to the standard kerosene can. The above distinctions can be administered without serious difficulty by the Customs Officers, as similar distinctions are in other countries. These exemptions are applied for in accordance with the declarations made that there is to be no interference with classes of goods not made in India.

## F

### APPLICATION IN THE EVENT OF A RENEWAL OF PROTECTION FOR PREFERENTIAL RATES OF DUTY FOR WELSH TINPLATES.

35. If the Tariff Board should recommend

(a) a continuance of protection, and

(b) on all tinplates as at present,

then the Welsh Manufacturers beg for consideration of their claim to preferential rates of duty. The British Dominions grant such preferential rates on Welsh tinplates. The conditions such as for Australia are based on invoice declarations, as per copy submitted. There is no difficulty from an administrative point of view in working such a scheme of preference. The Welsh Manufacturers submit that the application of protection to tinplates is a special thing, and preferential rates might be granted without raising the general principle of Empire preference. Already the operation of the protective duties has cut off the orders we used to receive from the American Oil Companies for distribution in India, and those have passed to the American Tinplate Manufacturers. The trade with India was until the war practically entirely with the Welsh Manufacturers, although there was an open market, and, as has been stated, during the war India was preferentially treated as to supplies. It is submitted to be against the interests of India to entirely break off the trade connections with Wales, as there may come a time again when India will have to fall back for essential supplies on the Welsh Manufacturers. If the Tariff Board does not recommend according to either (a) or (b) this appeal is not pressed.

### IMPORTS INTO INDIA (GOVERNMENT OF INDIA FIGURES).

|                | From<br>United<br>Kingdom. | From<br>U. S. A. | From<br>Others. | TOTAL. |
|----------------|----------------------------|------------------|-----------------|--------|
| 1914 . . . . . | 52,787                     | 37               | 12              | 52,836 |
| 1923 . . . . . | 35,739                     | 4,006            | 876             | 43,621 |
| 1924 . . . . . | 37,496                     | 6,587            | 7               | 44,090 |
| 1925 . . . . . | 25,892                     | 10,534           | 103             | 36,529 |

## G

### COMPARATIVE STATEMENT AS TO THE EQUITABLE BASIS FOR CAPITAL CHARGES IN THE EVENT OF A RENEWAL OF PROTECTION.

36. In the Evidence 1925, page 128, it is shown that the capital invested in the Golmuri Works is:—

|                      | Rs.                        |
|----------------------|----------------------------|
| Shares . . . . .     | 75,00,000 at 6 per cent.   |
| Debentures . . . . . | 154,00,000 at 10 per cent. |

In the reports of 1924 and 1925 this capital was admitted for the purpose of establishing the deficiency in revenue, and protection was granted therefore to enable the Company to pay interest at 10 per cent. on Rs. 68 lakhs of working capital, and the Tinsplate Company of India hoped to meet a further 10 per cent. on Rs. 86 lakhs and 6 per cent. on Rs. 75 lakhs. This arrangement has appeared to firms in Great Britain a rather extraordinary act of generosity on the part of a Government at the expense of its subjects who have to provide the funds by higher prices, when they have had regard to their own works that have had to be closed down, and to the losses they have had to bear, and the capital they have had to write off. But that is a principle upon which the Welsh Manufacturers make no further comment. The point that they respectfully urge is that when the return on capital is brought in as a factor for determining the measure of protection, the amount of that capital should be limited to some figure that has a commercial basis. No tinsplate works of six mills of the type of those in India (even with allowance for the possibility of the annealing furnaces or other auxiliary equipment being capable of dealing with a future expansion) would be expected in Wales, America, or anywhere else to pay dividends on a capital of £1,700,000, or anything like 10 per cent. on £500,000. Even for new works to-day Welsh Manufacturers for a works of equal capacity would not face overhead charges on capital beyond £450,000. It is suggested that if protection is to be continued, the Company should write down its capital to some such commercial figure, or that so far as the Tariff Board is concerned the basis of calculation should only be on such a commercial basis. It would be regarded as only just and reasonable by commercial men to-day, when the most powerful corporations have had to write off enormous portions of their capital as a result of miscalculations or losses during the war, or the subsequent years, that the Burmah Oil Company should be expected to do likewise before they come forward for Government aid.

## H

### STATEMENT AS TO MISLEADING HISTORICAL STATEMENTS IN THE 1923-1924 EVIDENCE RELATING TO THE MANUFACTURE OF TINPLATES IN AMERICA.

37. Much point was made in the original 1923 application of the Tinsplate Company of India of the relation of protective tariffs to the development of the manufacture of tinplates in the United States of America (see pages 17-19 and 52-53, Evidence 1924). The Tariff Board appears to have been much impressed at that time with those statements made by the representatives of the Tinsplate Company of India. The crux was the assertion that it was only as a result of the McKinley Tariff of 1891 that tinplate manufacture really got going in America. The whole of these representations were misleading and historically inaccurate. This is proved by the following list of the protectionist duties at various dates as follows:—

|      |           |                   |
|------|-----------|-------------------|
| 1861 | . . . . . | 2 cents per lb.   |
| 1883 | . . . . . | 1 cent per lb.    |
| 1890 | . . . . . | 1 cent per lb.    |
| 1891 | . . . . . | 2·2 cents per lb. |
| 1894 | . . . . . | 1·2 cents per lb. |
| 1897 | . . . . . | 1·5 cents per lb. |
| 1922 | . . . . . | 1 cent per lb.    |

Up to 1894 the American production had only reached 45,635 tons but by 1896, under the reduced tariff, it had increased to 120,603 tons. What was the reason for the rapid development after 1895? It was not the tariff because the above table shows a higher tariff as far back as 1861. The

basis was the revolution in canning due to the triumph of machinery and the use of tinplates for oil distribution by the Standard Oil Trust. Canning split off from canning as a separate industry about 1885. Every year new processes and machinery were brought from invention into commercial use, and a special machinery industry for canning and making cans developed until in 1896 the modern sanitary can came into use. An instance of the growth can be seen in the figures as to the production of canned tomatoes: in 1891, 3,332,365 cases; in 1894, 6,456,979; in 1925, 19,770,000. When the McKinley Tariff was the subject of the political campaign preceding 1891 several Welsh Manufacturers established tinning plants or "dipperies" in the United States. They took over numbers of skilled Welsh tinplate workers, who finish the blackplates shipped from Wales. The immediate effect of the McKinley duty was to raise the price of tinplate over a dollar a box. Some progress was made by American manufacturers by recruiting workmen from Wales in rolling and tinning their own plates between 1890 and 1892, but it was very small. Then there came the big drop in the price of steel in the United States of America, and an increased production. Steel fell from £5 per ton in 1892 to £4 in 1894 and to £3 6s. 4d. in 1895. There was also a heavy fall in internal freight rates. In 1894 the Wilson Tariff Act reduced the tinplate duty from 2.2 cents per pound of the McKinley Tariff to 1.2 cents per pound, but imposed the same duty for finished blackplate. In 1897 the Dingley Tariff Act raised the duty again to 1.5 cents per pound. Between 1898 and 1900 the great steel trusts were formed, including the American Tinplate Company in 1898, and the American Sheet Steel Company in 1900. The powerful American Can Company in 1900 amalgamated most of the can-making companies. All the time, continuing to the present day, the large quantity of tinplate for the oil exports and the canned goods exports was free of import duty. But from 1896 that free trade was steadily lost by the Welsh Manufacturers. The American makers captured it obviously for other reasons than protective tariff. The influence of the misleading statements of the Tinplate Company of India on the minds of the Tariff Board was impressive in relation to the question of trying out temporarily a protectionist policy in India. It is submitted that the facts about the American parallel teach the opposite lesson to that conveyed by the incorrect statements of the Tinplate Company of India. The American facts demonstrate the contention that you cannot build up a tinplate industry by means of protectionist tariffs as such. They show that you must create a general market first, and have favourable conditions as to materials. That is the burden of the argument in Section C of our Evidence. That argument is strongly sustained by these historical facts. When India has reached the point that her requirements for tinplates can sustain and encourage a tinplate industry, such an industry can be successfully undertaken. Tariffs cannot be a substitute for business, but they can delay the development of the industry for thirty years, as in America. India for the present, needs a free market and cheap tinplates to encourage the use of tinplates generally, and in starting a canning industry for her produce, as in America. Afterwards real progress can be made.

## I

## STATEMENT AS TO THE CONFUSION IN THE CALCULATIONS BASED ON THE 1923-1925 EVIDENCE.

38. It has been impossible from the statements published in the Reports and Evidence of the Tariff Board to understand the statistical basis on which the amount of the duty has been calculated. The principle followed was clearly laid down: First, the cost of production was to be arrived at allowing depreciation, interest, etc., as agreed by the Tariff Board; second, the imported price of tinplates from Wales F.O.R. Shalimar was

arrived at. This was supposed to be the same as the price paid to the Tinsplate Company of India under contract by the Burmah Oil Company. The difference between the above two figures was taken as the measure of the amount of duty. There appears to have been much confusion in the original calculations in 1923. In the Report of November, 1924, the previous figures were taken for granted and automatic adjustments to meet the difference in the rate of exchange were made as the basis of recommendation. For the purpose of the 1925 Report a fresh investigation of the figures was made, but the plan and method of calculation was the same as that of 1923. So far, therefore, as the 1923 method was confused so were of necessity the subsequent calculations based on those of 1923.

39. First—Cost of Production. The root cause of the baffling confusion of the various costs given from time to time is due to the system of analysis adopted at the works. Owing to the many varieties of plates produced at Welsh works it has been the practice to endeavour to arrive at costs by equating all production to that of a basis box of 112 sheets 20 by 14 and a weight of 108 lbs. But as the Golmuri works were practically confined to oil sizes, a theoretical basis of 106 lbs. basis was taken for equating costs. When the “works end” dealt with “boxes” it therefore meant, theoretically, 106-lb. boxes. It would have made the calculations much simpler if the two kinds of boxes were taken as the actual basis of calculation. The indications of the way the Tinsplate Company of India have been themselves bothered by the confusion can be seen throughout their evidence. A striking instance is the substantial difference in the cost figure of their Statement of January 13th, 1925, and that of April 30th, 1925. Such an enormous difference in so short a time cannot be accounted for by any specific factors. It can only be attributed to a realisation by the officers of the Company of the unreality of their figures, and a genuine effort to straighten out the confusion. It is not possible to sort out the details that made for the confusion without a complete investigation by a costings expert. There is, however, one tangible illustration of the unreality of the various calculations in page 57 of the evidence of September 10th, 1923. It is there stated that 10 per cent. is added to the general cost of the tinsplates for waste and the loss of the prices of primes for wasters. The confusion in this was realised, and in the Statement of May 16th, 1924, paragraph 11, they state that they have abandoned this, and taken “actual costs,” transferring the “wasters” to the price calculations. In view of the constant substantial differences of those “actual costs” in statements within short periods, and of the fact that the original 10 per cent. added was double what it should have been, there is *prima facie* cause for doubting reliability of all the costs figures, and for not relying on the attempts at analysis and theoretical equating. The serious confusion, however, has arisen when comparisons were made between the cost figure and the price figure.

40. Second—The Imported Price. This figure was supposed to be the price that the Burmah Oil Company would have to pay for Welsh tinsplates F.O.R. Shalimar; and that was supposed to be the price received by the Tinsplate Company of India. The calculation was arrived at by taking Welsh f.o.b. prices as quoted in trade journals and adding 2s. 1d. per box for freight and insurance and Rupee 0.25 for landing charges. A serious omission was made. Imported plates from Wales are liable to an additional charge of 1s. 3d. to 1s. 6d. per box for tin-lining and hooping. On page 138 of the 1925 Evidence it can be seen that the President of the Tariff Board discovered an inconsistency in the figures between two of the statements, and the witness could not explain it. Subsequently an explanation was put in, in paragraph (4) of which there is the admission that this charge had not been included previously. So the 1923 basis of figures was wrong, and very seriously wrong, owing to this item alone, because an addition to the price of Rupee 1 per box or Rupees 20 per ton would have made an enormous difference in the calculation of the extra import



duty, which was eventually fixed at Rupees 20 per ton. Apart from the above definite error, there appears to be confusion throughout in the relation of the price figure to the cost figure. When the "works" give evidence as to "boxes" it is always concerned with the theoretical basis box of 108 lbs. But when the Calcutta office is dealing with "boxes" it often means the actual selling boxes on which the sale prices are based. This is obvious, for instance, on page 137 of the 1925 Evidence, where the office witness states that 20 boxes weigh one ton. If the "works" basis box were taken it should be 21 boxes. An extra basis box in every ton—a big difference of Rupees 16 per ton. The 20 boxes per ton would be correct for the "selling" boxes. Running as a continuous thread through the Evidence as to price is the indication that in that connection "boxes" mean the actual boxes sold to the Burmah Oil Company. The confusion increases, therefore, when the price of the Welsh basis box of 108 lbs. is taken as the basis of comparison with the "works" basis box, because that is not the comparable Welsh price.

- (1) The Welsh basis box is 112 sheets, 20 by 14 inches, 108 lbs.
- (2) The Oil Plate box is 124 sheets, 18½ by 14 inches, 110 lbs. or
- (3) The Oil Plate box is 225 sheets, 20 by 10 inches, 156 lbs.

The prices of (2) and (3) are always a regular proportion higher than (1). For example, when (1) was quoted at 19s. 3d. then (2) was 20s. and (3) was 28s. per box, a difference of 9d. and 8s. 9d. respectively. The average prices paid by the Burmah Oil Company should be compared with the average for oil plate boxes, and not with something which they do not buy, and with which comparisons are fictitious and misleading.

*Copy of Declaration on Oath.*

STAMP.

I, Hugh Clement Thomas of 28 to 29, Royal Metal Exchange in the County Borough of Swansea, Assistant Secretary of the Welsh Plate and Sheet Manufacturers' Association (hereinafter referred to as "the Association"), solemnly and sincerely declare as follows:—

1. I have for more than eighteen years last past been the Assistant Secretary of the Association which comprises in its Membership the producers of ninety-eight per cent. of the Tinplates manufactured in Great Britain. I have in that capacity taken an active part in all the enquiries which have been made and discussions which have taken place in reference to wages costs labour and other matters and questions relating to the Tinplate Trade and as the result of the experience which I have so acquired I have tabulated the information and statistics which are hereinafter set forth and which are to the best of my knowledge, information and belief as correct as it is possible to make them.

2. The average gross weekly wages per operative per shift of eight hours throughout all Departments of the Tinplate Trade during the period of three calendar months ending the 31st March 1926, was 10s. 7d. made up in the following Departments:—

|                                | Per shift. |    |
|--------------------------------|------------|----|
|                                | s.         | d. |
| Bar Department . . . . .       | 14         | 4  |
| Hot Mills . . . . .            | 13         | 10 |
| Shearers and Openers . . . . . | 8          | 1  |

|   | Per shift. |
|---|------------|
|   | s. d.      |
| Black Pickling . . . . .  | 6 5        |
| Annealing . . . . .   | 13 10      |
| Cold Rolling . . . . .  | 4 0        |
| Tinhouse . . . . .  | 11 1       |
| Maintenance Department including all labour not<br>enumerated above and including Engine Drivers<br>and Firemen . . . . . | 9 9        |

3. The average wages cost of tinplates during the same period was 4s. 1·3d. per basis box.

4. The length of service of the workmen at present employed by three firms in the Association is as follows:—

*Works "A".*

- (1) 21·6 per cent. of males have over 30 years' length of service.
- (2) 17·1 per cent. of males have over 20 years' length of service.
- (3) 28·0 per cent. of males have over 10 years' length of service.
- (4) 15·4 per cent. of males have over 5 years' length of service.
- (5) 17·0 per cent. of males are under 21 years of age.

*Works "B".*

- (1) 18·6 per cent. of males have over 30 years' length of service.
- (2) 17·0 per cent. of males have over 20 years' length of service.
- (3) 26·0 per cent. of males have over 10 years' length of service.
- (4) 22·2 per cent. of males have over 5 years' length of service.
- (5) 19·3 per cent. of males are under 21 years of age.

*Works "C".*

- (1) 17·4 per cent. of males have over 30 years' length of service.
- (2) 8·5 per cent. of males have over 20 years' length of service.
- (3) 22·2 per cent. of males have over 5 years' length of service.
- (4) 22·0 per cent. of males have over 5 years' length of service.
- (5) 23·0 per cent. of males are under 21 years of age.

5. From the Reports from Tinplate Works of the cost delivered to them during the year 1925 of the following materials the prices appear to average as follows:—

|                                   | £ s. d.         |
|-----------------------------------|-----------------|
| Rolls . . . . .                   | 34 0 0 per ton. |
| Annealing Pots . . . . .          | 16 7 2 „ „      |
| Mill Top Brasses . . . . .        | 113 11 6 „ „    |
| Mill Bottom Brasses . . . . .     | 113 11 6 „ „    |
| Mill Side Chock Brasses . . . . . | 106 15 9 „ „    |
| Cold Roll Brasses . . . . .       | 107 18 4 „ „    |
| Sulphuric Acid . . . . .          | 4 7 3 „ „       |
| Pink Meal . . . . .               | 2 1 5 „ „       |
| Zinc Chloride . . . . .           | 12 5 0 „ „      |
| Palm Oil . . . . .                | 41 7 1 „ „      |
| Cold Roll Grease . . . . .        | 15 15 7 „ „     |
| Hot Neck Grease . . . . .         | 13 6 1 „ „      |
| Lubricating or Gear Oil . . . . . | 0 2 4½ per gal. |
| Sheepskins . . . . .              | 0 9 4 each.     |

6. The average number of operatives employed per mill in all Departments is Fifty-nine made up as follows:—

|  | Per Mill. |
|--|-----------|
| Bar Department . . . . .   | ...       |
| Hot Mills . . . . .  | 19        |
| Shearers and Openers . . . . .   | 4         |
| Black Pickling . . . . .   | 2         |
| Annealing . . . . .  | 2         |
| Cold Rolling . . . . .   | 8         |
| Tinhouse . . . . .   | 13        |
| Maintenance Department including Engine Drivers<br>and Fireman . . . . . | 11        |

59

7. For a six mill Equipment similar to the Indian Works operating full three shifts and producing 30,000 tons of tinplates per annum I give the total number of employees required as between 710 and 720.

8. I estimate at £350,000 the total capital on which firms in South Wales would expect to pay reasonable dividends for a Works with a six mill capacity for about 36,000 tons of Tinplates per annum.

9. The number of odd sizes worked by the various Tinplate Works in South Wales is very considerable as appears from the following examples:—

- (a) One Works during the year 1925 manufactured 1950 different sizes and substances.
- (b) Another Works during the year 1925 manufactured 581 different sizes and substances.
- (c) Another Works manufacture on an average 60 different sizes and substances per week.
- (d) Another Works manufacture on an average 579 different sizes and substances per annum.

10. The number of rates which have been fixed to cover the various operations, sizes and substances worked in the Tinplate Trade number over 1,800 and these are embodied in a list of wages drawn up by the Joint Industrial Council from time to time and issued to the Employers and Employees.

And I make this Solemn Declaration conscientiously believing the same to be true and by virtue of the provisions of the Statutory Declarations Act, 1835.

Declared at the County Borough of Swansea this 28th day of June 1926 } HUGH CLEMENT THOMAS.  
Before Me

JAMES WOODS,

Commissioner for Oaths.

## III.—THE IMPERIAL TOBACCO COMPANY OF INDIA, LIMITED.

*Letter, dated the 15th July 1926.*

Should the Board recommend any further increase in the import duty on tinsplate, we hope that they will exempt those on the basis weight of 70 lbs.

We are large users of this class of tinsplate, for packing cheap cigarettes. We should be only too willing to purchase our requirements from Indian manufacturers if we could get them, but we are advised by the largest tinsplate manufacturers, The Tinsplate Company of India, Limited, that there is no immediate prospect of their being able to roll tinsplates of this weight.

If, therefore, the duty on this particular weight is further increased, it would only go towards increasing the cost of our manufacturers, without in any way benefiting the tinsplate manufacturers.

If, by paying an increased duty, we are in common with other users benefiting a vital industry, we have no objection at all, but we do object to having the duty increased for protective purposes when the local manufacturers are unable to supply the Indian manufactured article.

We therefore hope that, if you propose to recommend any further enhancement of duty on tinsplates, you will recommend that the 70 lb. basis weight be omitted from such enhancement of duty.



## IV.—THE TATA IRON AND STEEL COMPANY, LIMITED.

*Letter, dated 12th/18th October 1926.*

With reference to the undertaking given you in Shillong that this Company and the Tinplate Company of India, Limited, would endeavour to come to an arrangement regarding their present contract for the supplies of steel, we have the honour to inform you that an agreement has been made for the sale to the Tinplate Company of their requirements of steel by this Company at Rs. 83 per ton during the period of protection. A further agreement has been made regarding subsequent supplies for the remaining period of the present contract. We understand that the Tinplate Company of India, Limited, have already informed you of this and they have asked us to confirm it to you.

The agreement between us is that the price of the raw material, namely, Rs. 83 per ton, shall be paid either f.o.r. the Steel Company's works or f.o.r. the Tinplate Company's works according as the price taken by the Tariff Board in their Report on protection to the tinplate industry is Rs. 83 *plus* the cost of transport from the Steel Company's works to the Tinplate Company's works or Rs. 83 f.o.r. the Tinplate Company's works. The difference in the price of steel to this Company will be 12 to 14 annas which is the cost of transport between our works and the Tinplate Company's works. As our calculations have throughout been based on the prices received by the Steel Company f.o.r. works, we submit that the price of the raw material should be calculated f.o.r. the Steel Company's works which will slightly increase the price to this Company and we trust the Tariff Board will consider this.





## THE TINPLATE COMPANY OF INDIA, LIMITED.

ORAL.

**Evidence of Messrs. J. R. FARQUHARSON, A. K. FAULKNER and J. C. K. PETERSON, representing the Tinplate Company of India, Limited, the Burmah Oil Company, Limited, and the Tata Iron and Steel Company, Limited, respectively, recorded at Shillong, on Monday, the 21st June, 1926.**

*President.*—This morning I would like to explain to you briefly some of the important points to which the present enquiry of the Tariff Board would be directed. First of all, I think that it is necessary for us to see that all parties representing this industry are present. Who represents the Tinplate Company?

*Mr. Farquharson.*—I do.

*President.*—There is the Burmah Oil Company in its dual capacity, that is to say, as one of the partners in the Tinplate Company and as one of the purchasers under an agreement of its finished products. Mr. Faulkner, do you represent that Company in both capacities?

*Mr. Faulkner.*—Yes.

*President.*—There is also the Tata Iron and Steel Company in its double capacity, viz., as the other partner in the Tinplate Company and as the supplier of the principal raw material. Mr. Peterson, do you represent that Company in both capacities?

*Mr. Peterson.*—I do.

*President.*—You are partly an applicant for protection and partly a supplier of raw material to the Tinplate Company.

*Mr. Peterson.*—Yes.

*President.*—You are also in the same position partly as an applicant and partly as a purchaser of the finished product.

*Mr. Faulkner.*—Yes.

*President.*—There are two or three points which we have to clear up before we proceed any further. One is that in our previous enquiry we reserved for further consideration one very important point and that is set out in paragraph 31, page 124 of our main Report on Steel. We said "It would be premature to express a confident opinion, when the manufacture has been carried on for only one year, as to the eventual ability of the industry to dispense with protection altogether." That was one of the conditions laid down by the Fiscal Commission and we kept our minds entirely open on that point. Of course that condition has its own implications and I shall have to explain what they are. The second point is the special reference by the Government of India to us in which they drew our attention to the speech of the Hon'ble the Member for Commerce and Railways when he introduced measures for supplementary protection last February. He said "As the House knows this matter of protection for the Tinplate industry will be investigated again by the Tariff Board this summer, and I may say quite publicly that when the Tariff Board do investigate that question, we propose definitely to instruct them also to investigate the question of capital invested in this company and to investigate the question whether that capital ought not to be written down." Then after referring to other matters which are not material to the present enquiry, he said "I think there is grave reason

to doubt whether it will ever be a sound and healthy industry in India unless the question of writing down the capital of the company is very carefully considered and we propose to direct the attention of the Tariff Board to that question." These are two very important points. As regards the point whether the industry would eventually be able to dispense with protection altogether, that involves an examination firstly of your selling price to-day as compared with the price at which the competing article enters the country and sells in competition against you. Then, we will have to make an estimate as to both, that is, as to what your selling price in the future ought to be and what is the price at which the foreign article is likely to enter the country. The determination of your fair selling price necessarily involves an examination of your works costs. In the works cost the most important item is the cost of your principal raw material, i.e., tin bar in this case, and it was implied by the scheme of protection that it should be of local manufacture. That is the basis on which we proceeded. The price of that material depends upon certain agreements that you have entered into with the Tata Iron and Steel Company. If we are to go into that question, it would involve a construction of that agreement by this Board, and it is now clear that that very question is in issue before a High Court and I do not think that it would be right for this Board, whilst the matter is *sub judice*, to attempt any construction of that agreement. Without understanding the agreement and without arriving at the price of the principal raw material, it is obvious that the Board cannot proceed with the investigation. In these circumstances, if we are to be tied down to this agreement, I think it may be necessary for us to consider whether we should not postpone the consideration of this application *sine die* until the litigation is finished, because, as I say, it is quite obvious that the Board cannot, whilst the matter is being investigated in a competent court of law, possibly attempt to consider the very thing which is in issue. Unless therefore you can suggest any other way in which the Board can proceed with the enquiry we shall have to consider whether this application should not be adjourned *sine die*. I think I have informally explained this to both Mr. Peterson and Mr. Faulkner and it is for you to show cause why the Board should not adjourn the case *sine die*.

Mr. Peterson.—I take it that the Board are not interested in the question of the distribution of nett profits made or loss made in so far as the two partners are concerned.

President.—As regards the past. **गमन नये**

Mr. Peterson.—Even as regards the future, whether the Burmah Oil Company make more out of it or the Steel Company make more out of it, it does not affect the substantive question.

President.—The Board would naturally like to know how the price of the raw material is going to be affected by the agreement. If the Board cannot ascertain how the price of the raw material is going to be affected in future, it will be exactly in the same position as it is in to-day.

Mr. Peterson.—Can the Board not assume a provisional price, that is to say, the corresponding import price?

President.—No, at any rate, that is, at present, my opinion. If the industry is to use a local raw material which is included in the scheme of protection then the price of that raw material has to depend either on the domestic price or on some reasonable agreement between the parties which approximately represents that price.

Mr. Peterson.—So far as protection is concerned, can't you imagine another Tinplate Company and another Steel Company without any agreement between them?

President.—Ordinarily we should proceed on that assumption, but I think looking at the figures as far as I can understand them at present there is not much scope for another new Tinplate Company being started.

Mr. Peterson.—Probably not.



*Mr. Peterson.*—What I am trying to get at is this, that the Tinplate Company as manufacturers of tinplate are in the same position with regard to the supply of sheet bars as we are with regard to the supply of coal.

*President.*—I don't wish to discuss these details. Have you got any other suggestion? Make it and we would consider it.

*Mr. Peterson.*—I am only pointing out that in the case of our coal the Tariff Board proceeded on the general price of coal, not on the Railway Board's contract price. I was wondering whether in this case we could not proceed on the world price. Supposing no agreement existed.

*President.*—That is quite a different proposition. The agreement does, in fact, exist, and there is no immediate prospect of any other industry being started in this country and therefore the country is entitled to know what is going to happen to the industry under the operation of this agreement.

*Mr. Peterson.*—That is true. What I wanted to point out was that it might be possible to assume a reasonable price for steel. Supposing we charge a reasonable price for steel, then I don't see how the scheme of protection is affected by the fact that subsequently we have to pay back to the Tinplate Company something under some agreement we have made with them.

*President.*—I am not prepared to give my opinion on that point.

*Mr. Peterson.*—Without prejudice, I may tell you that the Burmah Oil Company and ourselves have almost agreed upon a fixed price basis for the next ten years. Of course I understand the Board's difficulties that they cannot ascertain a fixed price for sheet bars, but in all ordinary commodities the price will vary from time to time. For a period of ten years there will be little fluctuation in the price of sheet bars if we come to an agreement.

*Mr. Faulkner.*—There is no industry that is protected in the world that has a fixed price. That is impossible, is it not?

*President.*—I am not prepared to answer any questions!

*Mr. Peterson.*—We would say that the price will fluctuate somewhere round an average of about Rs. 80 a ton and we see every chance of arriving at some arrangement between the Burmah Oil Company and the Steel Company that will ensure that. That would settle all the outstanding differences, and the price would be fixed within a margin of 10 per cent. or probably within a margin of 5 per cent. up or down. But it will depend upon the fluctuation of the world prices of tinplates and possibly of sheet bars because we cannot say now what the price of tinplates is going to be ten years hence; that is not possible.

*Mr. Faulkner.*—Is not the existence of the present agreement your principal difficulty?

*President.*—If you make the price of your raw material dependent on some other factor which is itself quite uncertain, then I don't think we are much better off than under the present agreement.

*Mr. Faulkner.*—Can you suggest anything?

*President.*—I don't suggest anything. So far as I am concerned, what I really want to know is whether there is any ascertained price of the raw material upon which the Board can proceed. Then you bring in this adjustment which is the very thing which has brought about the litigation.

*Mr. Peterson.*—What period, Mr. Ginwala?

*President.*—I can't say.

*Mr. Peterson.*—The price for this year is fixed at Rs. 84 per ton definitely.

*President.*—This year is not what we are concerned with. It is the period commencing after 1926-27 that we have to consider.

*Mr. Peterson.*—I think the price is going to be something between Rs. 80 and Rs. 84 for the next year and the year after, but if you want me to go beyond

that I am afraid I cannot say because we shall in that case have to go into all sorts of considerations as to the movement of the world price. The idea on which we are at present working is to link up the price of the raw material with the price of the finished product. This is the principle on which most of these contracts are usually made in England. Many coal contracts are fixed on the price of pig iron prevailing over a certain period. Wages also are fixed on the price of pig iron and steel.

*President.*—We have seen the result of some of such agreements.

*Mr. Peterson.*—I think myself it is extremely difficult to.....

*President.*—It is for you to consider. If you are applying for protection, then I think it is incumbent on you as applicants to supply the Board with all the necessary facts which would enable it to come to a decision—facts that do not depend on some uncertain factors of which the Board can form no definite idea. I am not making any suggestions to you, I am just telling you what my difficulties are.

*Mr. Peterson.*—I leave it to the Burmah Oil Company and the Tinsplate Company. As I have said, there is some prospect of a settlement coming out of the proposals about a percentage price based on the average price paid for the raw material by the Tinsplate industry, which will result in a price somewhere between Rs. 80 and Rs. 84 for a period of five years. The Burmah Oil Company want to link that up to the price of the finished product. There may be great fluctuations in the price of the finished product.

*Mr. Faulkner.*—Perhaps it would be helpful if I were to state briefly what these proposals are. In the first place, we found some considerable difficulty over the profit and loss sharing arrangements in the present agreement. Recognizing that difficulty the Burmah Oil Company have made certain suggestions to the Tata Iron and Steel Company which are now being considered, the basis of which is that the price of the raw material (sheet bars) should be a percentage of the price of the finished article. I shall illustrate what I mean. At the moment the price of steel is, I think, roughly Rs. 80 per ton f.o.r. Swansea which is 30 per cent. of the price per ton of tinsplate at 19s. 1½d. per box of tinsplate f.o.b. Welsh port.

*President.*—What is precisely the price of sheet bar on that basis?

*Mr. Faulkner.*—Take the price of tinsplate 19s. 1½d. f.o.b. at Bristol or whichever port it may be. That is the selling price of tinsplate and in that there is a certain quantity of sheet bars. What you want to know is the cost of sheet bar in that; we have reckoned it at Rs. 80 a ton and it represents 30 per cent. of the price of the finished article. That is the basis of the proposal we have put before Mr. Peterson and he thinks there is a reasonable chance of the Burmah Oil Company and the Tata Iron and Steel Company coming to some re-arrangement of the contract which would provide a satisfactory basis for the future and to re-write the contract as from the 1st of January next year because the present price of steel is fixed. That is the main basis of our present negotiations.

*President.*—How much does a box contain?

*Mr. Faulkner.*—108 lbs.

*President.*—What is the equivalent of 30 per cent. of that in rupees?

*Mr. Faulkner.*—Rs. 79·35 per ton.

*President.*—It must bear some ratio to the Indian price.

*Mr. Faulkner.*—We might take instead of f.o.b. Bristol port, f.o.r. an Indian port, but we have not worked it out and so cannot say what the effect would be.

*President.*—Would it not bear some percentage to the Indian price?

*Mr. Peterson.*—I might explain how the negotiations started. The Tinsplate Company came to us in April or May and said they wished to alter the original agreement. The first point raised was that they wanted a very much larger tonnage than was provided for in the agreement—50,000 tons instead

of 35,000 tons of steel. We said that would naturally alter things, and we could not supply that under the original agreement. If we supplied that they would have to pay the market price for it. A further point was raised, namely, that they wanted a different specification of steel from what was mentioned in the agreement. On these two points the Board of Directors appointed a committee consisting of myself, Mr. Dinshaw and Mr. Ghandy and we made two definite offers to the Burmah Oil Company. We made two alternative proposals over a period of ten years if the existing agreement for the supply of steel was cancelled. The first proposal was that there should be a fixed price of Rs. 83 per ton of sheet bar for ten years and the second was that the profit and loss sharing agreement should continue but that we should get our actual works costs and should be entitled to a share of the profits but should not share any further loss. Under the second agreement the works cost should be Rs. 70 a ton *plus* some profit. They came back with two proposals. They said they did not like the price of Rs. 83 per ton because the price was too high, and they wanted it for a longer period. They did not like the price of Rs. 83 and they wanted to link it in some way to the possible fluctuation in world price of tinplates, that is to say, if there is a great fall in the price of tinplates they cannot manufacture at that price. That of course is reasonable enough. If there is a fall in prices we cannot expect people in India to use our steel to manufacture anything at a loss. We made a counterproposal that if a provision is made for a falling price in this way, provision must be made for a rise in the price of tinplate. It is on some such lines that I think a settlement is possible, that is to say, there should be a basis price somewhere between Rs. 80 and Rs. 83, and there will be a provision that if 30 per cent. or some such percentage of the f.o.b. price of tinplate should fall below this price, the price shall be 80 per cent. of such f.o.b. price so as to maintain an average price for ten years of between Rs. 80 to Rs. 83. That is the proposal we are considering at present.

*Dr. Matthai.*—Were these negotiations started before the suit was filed?

*Mr. Peterson.*—No, after.

*President.*—We do not wish to go into a subject which is a matter of litigation.

*Mr. Peterson.*—This is all without prejudice and I should prefer my statement not going down on your records. That is how the thing arose and it should result in a more or less fixed price for a period of ten years of somewhere near Rs. 80 a ton. I don't think there will be a considerable fall in the price.

*President.*—Would it be possible for me to look at it this way? There are two separate prices for the manufacture of tinplate and tin bars. Would it be possible for me to treat the two as one? We can get approximately the cost of tin bar.

*Mr. Peterson.*—You could treat it as a finishing department of the steel works.

*President.*—We would treat it as if tin bar was part of tinplate manufacture, as if tin bar was manufactured and then in the same works converted into tinplate. Would it be possible to consider the two as one?

*Mr. Peterson.*—I think so.

*President.*—Would it be possible for you to give us the necessary figures for that purpose?

*Mr. Peterson.*—We can work out the figures for you.

*President.*—Take the ordinary Welsh Tinplate Company. What does it do? It gets the tin bars from others.

*Mr. Faulkner.*—Yes.

*President.*—Instead of that a Company could make its own tin bar and by a continuous process turn out its tinplates.

*Mr. Faulkner.*—Yes.

*President.*—I just want to see whether it is possible to apply that principle. It might enable us to overcome the difficulty.

*Mr. Peterson.*—It would be possible. We would simply work out the proportionate cost.

*President.*—Then the logical consequence may be to take the tin bar out of your steel works and treat it as part of the Tinplate Company. Then you have got your own arrangement as to profit and other things.

*Mr. Faulkner.* It would be possible to do it that way.

*President.*—That I think may help us to come to some definite view. Then it becomes a question of profit and loss. You are two partners and you can do as you like.

*Mr. Peterson.*—You will find that will produce a slightly higher cost for your raw material.

*President.*—That of course we have to consider.

*Mr. Faulkner.*—Even if you did that, I take it, you would not be interested in the arrangements between the two partners.

*President.*—Nor if it is treated as a single concern. One partner makes his contribution in the shape of the tinplate plant. The other partner says, "I shall contribute the sheet bar plant. Let us share our profits in such and such a way on the two undertakings." It is possible to treat that purely as a domestic matter between yourselves, but to separate the tin bars from the tinplate entirely without having any definite basis for the price of the tin bar is more difficult. I am simply putting this as a suggestion. I am not expressing any opinion. It may be one way of dealing with it and then we can compare it with the actual proposals before us and see which is better.

*Mr. Peterson.*—Under the contract we have only to supply 35,000 tons of sheet bars to the Tinplate Company. With regard to the remaining 20,000 tons which they want, they have no arrangements with us. They will have to buy from us at the market price. It would be hardly fair to us to take part of our block in regard to 20,000 tons and make it over to the Tinplate Company on the ground that protection is going to be given. The point is altered by the fact that they require very nearly half as much steel again as they contracted for.

*President.*—What is the present consumption?

*Mr. Faulkner.*—48,000 tons a year now.

*Mr. Peterson.*—The contract is for 35,000 tons so that with regard to this 13,000 tons we are entirely in a different position.

*Mr. Mathias.*—Where are they getting it from now?

*Mr. Faulkner.*—This year is a special year and does not come under the agreement.

*President.*—May I take it that, as far as one can see at present, the price of tin bar, say, for the next 10 years would be in the neighbourhood of Rs. 80?

*Mr. Faulkner.*—Yes.

*President.*—It is in the neighbourhood of your present estimated works cost.

*Mr. Peterson.*—Our works cost goes down to Rs. 65.

*President.*—You say Rs. 80.

*Mr. Peterson.*—That is the price we are suggesting. If we supplied on the works costs then we would be entitled to a share of the profits.

*President.*—Your cost here is Rs. 70.

*Mr. Peterson.*—That is works cost without allowing anything for the depreciation.

*President.*—That is to say, Rs. 10 is intended to cover part of your depreciation.

*Mr. Peterson.*—It is a matter of bargaining between the two Companies. I don't know what the final figure would be. We asked for Rs. 83 and they offer us about Rs. 81. Owing to the existence of the contract, we are not simply selling in the open market. If we were, we should ask the Tinplate Company a much higher price for sheet bar. We are not in a position to do that under the existing agreement. There must be some settlement between the two Companies.

*President.*—There is one point I want to be clear about. There is this litigation. I shouldn't like the High Court to be able to say that we were trying to do something which is before that Court as regards the future. As regards the past, the Board has nothing to do with it, but as regards the future, I should like to understand clearly whether it is still going to form part of the litigation that is now pending.

*Mr. Faulkner.*—Probably not.

*Mr. Peterson.*—The case, if it proceeds, will deal with disputes as to the past?

*President.*—You are asking for a construction of the agreement.

*Mr. Faulkner.*—Provided these present proposals are ultimately agreed to by the Boards of the Burmah Oil Company and the Steel Company, we propose to apply them retrospectively.

*President.*—When is this Board going to be placed in possession of that fact?

*Mr. Peterson.*—I think before you submit your report.

*President.*—These are two big companies concerned. If you had come to any definite agreement, I should have been prepared to accept your undertaking that it would be carried out, but you have not come to any final conclusion.

*Mr. Peterson.*—These proposals were made to me only a few days ago.

*Mr. Faulkner.*—It is very difficult to come to any definite conclusion so quickly.

*President.*—I quite understand it. Are we to assume that more or less the future price would be fixed in the neighbourhood of this figure?

*Mr. Faulkner.*—Yes.

*Mr. Peterson.*—We have offered them a price of Rs. 83 for 10 years. We have taken Rs. 83 as the price of the finished bar in our calculations regarding future estimates. Now the Tinplate Company want to reduce it to Rs. 81. There is only a difference of Rs. 2. There is a further point. Any arrangements that we come to between ourselves will be subject to confirmation by our Boards.

*President.*—At present you are only in the negotiating stage?

*Mr. Faulkner.*—I may add that Mr. Peterson has sent these proposals over to Bombay. They have gone since I have been up here.

*President.*—We are examining you on the 5th and 6th of July subject to your being ready with information. Would it be possible for you to give us something more definite by that date?

*Mr. Peterson.*—I have sent these proposals over to Bombay and I expect a reply within 10 days.

*President.*—I may tell you that in what I have stated there is no expression of any definite opinion on our part naturally. We must also consider the effect of your proposals on our work, but I think it may be possible for the Board to proceed with the hearing of this application without postponing it *sine die* as I thought at first sight, on the assumption that within three or four weeks you are able to tell us, so far as this part of the arrangement is concerned, that the arrangements had been concluded. Of course you may have to alter your Articles of Association or take other legal measures. That is a different matter. The legal part may take time. So far as we are concerned, if you are able to tell us definitely that these arrangements have been concluded as between yourselves and then you give an undertaking that you

will take all the necessary legal steps involved in giving effect to them, I think the Board may be in a position to hear your case.

*Mr. Peterson.*—That is only with regard to the future price of steel.

*President.*—If the other matters defeated this agreement as they did the earlier agreement, it would be no advance over the past.

*Mr. Peterson.*—They won't. We are contemplating tearing up the old agreement and writing a fresh agreement for a certain number of years. That is to say, there would be no question of profit or loss. There would be a question of a fixed price which might fluctuate a little with the price of tinplates, but with regard to the past litigation, the settlement may take longer.

*President.*—So far as your litigation with regard to the past is concerned, that affects the last scheme which is the current scheme. It has got no bearing on our future recommendation as far as I can see.

*Mr. Faulkner.*—I think I would like to add here that it depends on how soon we hear from Tatas and as to how soon I can send on to London anything that they may have to say on these offers. You say you want this within two or three weeks. That means 5th or 6th July.

*President.*—The Welsh Plate and Sheet Manufacturers' Association are coming here to give evidence and we have provisionally fixed 3rd August 1926 and subsequent dates for hearing them. They are not interested in what arrangement you make. But I think, they are interested in the cost of your raw material. To give us any useful assistance, I think it would be necessary for them to know what the position is as regards that aspect of the case.

*Mr. Faulkner.*—Yes.

*President.*—Now it is too late for us to make any other arrangements for their examination and for that reason I think it is essential that by that time you should be in a position to tell us whether you had concluded these arrangements and whether you had taken any steps to give them the necessary legal effect.

*Mr. Faulkner.*—You want the assent of the Boards of the two Companies.

*President.*—Will you reach that stage when, to use a legal phrase, the Court may order specific performance?

*Mr. Peterson.*—Their Board is in London. It is very difficult to explain the thing by cable. I can answer for my Board, because they are in India.

*Mr. Faulkner.*—I will do as much as I can by cable.

*President.*—On the 5th July we shall proceed on the assumption that the price would be in the neighbourhood of Rs. 80.

*Mr. Faulkner.*—I think by the end of July you will have a definite answer.

*President.*—These people will be here by the end of July and their evidence will begin on the 3rd August. As regards the other point about treating this as one, I think it would be better if the Tata Iron and Steel Company and the Tinplate Company agreed upon the approximate figure. The value of the Tata Iron and Steel Company's block is known. It is in the proceedings. We applied a principle by which we wrote down the value of their block. It is in our First Report. We assumed the capacity of the works to be 420,000 tons.

*Mr. Peterson.*—The cost of production of sheet bar is much lower than the cost of production of finished steel. We can arrive at the proportion accordingly.

*President.*—There are two or three ways in which you can do it. The simplest way is to take the ingots as Mr. Peterson suggests. I think the ingot is the safest to take, because it involves least trouble or you can take the semi-finished product. If I were you I would certainly take the ingot, because from the ingot to the tin bar it is only a very small process. To enable us to treat it as one single unit we will continue the works cost from Tatas right up to the stage when it is tinplate and then add so much for overhead and so much for profit.

*President.*—Of course, Mr. Peterson has rightly pointed out that it would increase the cost of the finished tinplate if you were to allow profits on the same scale on the tin bar portion of the plant.

*Mr. Peterson.*—It would be too high. The price of imported tin bar would be somewhere in the neighbourhood of Rs. 90.

*President.*—It is simply to get an idea as to what would be the cost of a new industry starting now, that is what it comes to.

I think that the whole of this part of the evidence beginning with Mr. Peterson's first answer should be treated as "without prejudice."

*Mr. Faulkner.* I don't think that you have treated us fairly on this point of reconstruction. We particularly asked you for information. You said that you had sent an outline of the scheme to the Government of India. We asked for a copy of that and you did not send it.

*Mr. Faulkner.*—We did not send anything to the Government of India about the reorganization of the capital of the Company.

*President.*—This is what you told us "The question of the reorganization of the capital of the Company is now under consideration and we hope very shortly to discuss the question fully with the Tata Iron and Steel Company, Limited, in Bombay and that a mutually satisfactory accommodation will be arranged between the parties. An outline of the scheme of reorganization suggested has been forwarded to the Hon'ble Member for Commerce and Railways."

*Mr. Faulkner.*—It gives that impression because the words "reorganization of the capital" occur in the first sentence. The proposals sent to the Hon'ble Member for Commerce and Railways are the proposals to the Steel Company which have resulted in our present negotiations.

*President.*—That is to say, the proposal that you have now put forward before the Tariff Board is the one that you communicated to the Hon'ble the Member for Commerce and Railways.

*Mr. Faulkner.*—No, it is a revised one.

*President.*—I think that we communicated to you the second instruction that we got from the Government of India with regard to the speech of the Hon'ble the Member for Commerce and Railways about the reorganization of the fixed capital. You have made no proposals whatsoever as regards that.

*Mr. Farquharson.*—We had none at that time.

*President.*—As you can see, Government attaches considerable importance to that and in the presentation of the case, this point has to be met. The Hon'ble the Commerce Member said that it was one of the points to be investigated by the Tariff Board. We wrote to you on this point and we expected to hear from you on that point.

*Mr. Farquharson.*—We could not put up any proposals because we had not any.

*President.*—One thing upon which stress is laid is this writing down of the capital. Whether that point had been referred to us expressly or not in the ordinary course of our enquiry we should have gone into it. It is not a new question, so far as this Board is concerned. Whether you actually write down your capital in your books—that is the point over which the Government of India lay stress—so far as the writing down of the value is concerned, in order to determine your overhead charges and profit, we have to do it in any case if it appears necessary.

*Dr. Matthai.*—There is a reference in your letter of 2nd June, 1926, to the Tariff Board "In the event the Steel Company submitted counter-suggestions which have been placed before the Burmah Oil Company in London by cable, and they should receive the writing in which these counter-suggestions are confirmed and more fully detailed on the 7th June." Is that the communication that you were talking of?

*Mr. Farquharson.*—Yes.

*Mr. Faulkner.*—I saw Tata's in Bombay in May and I cabled to London on the 13th of May and they said quite naturally that they would wait until they had my writing in confirmation of the cablegram, which they did. They cabled me on the 9th the proposals regarding capitalisation.

*President.*—Please tell us what they are.

*Mr. Faulkner.*—These proposals are extremely complicated to work out but I would read them to you. As you say, one of the most important points is to ascertain the replacement cost of the works which, as you know, we still have got to obtain. I showed you informally some telegrams which indicated that 1,500 invoices and 250 orders had to be checked. We have to deal firstly with capitalisation proposals. The first suggestion is to reduce the loans and the debenture interest in arrears by recalculating the interest on all these *ab initio* to the 1st of January 1926 at 6½ per cent.

*President.*—That is to say, you are charging compound interest.

*Mr. Faulkner.*—On the 10 per cent. debentures we shall charge 6½ per cent. also on arrears of interest and the Rupee loan. The interest on the interest has been a rate rising and falling with the Bank rate.

*President.*—Under the terms of the debenture you are entitled to charge compound interest, that is what it really comes to.

*Mr. Farquharson.*—We charge interest on interest.

*President.*—That is compound interest.

*Mr. Farquharson.*—We don't charge the same rate of interest on arrears of interest on debentures as on debentures.

*Mr. Faulkner.*—At the end of the 31st December 1925, there was a certain amount of debenture interest in arrears running at 10 per cent. and a certain amount of loans due to the Burmah Oil Company by the Tinsplate Company. The proposal is to recalculate the whole of that figure at 6½ per cent. After giving effect to the above it is proposed to write off the capital in excess of to-day's replacement cost of erected plant and buildings including the housing block and in excess of the sum required for working based on three months' financing of wages, raw material, stores including rolls, etc.

*President.*—That would be your working capital.

*Mr. Faulkner.*—Yes. That writing off has to be apportioned between debentures and loans on the one hand and the ordinary share capital on the other in the proportion of the total written off. It is not possible at present to ascertain the rupee effect because we have not yet got the replacement cost. The Burmah Oil Company in London have advised that "The United States and the United Kingdom to-day's replacement cost will be cabled as soon as possible with details by mail." Loans and interest, if any then outstanding, after writing down, are to be converted into debentures bearing interest at 6 per cent. per annum and the whole debenture issue then has to be converted at 6 per cent. It may be that there will be, even after writing down, a certain amount of loan and interest in arrears outstanding, say about Rs. 10 lakhs, which would be added to the written down debentures and the whole converted into 6 per cent. debentures.

*President.*—What it comes to is this. There are two things. First of all, you are writing down the block value to its present replacement value.

*Mr. Faulkner.*—Yes.

*President.*—That involves more or less a certain amount of loss.

*Mr. Faulkner.*—Yes.

*President.*—Having done that, your capital consists of the ordinary share capital and debentures.

*Mr. Faulkner.*—Yes.

*President.*—Your block has not been purchased merely out of your ordinary share capital because that is only Rs. 75 lakhs.

*Mr. Faulkner.*—That is right.

*President.*—The capital required in excess of that Rs. 75 lakhs is provided by means of debentures.



*Mr. Faulkner.*—Yes.

*President.*—Those debentures were carrying interest at 10 per cent. on the principal and interest on interest at a varying rate.

*Mr. Faulkner.*—Yes.

*President.*—According to the present scheme, the principal of the debenture will remain subject to reduction on the loss of the block value and the balance is to be converted into a 6 per cent. debenture issue.

*Mr. Faulkner.*—The whole debenture issue is to be converted into a holding at 6 per cent.

*President.*—The position is fairly simple, as far as we are concerned. In determining your profits, so far as you are concerned, we must take into account the charges on the debenture loan first, and then your reasonable profit on the remainder of the capital which is ordinary share capital, is not that so?

*Mr. Faulkner.*—Yes.

*President.*—You will be able to tell us, I take it, your replacement value.

*Mr. Faulkner.*—Yes.

*President.*—First of all I take it that the block value of your plant has to be written down? Would you write down the whole of it from the ordinary share capital or *pro rata* from the debenture?

*Mr. Faulkner.*—*Pro rata*. Such writing down will have to be borne between the debentures and loans on the one hand and ordinary share capital on the other in the proportion that the total writing down bears to the aggregate of both.

*President.*—So far as your shares are concerned, they will still retain their value because of the writing down of a proportion of the debentures?

*Mr. Faulkner.*—Yes. It must be so because the proportion of debentures is very much greater.

*President.*—That is what I want to be clear about. Supposing your block value is 2 crores of rupees and it is one crore now. You have got to write down that one crore. If you write down one crore from the share capital it will all be wiped out.

*Mr. Farquharson.*—That is not suggested.

*President.*—It is not so because you take the aggregate and the debentures and the ordinary shareholders constitute the two and you write down a proportion, so that there must be some ordinary shares left. What is the proportion of the debenture loan as compared with your share capital?

*Mr. Farquharson.*—Rs. 125 lakhs debentures *plus* about Rs. 35 lakhs loan.

*Mr. Faulkner.*—You may take it as Rs. 160,00,000 debentures and 75,00,000 loans.

*President.*—Working capital would be a sort of floating charge?

*Mr. Farquharson.*—On that basis about Rs. 30 lakhs roughly.

*President.*—That is partly covered by debentures and partly a sort of floating charge as the position stands now?

*Mr. Farquharson.*—It has all been met by loans.

*President.*—The whole of that working capital will not be covered by debentures?

*Mr. Peterson.*—The proposal is that the block *plus* Rs. 30 lakhs, that is the working capital, should be covered by ordinary capital and debentures.

*President.*—The first thing is the replacement value; after that what the Board would like to know is how the capital has been financed, that is to say, how much of that would be in the form of debentures and how much would then remain as ordinary share capital. On the one there is the first charge of 6 per cent., on the other we have got to determine what ought to be a reasonable return. I take it you won't know that until you know what your replacement value is going to be.

*Mr. Farquharson.*—You can take 20 per cent. as a very rough figure.

*President.*—It would come to more than that. It would be just as well for you to give us the same sort of data that we asked for from the Tata Iron and Steel Company. One of the principles applied was the drop in the composite price of steel. For that purpose it is necessary for you and us to know how much money you invested in the purchase of this block at different periods. That you have not given us. That is no fault of yours because you treated it this way. These purchases have been made through your Home office and they provided all the money. Then you discharged that loan by raising these debentures, as far as I can see, and for that reason you came to the conclusion that it was not necessary for you or for us to know when these various things were purchased which constitute your block. The point is when you purchased your plant through your Home office what were the prices that you paid?

*Mr. Farquharson.*—We have no particulars here.

*President.*—Until we have got those prices we cannot apply this principle of a composite price. Supposing you paid Rs. 120. At that time the composite price of steel was Rs. 100, now it is 50.

*Mr. Farquharson.*—Do you want that in addition to our replacement cost?

*President.*—We want to check it because the replacement value would be a sort of estimate. If a man has got to prepare 1,500 invoices for an offer which is not going to result in business his estimates won't be reliable. When you are actually buying a plant you may get a much lower quotation.

*Mr. Farquharson.*—What you want is our original invoices or extracts?

*Mr. Peterson.*—You don't want the actual invoices, you want the actual money spent each month on the material?

*President.*—That is it. Supposing you spent 150,000 dollars on machinery—

*Mr. Peterson.*—You want to divide it into machinery and material?

*President.*—Yes. Then you have to take the composite price of steel. It is only a rough and ready principle. In one case the replacement value given is 60 per cent. In our first enquiry the Tata Iron and Steel Company did not grumble very much when we reduced their block value from about 21 to 15 crores.

*Mr. Peterson.*—Yes, 31 per cent.

*Dr. Matthai.*—When exactly did you start buying these things?

*Mr. Farquharson.*—In 1921.

*President.*—The price of steel has dropped a good deal since then. The price of machinery must bear a certain proportion, not necessarily the same proportion, to the price of steel.

*Mr. Farquharson.*—We will give you as much information as we can.

*President.*—Will you give us figures for freight separately?

*Mr. Farquharson.*—Yes.

*President.*—And exchange. In your case the exchange position is easier, but all the same it would affect the rupee prices of all the articles that you purchased in the United States of America.

*Mr. Farquharson.*—That is correct.

*President.*—We don't want to commit ourselves at this stage nor do I wish you to commit yourselves to anything, but if you could adopt the same principle as we did in the case of the Tata Iron and Steel Company it would expedite matters.

*Mr. Faulkner.*—Would you like to make any comments on the capitalization proposal?

*President.*—I am afraid it is very difficult for me to make any comments just now, but I want to be clear whether I understand your proposals. As far as one can see, they seem to be in accordance with the sort of facts that we would require for our purposes. I cannot say more than that. The first point that we have to determine is your block value as at 1st April 1924.

After that if there is any further writing down we do not know. We have not looked into that.

*Mr. Farguharson.*—What you want is the total amount paid on machinery and buildings, *plus* freight and exchange.

*President.*—Yes, from the time you started. What we want is the dollar and the sterling exchange because the rupee exchange did not operate so far as you were concerned at that stage.

*Dr. Matthai.*—All that time you were buying on credit given by the Burmah Oil Company?

*Mr. Farguharson.*—Yes.

*President.*—As regards the presentation of your case I am afraid it is very incomplete, and later on I will have to explain the form in which we would require the statements.

*Mr. Faulkner.*—The statements will be prepared by the Managing Agents.

*Dr. Matthai.*—I would just state in outline the points on which I would require assistance later on. The President raised a point earlier in the day with regard to a matter which has been reserved in our terms of reference by Government, that is to say, whether your business will ultimately be able to dispense with protection and as I look at it—I am speaking for myself—that is a question of the extent to which you have been able to increase your output during these years and the extent to which you have been able to reduce your costs. On that we should be able to form some opinion whether you would ultimately be able to dispense with protection. Another point is whether there is any possibility within a reasonable time of another tinplate unit coming into existence considering the demand in this country. Supposing there is no reasonable possibility of that kind, then it would be necessary to treat your case differently from the case of other industries. In that case the scale of protection that one would suggest for you would have nothing to do with the question whether further capital would be attracted to the industry. If there is no reasonable possibility of another company coming into existence, I would simply proceed on this line: Here is an industry of national importance and we ought to keep it going. What is the minimum of protection required both in point of time and in point of scale to help you to turn the corner? With regard to that the real point will be this. You have had protection for three years. If, on a statement of the facts, it appears that you have turned the corner, that you have survived the worst stage, then the question is closed. There is no further protection required. On the other hand, if without protection you are going to sustain so serious a loss that there is a reasonable possibility of your closing down, then it would be necessary to go further and see whether protection should be continued and if it is to be continued how much longer it should be continued. I find from the statements you have given us, that you don't ask for an increase. You are simply asking that the present rate of protection should continue. Therefore the question of increase doesn't arise, but it would be necessary for us to consider whether in the circumstances a reduction is called for on a review of your costs and prices. That question of reduction, as I look at it tentatively at this stage, is bound up with the question of the period for which protection would have to be continued. Supposing, on a review of the facts, I come to the conclusion that all that you require is one or two years of protection, in that case it would be necessary to consider whether it is worth while at all revising the tariff. On the other hand, if it appears necessary to give you protection for a longer period, say, 5 or 10 years, then it would be necessary to go into the whole question of costs and prices. That generally is the point of view from which one would approach your case.

## THE TINPLATE COMPANY OF INDIA, LIMITED.

ORAL.

**Evidence of Messrs. J. R. FARQUHARSON, H. D. TOWNEND,  
A. K. FAULKNER, and J. P. AINSCOUGH, recorded at  
Calcutta on Wednesday, the 7th July, 1926.**

*President.*—We are very much indebted to you for the excellent manner in which you have given us the statements that we asked for as well as for the further exposition of your case. I think last time I explained to you that we should proceed with your application on the assumption that you were taking steps to get over the difficulties created by your agreement with the Tata Iron and Steel Company and that you were also taking steps to reconstruct the capital as far as possible.

*Mr. Faulkner.*—Yes.

*President.*—Has any further progress been made in either of the two directions?

*Mr. Faulkner.*—Some progress has been made. Negotiations are still proceeding. I have seen Mr. Peterson but he tells me that the proposals have not been actually considered so far by the Board of the Steel Company because they await his own recommendations which he will submit as soon as he can.

*President.*—As far as you can tell at present, there will be no difficulty in your being able to put through the new agreement and the reconstruction scheme. I must remind you again that this enquiry is entirely on the assumption that both these objects will be accomplished.

*Mr. Faulkner.*—We appreciate that.

*President.*—We shall start with the examination of the *prima facie* reason given in this application for the continuance of protection. Before our last scheme came into operation under the revenue duties you were getting Rs. 40 a ton, on a tariff valuation of Rs. 400 at 10 per cent. *ad valorem*.

*Mr. Farquharson.*—Yes.

*President.*—In the first scheme that duty was converted into a specific duty of Rs. 60 a ton which was at that time the equivalent of 15 per cent. *ad valorem* on a tariff valuation of about Rs. 400.

*Mr. Farquharson.*—Yes.

*President.*—Then, from the beginning of this fiscal year, the duty has been raised to Rs. 85 a ton.

*Mr. Farquharson.*—From the 1st of March.

*President.*—That is equivalent to about 32 per cent. on a tariff valuation of Rs. 320.

*Mr. Farquharson.*—About 27 per cent.

*President.*—So far as the first scheme was concerned, we had not any reliable figures because you had been working only for a few months. In 1923, your works cost was Rs. 576·324.

*Mr. Farquharson.*—Yes.

*President.*—We could not make your works costs the basis of our recommendations at all. At that time the recommendations were made not so much on works cost as to keep the company alive. Since 1924, there has been a drop in your works costs of about Rs. 145·111.

*Mr. Farquharson.*—Yes

*President.*—Your protection is now Rs. 85 a ton. *Prima facie* on a reduction such as that, you don't need any protection. Far from needing any protection, you can spare about Rs. 60.

*Mr. Farquharson.*—How do you arrive at that?

*President.*—Your protection is now Rs. 85 a ton. Your works cost has come down by Rs. 145. On these figures it may appear at first sight that you no longer needed any protection and that you were making a lot of money. But this Rs. 145 is very largely set off, more or less by certain causes. There are three things operating, as far as I can see, in this industry as well as in the main steel industry. First of all, there has been a drop in the sterling price of the imported tinplate.

*Mr. Farquharson.*—Yes.

*President.*—At that time we took the average of April and August. The average for 1923 was £27-13-10. It works out to Rs. 415·5. The exchange was 1s. 4d. at that time. With the landing charge of Rs. 2-6-0, it would be Rs. 418 in round figures.

*Mr. Farquharson.*—That is right.

*President.*—The average from January to May 1926 is £28-16-9—that is roughly a drop of just under £4.

*Mr. Farquharson.*—The drop is about that.

*President.*—Taking the rupee price, it works out to about Rs. 320 or Rs. 322 with the landing charge.

*Mr. Farquharson.*—Yes.

*President.*—That accounts for only Rs. 96, taking the two together. From Rs. 145, you have to deduct Rs. 96. Still you have Rs. 49 left. That being so, it is rather difficult to follow. We are not going into details just now. Of course it may be that your original works costs were much higher than they should have been, but there is still this margin of Rs. 49 which is not explained.

*Mr. Townend.*—It is explained by the drop in the manufacturing cost.

*President.*—The point is that your protection at present is Rs. 85 per ton. Against that you have brought down your cost by Rs. 145. Of that Rs. 96 is given away because of the change in price. Still, you have Rs. 49 to spare and yet you want the same protection of Rs. 85. I find it rather difficult to understand it. We are not going into any more details at present. It may be that even with a reduction of Rs. 145, you need protection. Of course this assumes that the former protection was adequate. There is one other thing to which we shall come later and that is though you have had this protective duty of Rs. 85, you have not been able to realise a price which is the equivalent of the c.i.f. price plus Rs. 85. Your realised price has been lower.

*Mr. Farquharson.*—Yes.

*President.*—That is to say, the price of your article has not risen in the same proportion as the increased duty. That may partly explain it.

*Mr. Farquharson.*—In this statement we have the increased duty only for one month.

*President.*—For the rest of the period you had Rs. 60. Even so on this margin of Rs. 49, it would not seem that you would require as much as Rs. 60. I am just trying to point that out to you. We shall deal with it in greater detail afterwards. If you could explain to us how that has come about, we should be glad. At this stage, it would be convenient to deal with the question of exchange. The rise in the exchange has brought down the c.i.f. price of the imported article.

*Mr. Farquharson.*—Yes.

*President.*—It must have to some extent helped you to bring down your works cost.

*Mr. Farquharson.*—Yes.

*President.*—We want to estimate as far as possible what that would amount to. First of all, it would make a difference in the price of your imported materials?

*Mr. Farquharson.*—Yes.

*President.*—One of the most important items is tin.

*Mr. Farquharson.*—Yes.

*President.*—You have not given us the total cost of the tin that you use. I think that you have given us the incidence per ton but that is not enough to help us to get at this figure.

*Mr. Townend.*—We have given you the amount of tin consumed per ton of tinsplate.

*President.*—We have got to estimate what this means. Has the exchange moved in your favour or against you?

*Mr. Farquharson.*—Slightly in our favour.

*Mr. Mather.*—It has moved in your favour during the last three years.

*Mr. Farquharson.*—Yes.

*President.*—Does it make very much difference?

*Mr. Townend.*—The question is complicated by the fluctuating value of the tin itself.

*President.*—I just want to see whether the rise in the exchange has helped to bring down your works cost. Your tin costs you Rs. 80 per ton of tinsplate. If you were to take it in sterling, it would mean a reduction of perhaps Rs. 8 a ton owing to the rise in the exchange. Would that apply to tin?

*Mr. Farquharson.*—No.

*Mr. Mather.*—Assuming that the external value of the rupee had remained as it was three years ago, you would now be paying Rs. 10 more than you are doing at present.

*Dr. Matthai.*—May I know how exactly you do this tin business? You get your tin from the Straits, don't you?

*Mr. Farquharson.*—Yes.

*Dr. Matthai.*—The sterling exchange does not come into it.

*Mr. Farquharson.*—No.

*Dr. Matthai.*—How does the Straits dollar move?

*Mr. Farquharson.*—It is different altogether.

*President.*—It would move with the sterling, would it not?

*Mr. Farquharson.*—I think that it is entirely independent in the same way as the rupee.

*President.*—We are simply dealing with the question of exchange to see how it might have affected your works costs and we want to see, so far as the price of tin was concerned, whether the rise in the rupee exchange had anything to do with it, so that if you could give us the rupee dollar exchange in 1923 it would be useful.

*Dr. Matthai.*—What we want is some information as to what amount of rupees would buy a certain amount of dollars during the last three years.

*Mr. Farquharson.*—We will let you have that.

*President.*—What I am trying to do is to assess the difference the exchange has made to you in the price of tin, that is to say, apart from the economic rise in the price.

*Mr. Mather.*—Your price per ton of tin in 1924 was Rs. 3,900; in 1926 it was Rs. 4,365, that is, a rise of not much more than 10 to 12 per cent. but the sterling price has risen more and the difference between the two is the measure of help you have received from the rise in the sterling value of the rupee.

*President.*—We should like to have that information if you could give it.

*Statement XI.*

Let us now go on to Statement XI—Quantities of different kinds of raw materials required for the manufacture of tinplate. We will take the 1925 figures. The total comes to Rs. 3,63,938. May I take it that all these materials are imported?

*Mr. Farquharson.*—Yes.

*President.*—That may make a difference of about Rs. 36,000 in the exchange, thus bringing down your cost by about one rupee per ton.

*Mr. Farquharson.*—Yes.

*Dr. Matthai.*—I want one point to be cleared up. I find in 1924 the largest item is 'Brasses.' I want to know whether the figure of Rs. 47,000 you give for the price of brasses in 1925 is something less than the normal figure. The quantity is a little less than just about a third.

*Mr. Townend.*—We may have been buying large quantities for stock.

*Dr. Matthai.*—Supposing we proceed on the basis of the 1925 figures, could we assume about Rs. 50,000 as the normal cost of brasses annually?

*Mr. Townend.*—Let me explain the position. In 1924 we were just starting full production and naturally we had to get large stocks of things like brasses, but in future we would be ordering each year.

*Dr. Matthai.*—Supposing we said Rs. 40,000 or 50,000 would be the normal cost would it be a safe statement to make?

*Mr. Townend.*—Yes.

*President.*—There is the question of imported labour. Is your imported labour paid in sterling or in rupees?

*Mr. Farquharson.*—In rupees.

*President.*—Is there any exchange compensation?

*Mr. Farquharson.*—No.

*President.*—What happens when they go on leave?

*Mr. Farquharson.*—When they go on leave they are paid a bonus of so much for so many years' service and they get that paid in rupees.

*President.*—Is there any other item that you can mention which would compensate you in some way by reason of the rise in the exchange?

*Mr. Mather.*—Would there not be a number of stores purchased in India the price of which must have been reduced to some extent by the rise in the rupee exchange?

*Mr. Townend.*—We do not get so material a benefit from the rise in the exchange when we buy stores in this country.

*Mr. Mather.*—It must have affected you to some extent?

*Mr. Farquharson.*—It must have, but it is very difficult to pick these items out.

*President.*—You don't include any of your rolls, etc., in the list of imported articles. Don't you import your rolls?

*Mr. Farquharson.*—Yes.

*Mr. Townend.*—They come in as machinery.

*President.*—How much do you put down for rolls per year? You have given about Rs. 16 per ton or a little more in the summary but it includes grease.

*Mr. Farquharson.*—Rs. 23,000 a month.

*President.*—That is Rs. 3,00,000 a year roughly. There will be a saving there of about a rupee per ton owing to the exchange. There is another item, material for repairs.

*Mr. Townend.*—They were stores purchased in Calcutta mostly.

*Mr. Mather.*—Miscellaneous electrical stores are practically all imported. are they not?

*Mr. Townend.*—Yes. But bought in India. They come under general works expense.

*President.*—The total of that comes to about Rs. 5 a ton; 10 per cent. would be about 8 annas.

*Mr. Townend.*—I don't think we get eight annas on them. Castings form a large proportion there.

*President.*—Is there anything that you can suggest that makes a difference?

*Mr. Mather.*—Your annealing boxes are imported?

*Mr. Townend.*—Yes.

*President.*—Last time the Tariff Board found it made a difference of Rs. 10 per 100 boxes. That is about Rs. 2 per ton.

*Mr. Townend.*—Yes. Prices have not changed very much since then.

#### *The Fair Selling Price.*

*President.*—We will now go on to the most important aspect, that is to determine the fair selling price. First of all we have to determine the present price; then we will have to determine what ought to be your future selling price. The first item to consider is the works costs; then the overhead charges and the manufacturer's profits. You have given us the works costs under three different headings. We shall deal with them on that footing, but towards the end we might deal with them under one combined heading from raw material right up to the finishing stage. We shall now take the works costs of your black sheet. I don't wish to make any comparison with your works costs of 1923. The comparison would be chiefly between the works costs of 1924 and for the three or four months of 1926 to see how you have been progressing.

*Mr. Farquharson.*—Yes.

*President.*—The total works costs in 1924 were Rs. 296·710 and they came down to 192·218, which means a difference of about Rs. 104.

*Mr. Farquharson.*—That is correct.

*President.*—Let us now take them under two separate headings, first the net metal cost which was Rs. 169·587 in 1924. It came down to Rs. 117·204, so that there is a saving of Rs. 52·383 in the nett metal cost. The first thing is that your yield has deteriorated. In 1924 it was 75·95 per cent. and in 1926 it is 73·40 per cent. It is a deterioration of nearly 3 per cent. in the yield.

*Mr. Farquharson.*—Yes.

*President.*—In itself the yield is very small being only 75 per cent. That is lower than it should be.

*Mr. Townend.*—We cannot expect to get the same efficiency as Wales. A fairer comparison would be the double mill system in America.

*President.*—Still, it is lower than it should be.

*Mr. Townend.*—Yes.

*President.*—Even making allowance for more difficult work in your case as compared with the Tata Iron and Steel Company's sheet mill, the yield is low. I don't say that the two things are analogous. They get 81 per cent.

*Mr. Townend.*—Do you say that their yield is 81 per cent.?

*President.*—Yes. As you know they have not done very well over their experts. In spite of that their yield is 81·39 per cent. Obviously there is a difference in the two processes, though in some respects the processes are more or less alike. Possibly there may be more wastage in your case. How much would the yield be in Wales?

*Mr. Townend.*—About 80 per cent.

*President.*—It is a big difference. In the matter of yield it would make a difference of Rs. 8 a ton. What is your explanation as regards that? You don't allege that Indian steel is in any way inferior to British steel.



*Mr. Townend.*—No.

*President.*—The next reason may be that your practice is not as good as Welsh. That is perhaps partly explained by the fact that your labour is not as efficient as Welsh labour, but now the point is do you consider that a permanent disability or do you expect to get over it?

*Mr. Townend.*—We certainly expect to improve in that respect as our workmen get more experienced.

*Dr. Matthai.*—How does Welsh practice compare with American practice?

*Mr. Townend.*—Welsh practice is better.

*Dr. Matthai.*—What roughly would be the difference?

*Mr. Townend.*—In Wales they work largely with one pair of rolls: in America with two. The idea is to get a much bigger tonnage for the space occupied, but there is more waste.

*President.*—Of course you have got more tonnage than they. Probably it might compensate you in that respect.

*Mr. Townend.*—As a matter of fact, we could never have worked on the Welsh system.

*President.*—I don't say you could. But the point is whether you have actually been able to get a bigger output by so to say submitting to this bigger wastage. That of course has to be established. Do you think you have done that?

*Mr. Townend.*—Yes, and the bigger output has lowered our costs. Further, while increasing tonnage we have been reducing our imported labour. It is a question whether it pays us to have the extra waste rather than to have the number of our imported staff at the original high figure. Our reduced labour cost per ton has more than compensated us for the extra wastage in steel.

*Mr. Mather.*—Why should you roll on two pairs of rolls instead of one and thereby increase the wastage?

*Mr. Townend.*—The extra wastage is inherent in the system. The double mill system is designed for relatively inefficient labour. It uses the mechanical doubler which is never so efficient as doubling by hand.

*Mr. Mather.*—Don't you think that the Welsh firms refrain from using mechanical doublers because of the wastage in the material?

*Mr. Townend.*—The Welsh works have not got the compensation of the bigger output. They would not be compensated by a bigger output unless they changed their system.

*Dr. Matthai.*—This double rolling is really a part of mass production. Mass production leads to wastage relatively?

*Mr. Townend.*—I should say that is generally true.

*President.*—By having this double mill system, do you shorten the time for rolling? Is that what you mean by the increased output?

*Mr. Townend.*—It may be put that way.

*President.*—You take less time to roll, say, 5 tons of metal by having this double mill system than you would by having a single mill system, because in the latter you would require more human effort.

*Mr. Townend.*—Our production is about 180 boxes, that is to say, you may take 9 tons as being a very fair average for a shift. In Wales, to the best of my information, they get an average of about 60 boxes, which is a third of our output. At the same time, they use only a third of the number of men. They have only 6 men whereas we have 18 men to a mill.

*Dr. Matthai.*—When you speak of the increased output, do you really mean you are able to do a great deal more in shortening the time?

*Mr. Townend.*—Yes, by using two pairs of rolls.

*President.*—It is less time and bigger output, but more men.

*Mr. Townend.*—Yes, but we are not employing more men as compared with the time when we had a smaller output.

*President.*—You want 18 men whereas in Wales there are only 6 men. Is there no calculation by which you can compare the two processes?

*Mr. Townend.*—You can compare them in this way. We have three times the number of men and we get three times the output, but by getting a bigger output, we cut down our overhead and the standing charges in our Works, and thus are able to bring down our costs per ton.

*Mr. Mather.*—You have a much more elaborate equipment and a much bigger overhead to carry.

*Mr. Townend.*—We are talking so far as yield is concerned.

*Mr. Mather.*—The nature of your equipment itself is much more elaborate and therefore you have a bigger overhead to carry.

*Mr. Townend.*—The overhead I was referring to is the cost of management in the works, power, lighting and all the rest of it.

*President.*—But then if you say the difficulty is due to the mechanical system of folding, then in that case how do you expect to get over it?

*Mr. Townend.*—We get compensated for the smaller yield by the increased output.

*President.*—That would make a reduction in your general works cost.

*Mr. Townend.*—Further, we hope to increase our yield.

*President.*—In what way do you expect to do it?

*Mr. Townend.*—By our labour getting more efficient. A man working on this double mill system has to learn only one job, not the whole process.

*Dr. Matthai.*—In 1925-26 you explain the reduction on the ground of covenanted men on leave and this is precisely the same point that you are trying to make.

*Mr. Townend.*—It must be emphasised that even when these men come back from leave it is not going to be our policy to keep a large staff. We take every opportunity of gradually reducing our staff by men who do not desire to stay with us.

*Mr. Mather.*—At any rate I take it that you anticipate a return from your present yield of 78 per cent. to your 1924 yield of 76 per cent.

*Mr. Townend.*—Yes.

*Mr. Mather.*—There is no reason why you should not get back to that 76 per cent.

*Mr. Townend.*—There is no reason.

*President.*—The next item is the cost of your tin bar. In 1924 it was Rs. 127.155 as against Rs. 84. Both these prices are not economic prices in this sense that they do not represent the actual cost of material. The first Rs. 127 was, I take it, under your old agreement.

*Mr. Townend.*—Yes.

*President.*—That was subject to adjustment?

*Mr. Townend.*—Yes.

*President.*—The other price of Rs. 84 is only for the year and that is not very much more than Tata's last year's works costs. For our purposes can we assume that as the economic price? I am just trying to point out that in making our calculations, we must take the economic price of the material and we haven't got it in either case. My point is this. If you take the price of tin bar at below its economic price, it means that somebody has got to make good the difference. In this case it would be the Tata Iron and Steel Company which supplies you with tin bar. If their works costs are correct it would not pay them. On the other hand if we take the economic price of tin bar as Tata's fair selling price, then your works costs go up, your selling price goes up and with that the protection goes up.

*Mr. Townend.*—Would you not take our price?

*President.*—I am trying to explain to you the awkwardness of the position. If take this price which may be agreed to between you and the Tata Iron and Steel Company and if the Tata Iron and Steel Company are not getting an economic price, the result is that you can do with smaller protection in the end.

*Mr. Townend.*—Yes.

*President.*—You could do with smaller protection if you got your tin bar at a little above Tata's works cost which is very nearly the Welsh price of tin bar. In that case you can do with less protection, but what happens? The direct consequence is that though it enables you to do with less protection the consumer benefits at the expense of the Tata Iron and Steel Company.

*Mr. Farquharson.*—We are paying the same price as the Welsh manufacturer does.

*President.*—You are competing with the Welsh manufacturer under different conditions.

*Mr. Farquharson.*—Our economic price is therefore Tata's cost *plus* their overhead?

*President.*—Tata's themselves are applicants for protection. Your application also would largely depend on your being able to use indigenous raw material.

*Mr. Farquharson.*—Yes.

*President.*—This is only a difficulty which I am trying to consider.

*Mr. Townend.*—Does not the difficulty arise more in considering Tata's application than in considering ours?

*President.*—The point is this, if Tata's were to get protection on tin bar they would not get any benefit because of the agreement so far as the quantity that was to be supplied to you was concerned. In the meanwhile they would be so to say subsidising the Tinplate Industry. Of course they would get a little profit out of the protection of the Tinplate Industry. But on the assumption that the profit is intended merely to give a reasonable return on your capital, that profit would not in any way increase the price of the tin bar, would it?

*Mr. Townend.*—It might pay the Tata Iron and Steel Company to supply us with steel at the works cost just for the sake of keeping their continuous mill going at full production.

*President.*—That is an element which we will have to take into account when dealing with Tata's case. I am trying to point out to you that whatever figure we take, it may have little relation to the economic price.

*Mr. Townend.*—Let us take the price which we have to pay.

*President.*—What is it?

*Mr. Townend.*—We can't tell you to-day. We will tell you before the enquiry is finished.

*President.*—That would be complicated by the other factor that I am trying to point out. Supposing Tata's gave you their tin bar at Rs. 80 or whatever the figure is, which is just above their works cost, then it comes to this: that the main industry has to help the subsidiary industry at its own cost without getting any benefit itself. This is done no doubt by the big German Trust who, when a subsidiary industry is concerned, supply the raw material at a lower cost than to an outsider.

*Mr. Townend.*—I take it that this would not ultimately affect our case for protection.

*President.*—As you know, we have got to determine whether in the long run you would be able to do without protection?

*Mr. Townend.*—Yes.

*President.*—In dealing with that question we have got to take the price of your raw material into account. Supposing we give protection on this footing that your raw material is supplied to you at Tata's works cost or a little over, than the industry may be able to do without protection after five years. The reply to that may be that as you have not taken an economic price for your raw material, you cannot say that the industry will be able to stand on its own legs.

*Mr. Faulkner.*—What is an economic price may I ask you?

*President.*—It is the fair selling price in the country c.i.f. price *plus* the duty. If tin bar is protected it is the fair selling price which the industry ought to get for its tin bar. At present there is no help for it. We must assume that this is the price at which you are able to get your tin bar at present and we will have to consider its effect on the final question of your ability to do without protection.

*Mr. Farquharson.*—The Company is to rise or fall with Tata's?

*President.*—Don't run away with any such idea. I am just trying to explain that this has got a bearing on the question whether you will be able to do without protection in the long run. It may be that if you get your tin bar at Tata's works cost which is very nearly the f.o.b. price of tin bar, you may do without protection after some time.

*Mr. Farquharson.*—Their works cost is Rs. 70. The f.o.b. price is more than that.

*President.*—Their 1926-27 cost is an estimate. I don't think they have reached it yet. That is the point. If we were to take the ordinary economic price, then, as I say, the amount of protection goes up.

*Mr. Farquharson.*—Yes.

*President.*—At present we will leave it at that. We will assume Rs. 84 as your price at the moment. Then, you have taken credit for scrap. It is more or less the same, though it has slightly improved in 1926. I take it that your yield is about 75 per cent.

*Mr. Farquharson.*—Yes.

*President.*—The rest of it would be scrap.

*Mr. Farquharson.*—Yes.

*President.*—What is the proportion of scrap that you get? It is given here in rupees. I want to know how many lbs. to a ton you would get as scrap.

*Mr. Farquharson.*—Practically all.

*President.*—How much goes away in waste pure and simple?

*Mr. Townend.*—Our yield figure gives the percentage.

*Mr. Mather.*—What the President wants to know is whether the entire difference between 100 per cent. and 75 per cent. is available as scrap or whether some of it is completely lost.

*Mr. Townend.*—The entire difference is available as scrap.

*President.*—Then, 25 per cent. is scrap.

*Mr. Townend.*—Yes.

*President.*—It is really more than that. It would be very nearly 40 per cent. of scrap if you calculated it per ton of black sheet.

*Mr. Townend.*—That is not the way in which it is calculated in the trade, and to say that we have 40 per cent. of scrap, whereas we actually have 25 per cent. gives a very misleading impression.

*President.*—These are the figures that you have given. Steel consumed per ton of black plate is  $1\frac{3}{4}$  tons in 1925-26 and you get an yield of 75 per cent.

*Mr. Farquharson.*—It comes to 87 per cent.

*President.*—You credit yourself with Rs. 4-4-0 in 1926, for  $\frac{3}{4}$ th of a ton.

*Mr. Farquharson.*—Yes.

*President.*—That is equal to Rs. 10 a ton.

*Mr. Farquharson.*—That is what we are getting nett. Our selling price is about Rs. 20 a ton.

*President.*—How do you get Rs. 20?

*Mr. Farquharson.*—Our ex works price is Rs. 20. But we have to bale and stack the scrap.

*President.*—It is the nett price that you get after deducting the cost of baling, etc.

*Mr. Farquharson.*—Yes.

*Mr. Mather.*—Does it cost Rs. 10 to bale?

*Mr. Farquharson.*—Yes, to bale and to stack it.

*Mr. Townend.*—We ought to send it back direct to the steel works—that is what other tin works do.

*Mr. Mather.*—Does that apply to South Wales Works?

*Mr. Townend.*—Yes, the steel works are only too glad to get the scrap.

*Mr. Mather.*—At a price?

*Mr. Townend.*—At a very good price.

*President.*—You will be getting about 10,000 tons of scrap a year.

*Mr. Townend.*—Yes.

*President.*—If you got on an average Rs. 20 a ton, it would make a considerable difference.

*Mr. Farquharson.*—Yes, if we got Rs. 20.

*President.*—The point is that you cannot find a market for your scrap. Is that correct?

*Mr. Farquharson.*—Yes.

*President.*—Who are the principal consumers of your scrap?

*Mr. Townend.*—We export it to Italy. We have got to get rid of it somehow. Even if it costs us money, we have to get rid of it.

*President.*—Do they use it in the electric furnaces?

*Mr. Farquharson.*—Yes, as far as we know.

*President.*—This light scrap is more serviceable than heavy scrap.

*Mr. Farquharson.*—Yes, but if we want to use it, we will have to install an electric furnace.

*President.*—Why don't you?

*Mr. Farquharson.*—It is a question of cost.

*Mr. Mathias.*—Could not Tata's use it?

*Mr. Farquharson.*—No. They have too much scrap of their own.

*President.*—What is your f.o.b. price?

*Mr. Farquharson.*—We quote c.i.f.

*President.*—What is the freight from Calcutta?

*Mr. Farquharson.*—22 shillings.

*President.*—What is the freight from the works to the Docks?

*Mr. Farquharson.*—Rs. 8 per ton.

*President.*—It comes to Rs. 22. What is your selling price?

*Mr. Farquharson.*—£2-10-0.

*President.*—It is about Rs. 34. So, you get about Rs. 12. Out of that, you have got to bear your baling charges, etc.

*Mr. Farquharson.*—Yes, but the scrap market has gone down.

*President.*—You get about Rs. 5 to Rs. 7 per ton.

*Mr. Farquharson.*—At present, yes.

*President.*—If we take the cost above net metal, it came down from Rs. 127 to Rs. 75.14, the reduction being Rs. 52. Now as regards fuel, you came down from Rs. 6.75 to Rs. 3.09. First of all I want to know what is this fuel that you use?

*Mr. Farquharson.*—Coal.

*President.*—For what purpose is it used?

*Mr. Farquharson.*—For furnaces.

*President.*—What is the price at which you get your coal?

*Mr. Farquharson.*—Our prices vary. At present we are paying approximately Rs. 5 per ton ex the colliery.

*President.*—It must be inferior coal.

*Mr. Farquharson.*—Yes, second class coal.

*President.*—Do you pulverise your coal?

*Mr. Farquharson.*—No.

*Mr. Mather.*—It will cost about Rs. 7 at your works.

*Mr. Farquharson.*—Between Rs. 7-12-0 and Rs. 8.

*President.*—Has the price of coal come down since 1924? How do you account for this difference of Rs. 3?

*Mr. Farquharson.*—Last year we were paying Rs. 7-8-0 a ton against Rs. 5 this year.

*President.*—That is almost wholly due to the reduction in the cost of coal or is there any improvement in your practice?

*Mr. Townend.*—It must be due to reduction in the price.

*Mr. Mather.*—You don't think you can substantially reduce the quantity of coal you use per ton of bar?

*Mr. Townend.*—I don't think so.

*President.*—Have you found second class coal satisfactory?

*Mr. Townend.*—Yes. First class steam coal does not suit us. It gives localized heat; we do not want localized heat.

*President.*—Then there is a very big item 'Power'—19.310 in 1924 which came down to 14.473. It is a very big amount. Is this for operating the engines?

*Mr. Townend.*—For driving the mills, cranes, shears and so on. All our mechanical parts are driven by electricity.

*President.*—Look at Tata's figure.

*Mr. Townend.*—At what price per unit do they charge themselves?

*President.*—They give 137 units per ton.

*Mr. Townend.*—Our figure is 260 units a ton.

*President.*—How much do they charge per unit in your case? They apparently charge a quarter of an anna to themselves.

*Mr. Farquharson.*—They charge us about  $\frac{1}{2}$  of an anna.

*President.*—They have charged Rs. 1.65 for 137 units, which is about one-fifth of an anna, against your  $\frac{1}{2}$  of an anna and you use twice as much as they do. That explains the difference. Either you are charged too much for your energy or Tata's are not charging themselves enough.

*Mr. Townend.*—There is this to be considered. We are three miles away and they have to charge us for transporting the energy. There is the cost of the wire, the poles and so on, to take into account.

*Mr. Mather.*—Quite an important part of Tata's costs goes down under general works expense.

*President.*—Is your allocation based on any system or is it mere guess work? Have you got meters in every department?

*Mr. Townend.*—We have meters, but not in every department.

*President.*—I want to know whether your allocation is correct as far as this department is concerned.

*Mr. Townend.*—Yes, we have got meters for all the important parts. I don't know whether we have separate meters for the lights but we have for the motors.

*President.*—In your case, subject to this adjustment for lighting, this may be taken as a correct representation of the amount of energy used?

*Mr. Townend.*—Yes, you may take it as entirely correct.

*President.*—So far as any reduction in the charge for power is concerned, that is determined entirely by the variation in the price of coal. Is that correct?

*Mr. Townend.*—Yes.

*President.*—Is there any other factor?

*Mr. Townend.*—No, not in the price of electricity; in the consumption of electricity, yes. We have reduced our cost per ton.

*President.*—But you have nearly reached your full output. It is 35,000 tons and you expect to get 36,000.

*Dr. Matthai.*—When you have worked for a number of years on full production your costs might possibly come down, is that what you mean?

*Mr. Townend.*—Yes, we hope to effect a considerable economy.

*President.*—The next item is 'Rolls, greases etc.' where there is no improvement at all. The charge is very big—12.210 in 1924 against 12.379 in 1926. The price of rolls must have come down?

*Mr. Townend.*—There are special reasons for this. We are using more rolls than we were using before, because we have struck a bad batch of rolls; and we have very much less supervision now, with the result that we are breaking more rolls through carelessness or inattention.

*President.*—Do you expect any reduction in that?

*Mr. Townend.*—We do; when our more experienced men come back from leave we expect a reduction in breakages.

*President.*—But even when you had no breakages the charge was the same?

*Mr. Townend.*—The price of rolls was then much higher. We are now passing through a transition period. Our first object was to raise production and after that to get better efficiency. We have brought our costs down enormously by increasing our output.

*Mr. Matther.*—May I know whether these figures cover the cost of the rolls actually used or the total purchases?

*Mr. Townend.*—Actual use of the rolls.

*Dr. Matthai.*—It is a sort of depreciation.

*Mr. Townend.*—We have a very accurate method of costing the use of rolls.

*President.*—Do the rolls last as long as they would in America apart from the mistakes on the part of the operatives?

*Mr. Townend.*—In the first year we certainly made them last as long. Probably we got a better life out of the rolls than they do in America.

*President.*—What was it due to?

*Mr. Townend.*—We had an extraordinarily good set of rolls. We had supervision to look after them. Probably the first year's cost will never be excelled. We had about the maximum service possible out of our rolls.

*Mr. Farquharson.*—The first rolls were lying in the works for some time which apparently improved them. The next lot we put straight into the mill.

*Mr. Townend.*—We kept these rolls out in the sun for two years.

*President.*—It seasons them?

*Mr. Townend.*—Yes. You have to season the ordinary iron casting. It has a much better life if left for a few months before being put into use. Apparently the same is the case with rolls.

*Mr. Farquharson.*—We definitely got that from America.

*Mr. Townend.*—In fact we are now contemplating buying rolls and storing them, with that object in view.

*President.*—I want to know what this shearing and opening means. It has come down from Rs. 6,640 in 1924 to Rs. 3,336 in 1926 which makes a difference of about Rs. 3. What is that process?

*Mr. Townend.*—After the sheets are rolled we cut them to size, that is to say we shear them. Then we have to open them one from the other.

*President.*—Why does it cost so much? It does not seem to be a very intricate operation.

*Mr. Townend.*—It takes labour, and it takes time.

*Dr. Matthai.*—Why do you enter that separately from the rest, if the whole of it is labour.

*Mr. Townend.*—Shearing is a separate department.

*President.*—Is this reduction of Rs. 3 due to increased output?

*Mr. Farquharson.*—Almost entirely.

*President.*—General works expenses (Rs. 15,749 in 1924 and Rs. 8,793 in 1926) have come down by about half. First of all I want to know how you allocate your general works expenses.

*Mr. Farquharson.*—It is an arbitrary method.

*President.*—You take the total works cost in each department.

*Mr. Townend.*—Yes, and allocate the general charges accordingly.

*Mr. Mather.*—In strict proportion to the departmental costs? That includes all expenses borne by you at Goltmuri other than the departmental costs.

*Mr. Farquharson.*—Yes.

*President.*—The reduction will depend on the increased output.

*Mr. Farquharson.*—Yes.

*President.*—Labour was Rs. 65,349 in 1924 and it came down to Rs. 32,795, the reduction being just about half. That may be partly explained by the output.

*Mr. Townend.*—Yes.

*President.*—Even so there would seem to be more men than one would expect. As regards the European element you had 57 men in 1924 in the hot mills and now you have got actually 36 of whom 4 are on leave.

*Mr. Townend.*—36 is the average for the period you are considering. 32 men are actually on the works to-day.

*President.*—Do you want to go on with 32 or 36?

*Mr. Townend.*—The men are coming and going. We shall probably have about 36 men on an average. It so happens that we have 32 men to-day. We expect to have a few more men back from home next month and another batch will then proceed home. You may take 36 as the average.

*President.*—What I want to know is how much of this reduction is due to increased output and how much of it is due to a reduction in the number of men. That I don't see anywhere.

*Mr. Townend.*—I don't think we have got it stated definitely.

*Mr. Farquharson.*—In statement XV we have given the cost of labour per ton.

*President.*—So far as the uncovenanted labour is concerned, it is about the same.

*Mr. Farquharson.*—Yes.



*President.*—So far as the covenanted labour is concerned you have reduced it by 21 men. This is the only reduction so far as the number of men is concerned.

*Mr. Farquharson.*—Yes.

*President.*—Will the 21 men account for a reduction of nearly Rs. 32 a ton?

*Mr. Townend.*—No.

*President.*—The number of uncovenanted men is the same.

*Mr. Farquharson.*—We have also an increased production with a fewer number of men.

*President.*—It would partly be accounted for by that. 21 men would make a difference of Rs. 21,000 on an average per month.

*Mr. Farquharson.*—Not more than that. The chief reason is the increased production.

*President.*—That does not give any idea as to whether your men are improving or not. What I want to know is whether your labour is giving you better results and so far as the number of men is concerned it is the same. They are giving you more output. It may be that the machines may be giving you more output.

*Mr. Townend.*—But the man has got to be behind the machine.

*President.*—I want to know whether there is really any improvement in practice.

*Mr. Townend.*—I think if you look at statement XIV—Total labour and tonnage per head per annum—that you will find it shows a very considerable improvement in spite of the drop in the number of imported men.

*President.*—You say that that is explained by the tonnage per head going up.

*Mr. Townend.*—It is almost double.

*Dr. Matthai.*—Practically the same proportion as the increase in output.

*Mr. Townend.*—Yes.

*President.*—That has always been my difficulty. In looking at the labour figures you cannot differentiate between what the machine does and what the man does.

*Mr. Townend.*—You may rest assured that the machine does nothing without the man. It cannot run at all unless the man is there.

*President.*—I quite understand that. We found the same difficulty in other industries. The mere fact of the output going up the machine turns out more material in a certain time of course assisted by men—does not necessarily prove that the men have improved or that you are not employing more men than you need employ.

*Mr. Townend.*—In the hot mills, where the output is so directly allied to the labour employed, and where every pack has got to be handled, you may take it as a sure indication that the labour is improving. They are getting more out of the machine.

*Mr. Farquharson.*—Whatever the production the machine is running at the same rate throughout the whole time.

*President.*—The machines may be doing much better than you anticipated.

*Mr. Townend.*—It is the men that are doing better.

*President.*—Your total capacity at one time was supposed to be 28,000 tons. The machine has shown that it was able to produce 35,000 tons.

*Mr. Townend.*—There is this to be said about that. We are using larger rolls. If the men had not been capable of manning them, we would not have put them in. It is not like a blast furnace where it is a question of tapping out more frequently, or anything of that sort.

*President.*—I am suggesting to you that it is much better to try with a fewer number of men than you have got.

*Mr. Townend.*—We will take your suggestion.

*President.*—It will be cutting off so many heads.

*Mr. Townend.*—You have been round our Works. Have you seen many men doing nothing?

*President.*—All the industries in India have a tendency to employ more men, because men are cheap.

*Mr. Farquharson.*—We have been cutting down the number of men since we started.

*President.*—I don't see much reduction in numbers.

*Mr. Farquharson.*—There is a reduction of 10 per cent.

*President.*—The biggest single item in your works cost is labour and about half the wages, I take it, are for covenanted labour and the rest for the uncovenanted labour. That is what it really comes to. It is an argument which may be made: "Here are these 40 men getting as much as 2,000 men". I don't say men are to be measured like this, but still when it becomes a question of employing more Indians.....

*Mr. Townend.*—It does not pay us to employ any more of these expensive imported men than we need. We have to weigh up one disadvantage against another, and to strike a balance. You have seen how our yield has gone down, and our roll costs have gone up, since we started reducing the number, and therefore the cost, of the covenanted hands.

*President.*—Is one Welshman equal to 50 Indians?

*Mr. Townend.*—In pay?

*President.*—Yes.

*Mr. Townend.*—One man with 15 or 20 years' experience is worth the pay of so many with one or two years' experience.

*President.*—Indians would hardly credit it—it may be that you are right and that one man is equal to 40 men doing the same sort of work.

*Mr. Townend.*—It is like anybody else managing.

*President.*—I am talking of the man who rolls.

*Mr. Townend.*—He is managing that set of rolls just as surely as anybody managing a works, apart from occasionally having to do manual work himself.

*President.*—He is the kind of man who is doing the same kind of work in Wales.

*Mr. Townend.*—Here he has to superintend.

*President.*—Leave alone the superintending part of the work. So far as the manual work is concerned, is he equal to 40 men?

*Mr. Townend.*—No, and we don't pay him for that. He is only using 5 per cent. of his time on manual labour. As regards the remaining 95 per cent. of his time we pay him for his knowledge.

*President.*—Supposing you had all European labour and no Indian, how many Europeans would you require in that case?

*Mr. Townend.*—18 to each mill.

*President.*—That is how many.

*Mr. Townend.*—18 compared to 40 on each mill.

*President.*—That is not the point. Supposing you had no Indian labour, what would you have?

*Mr. Townend.*—18 Welshmen or Americans to each mill.

*President.*—That would be 108. How many have you got now?

*Mr. Townend.*—108 is only for one shift: for the three shifts it would be 324. We have about 720 actually on the mills.

*President.*—That works out to 2 or 3 Indians for every Welshman.

*Mr. Townend.*—Yes, that is what we have said.

*Dr. Matthai.*—You are suggesting that in that respect you are better off. You say "The experience of other industries was adduced to show that we should need three or four Indians to replace each Welshman, but it was not long before we found that, on the average only two were required". What other industries are you thinking of?

*Mr. Townend.*—We were told that a strong Welshman or Englishman could do three or four times the amount of work of an Indian, speaking of industries generally.

*President.*—It works out roughly to Rs. 32 or Rs. 33 a month for an Indian on these figures taking the mills as a whole.

*Mr. Townend.*—Yes, we pay very high wages.

*President.*—They do not appear to be very high.

*Mr. Townend.*—We start a man on the mills on one rupee a shift.

*President.*—If you take 2 Indians to be equal to one European, the pay would come to Rs. 60 on an average whereas a Welshman would be getting on an average Rs. 1,200 a month.

*Mr. Townend.*—If we were in a country in such circumstances that we could employ all Welshmen or Americans, we would not be paying them Rs. 1,000 or Rs. 1,200 a month.

*President.*—What I want to know is this. We want to assess the difference that it would make to you if and when you Indianized your staff so to say in your mills.

*Mr. Townend.*—We claim to be doing it already. Would you be more particular in regard to Indianizing the staff?

*President.*—We Indians attach much importance, not to the number of appointments that Indians hold, but to the possibility of Indians doing the work. There are two aspects. The first is the question of economy and the second is that when an industry is subsidised by the State then the State is entitled to see that the people in the country learn the work.

*Mr. Townend.*—Quite so.

*President.*—As regards the question of economy, if you were to employ more Indian labour, you might be able to reduce your European wages by half.

*Mr. Townend.*—The yield would go down and there would be more break-ages of rolls.

*President.*—Of course that argument is sometimes carried a little too far. I don't say that that does not happen. You cannot always lay it down as a rule that if you do, you run these risks which cannot be avoided at all. That argument won't go down as easily as before.

*Mr. Townend.*—After you have examined the other points, I think that you will yourself admit the force of that argument.

*President.*—Yes, up to a certain point.

*Mr. Townend.*—We have reduced our men from 57 to 32. We take considerable pride in that. We have reduced our total European staff by 34.

*President.*—In this particular industry, people say that nobody except the Welshman knows anything about it. Therefore you have got to show this work can be done by others.

*Mr. Townend.*—It can be done and it is being done. The only place which the Indian is not able to take is the superintending side of it. The man in charge of the mill has got to have many years' experience behind him whatever his nationality may be.

*Mr. Mather.*—Every detail of the manipulation on the mill is now being done by Indians?

*Mr. Townend.*—Yes.

*Mr. Mathias.*—In due course after 15 or 20 years your Indian labour will be in a position to supervise also.

*Mr. Townend.*—We certainly hope so.

*Dr. Matthai.*—What is the highest salary drawn by an Indian in your works?

*Mr. Townend.*—I cannot answer that off hand. We have a number on Rs. 250. I don't think that we have anybody drawing a higher salary than that. We start our men on a very much smaller salary.

*President.*—Take a concrete case. If you have reduced your number of covenanted men by about 25, you may have done in one of several ways. When there is a vacancy, you don't fill it or you employ an Indian in his place. Has any Indian taken the place of any covenanted man in that sense in the mills?

*Mr. Townend.*—No.

*Dr. Matthai.*—What is being done is that the imported skilled labour is gradually being replaced by Indian skilled labour but that as far as supervision goes, there has been no substitution.

*Mr. Townend.*—Not in the Hot Mills.

*President.*—That you say you can't do for a number of years.

*Mr. Townend.*—Yes.

*Dr. Matthai.*—I notice that if you do that shows itself in the reduced yield, and in the breakage of rolls. Would there be an increase in 'wasters' also?

*Mr. Townend.*—It is very difficult to say.

*Dr. Matthai.*—You don't think that they would go up.

*Mr. Townend.*—There might be more wasters produced by defective handling in the mills, but I would not be able to tell you that definitely.

*Dr. Matthai.*—I notice from your figures that as your output increases there is a slight increase in the percentage of wasters. It has not got anything to do with handling.

*Mr. Townend.*—I would not directly attribute the increase in wasters to defective handling. It is very difficult to establish that.

*President.*—As regards the "debit for spoiled sheets" this is some new entry that you are making in your cost sheets. Is there any change in the system?

*Mr. Farquharson.*—A change in the costing system.

*President.*—Where did you show this before?

*Mr. Farquharson.*—In the scrap.

*President.*—What it comes to is that scrap has gone up from Rs. 3 and odd to Rs. 6—that is what it comes to.

*Mr. Farquharson.*—Yes.

*Dr. Matthai.*—When you take credit for spoiled sheets, there must be a corresponding debit.

*Mr. Farquharson.*—Yes, there is in the other departments.

*Dr. Matthai.*—Would it be in the steel cost per ton of blackplate?

*Mr. Farquharson.*—It is sheets spoiled in the other departments.

*Mr. Mather.*—They are not defective sheets made in the hot mills.

*Mr. Farquharson.*—No.

*President.*—There is one other point. Do you sell any black sheets at all?

*Mr. Farquharson.*—We sell those which are not good enough for tinning.

*President.*—You don't sell any other kind.

*Mr. Farquharson.*—No.

*President.*—Is there any market for them?

*Mr. Farquharson.*—There is a certain market.

*President.*—What do they use these spoiled sheets for?

*Mr. Farquharson.*—They make them into boxes, paint drums, etc.

*President.*—How much would you get for a ton of good blackplate?

*Mr. Farquharson.*—We get about Rs. 100 a ton.

*President.*—What I want to know is—apart from the requirements of tinning, is there any demand for untinned black sheets?

*Mr. Townend.*—Certainly there is, but it is a very small demand. There is a big demand for plates of a larger size.

*President.*—Than you roll?

*Mr. Townend.*—Than we can shear. We can roll the size that the market wants, but we are not equipped with proper shears.

*President.*—There is a certain amount of black sheet imported into the country. I want to know whether it would be more economical to manufacture these thin black sheets in connection with the Tinsplate Industry or as a separate Sheet Mill Industry.

*Mr. Townend.*—If we were equipped, there would be certain sizes and gauges which we could well undertake.

*President.*—Under  $\frac{1}{8}$ ".

*Mr. Townend.*—We are rolling from 31 gauge to 27 gauge at the moment. We could easily roll down to 24 gauge.

*President.*—It struck me that there was a considerable amount of market for black and galvanized sheets. I was wondering whether it would be more economical to run a black sheet works along with a tinsplate mill or whether it would be better to work a sheet mill separately.

*Mr. Townend.*—There are certain gauges which a tinsplate mill can work more economically than a sheet mill.

*Dr. Matthai.*—The gauge depends on the sort of rolls that you have.

*Mr. Townend.*—So far as our present subject is concerned, the ability to roll blackplate simply depends on having proper shears, and appliances in other departments for annealing, pickling, and so on. The market wants plates 6 ft. long.

*Dr. Matthai.*—What is supposed to be the standard size?

*Mr. Townend.*—6 ft. by 2 ft., and 6 ft. by 2 ft. 6 ins.

*Dr. Matthai.*—If you look up the Iron and Coal Trades Review you will find prices quoted for 4 sizes of tinsplate. Out of these how many sizes do you do here now?

*Mr. Farquharson.*—We do all of them. 20×14 is the basis size and the others, the sizes for making 4 gallon tins. We can easily make the first size, but there is no particular demand.

*Dr. Matthai.*—You could do it if there was a demand.

*Mr. Farquharson.*—Yes.

*Mr. Mather.*—It will not be economical to increase the number of gauges and sizes. If you increase the variety it will increase your costs to some extent.

*Mr. Farquharson.*—Yes. Our cost would be less if we manufactured a few sizes only.

#### *Intermediate Costs.*

*President.*—They came down from Rs. 30-370 in 1924 to Rs. 23-587 in 1926, the difference being about Rs. 7. I want to know first of all what are the principal processes in this part.

*Mr. Townend.*—The principal processes are pickling, annealing and cold rolling.

*President.*—Then the black sheet goes into the tinning house.

*Mr. Townend.*—Yes.

*Dr. Matthai.*—Pickling just cleans the plate?

*Mr. Townend.*—Yes.

*Dr. Matthai.*—Annealing just softens it and cold rolling polishes it.

*Mr. Townend.*—Yes.

*President.*—The main reduction in the cost is very largely due to reduction in labour—9;165 to 4;523. Do you have much covenanted labour in this department?

*Mr. Townend.*—I don't know what the protection is. There are two covenanted men on pickling, two on annealing and two on cold rolling, against 365 uncovenanted approximately.

*President.*—These are not very difficult processes, are they?

*Mr. Townend.*—The processes are essentially not very difficult but it is very easy to spoil good work through inexperienced pickling, annealing or cold rolling.

*President.*—In annealing it remains in the furnace for some time. What does the man do? Is not the annealing box entirely closed?

*Mr. Townend.*—Yes, but he looks through the holes provided in the furnace, and judges by the appearance of the box whether it has had enough heat; the box becomes red hot. We have made a practical test of Indianization in that department. We have now only two imported men there. We have three shifts each equally important and we have put an Indian on one of the shifts.

*President.*—How do you find him?

*Mr. Townend.*—The spoiled sheets that we get come very largely from his shift. That is a matter of fact and not a matter of opinion, but we are training him. The same thing applies to the pickling. We have dispensed with one of the two picklers and we have now got only one covenanted man there, and the Indian is learning the work very creditably indeed. He is not alone, as in the annealing, because the covenanted man is there to see how he is getting on. They are working side by side on different machines.

*Mr. Mather.*—You are working only one shift there?

*Mr. Townend.*—Yes. In the cold rolls we have not Indianized in the same way. There are several likely Indians in the department but none of them is yet capable of taking charge.

*President.*—The other item is acid which is about Rs. 5.12. Is this sulphuric acid?

*Mr. Townend.*—Yes.

*President.*—You get it from the Tata Iron and Steel Company?

*Mr. Townend.*—Yes.

*President.*—It does not seem to have made very much difference to your cost.

*Mr. Townend.*—That is explained in the note in Statement VII.

*President.*—My point is different. I thought the duty on sulphur was removed, but that does not seem to have made much difference to you.

*Mr. Farquharson.*—In Statement VII we have put the whole thing clearly. It was Rs. 85 a ton up to the middle of May 1926 and after the 17th it has come down to Rs. 80 per ton. The price they charge is their works cost, plus 10 per cent.

*President.*—Is not this quantity rather too large?

*Mr. Townend.*—It is higher than we expect to get, say 7½ lbs. per box.

*President.*—Is it due to wastage?

*Mr. Townend.*—It is due to less efficient labour and less efficient handling. It is of course wastage in that sense. We fully expect to reduce it as we gain more experience. Our consumption is not higher to-day than some works.

*President.*—The Welsh Tinplate people are coming here to give evidence and we will ask them about it, but your explanation chiefly is this, that the labour at present is not sufficiently well-trained to economise the materials.

*Mr. Townend.*—That is perfectly correct.

*President.*—Then there is this item of "Annealing box covers" which has gone up by about Rs. 2 and I understood that was mainly due to a change of system.

*Mr. Townend.*—We estimated the life of an annealing box as two years and then we found that we were not getting two years out of them, and so we had to raise the charge for the boxes as it was found to be insufficient.

*President.*—Do you make them here?

*Mr. Townend.*—No, they are imported.

*President.*—What are they made of?

*Mr. Townend.*—Pressed steel.

*President.*—Is it a special patent process?

*Mr. Townend.*—No, there is no patent, but it is a specialized branch of steel fabrication.

*President.*—They will always have to be imported?

*Mr. Townend.*—The covers? Probably yes. Messrs. Bird & Co., and others have made annealing bottoms for us.

#### *The Tinhouse and Warehouse Department.*

*President.*—We will now take the Tinhouse and Warehouse Department. There the total cost of the finished article came down from Rs. 458-927 in 1924 to Rs. 313-816 in 1926, the difference being about Rs. 145. In this department the cost above metal came down from Rs. 55-592 in 1924 to Rs. 37-473 in 1926. There is a difference of about Rs. 18.

*Mr. Farquharson.*—Yes.

*President.*—First of all I want to know, whether, in this department there is any wastage in the sense that you get say from 100 tons of black sheet 95 tons of tinplate.

*Mr. Townend.*—The wastage is negligible.

*President.*—Practically you account for the whole 100 per cent. by way of product.

*Mr. Farquharson.*—Yes.

*President.*—But you have got a system by which you don't know really speaking how much your wasters cost and how much your unassorted and how much your primes cost.

*Mr. Farquharson.*—They all cost the same.

*President.*—The point is—should we allocate the same cost to different products. Take the case of rails for instance in Tata's works. They turn out certain quantities of second class rails. They don't count that as production. They say these are second class rails and they credit that department with the price of the second class rails and then the remainder is the output. The result therefore is that their works costs so far as good rails are concerned go up, but in your case it is the other way about. Do you see the point? In your case the primes carry less in proportion to their value than the wasters do. In the case of Tata's, good rails carry practically the whole costs.

*Mr. Farquharson.*—We have got to take our wasters out, and credit our manufacturing cost with the price of wasters.

*Mr. Mather.*—And the balance is divided by the weight of the primes only.

*Mr. Farquharson.*—It will mean a slightly larger price for a smaller production.

*President.*—The result is that your primes really speaking show much cheaper than they really are. I take it that the proportion of your wasters and unassorted to the primes is about 15 to 20 per cent.

*Mr. Farquharson.*—Yes.

*President.*—That is a bigger percentage than Tata's second class rails.

*Mr. Farquharson.*—It is a recognised percentage in the Tinplate Trade.

*President.*—I am trying to explain to you the difference in the costing system. It makes the cost of the primes a little smaller.

*Mr. Townend.*—It costs the same all through the works whether they are primes or wasters.

*Mr. Mather.*—In so far as it is inevitable to make some percentage of wasters in making primes, the loss on these wasters, that is the difference between the cost and the selling price should be borne by the primes.

*Mr. Farquharson.*—We take the average cost and the average price.

*Mr. Mather.*—It might have a bearing in this way. You find that your average cost according to your present system is so much. There is rather a tendency to feel that if you are selling your primes at that price, the position is satisfactory, although you have got to sell your wasters at less price. On your total transactions there would be some loss.

*Mr. Farquharson.*—There is another thing with this average.....

*Mr. Mather.*—You don't know precisely at what price you can afford to sell your primes.

*Mr. Farquharson.*—All these c.i.f. figures we have given you are for primes.

*Dr. Matthai.*—The suggestion that is now made would mean that you should treat your wasters for accounts purposes practically on the same footing as scrap.

*Mr. Farquharson.*—That is not the way in which we have given figures to the Tariff Board before.

*President.*—At that time the Tariff Board did not think it necessary to go into costs in detail. The point is this. You have taken a sort of weighted average. In Statement IX (d) you have shown your realised price as Rs. 382 for primes and for wasters Rs. 288 in 1925.

*Dr. Matthai.*—There is one difference between your position three years ago and now. In 1923-24 you had very few wasters compared with 1925-26. Is that not so?

*Mr. Farquharson.*—Yes.

*Dr. Matthai.*—It was under 15 per cent. in 1923-24. It is about 18 per cent. in 1925-26.

*President.*—If you look at Statement IX (d), it will be seen that there is a difference in round figures of Rs. 100 per ton between primes and wasters. It would make a difference of Rs. 20 against primes.

*Mr. Farquharson.*—Yes, but our average price is 10 per cent. lower.

*President.*—It is more here.

*Mr. Mather.*—Your average price for 1924-25 is Rs. 20 below your price for primes.

*Mr. Farquharson.*—Yes.

*President.*—The trouble is that there are no two separate prices—as far as I can see, c.i.f. prices for primes and c.i.f. prices for wasters. If the difference is as much as Rs. 20, it may be worth while considering whether they should be separated for tariff purposes.

*Mr. Farquharson.*—The difference is 2s. to 3s. per box.

*Dr. Matthai.*—You get separate quotations in the Iron and Coal Trades Review for primes and wasters.



*Mr. Farquharson.*—Yes.

*President.*—In the bazaar they are known as wasters?

*Mr. Farquharson.*—Yes.

*President.*—I think in that case what you have to do is to get the true works cost of your primes against the true works cost of your wasters, and give us the c.i.f. prices for both separately.

*Mr. Townend.*—We cannot go right back to the hot mills for wasters.

*President.*—What would you do?

*Mr. Townend.*—We can give you a combined statement.

*President.*—If the difference is as much as Rs. 20 a ton— it is more as a matter of fact.

*Mr. Townend.*—We ought to state that we cannot get the c.i.f. price for wasters in the same way as we can get the c.i.f. price for primes.

*President.*—Take the f.o.b. price. You can get that.

*Mr. Townend.*—We cannot get the same return on them.

*President.*—First of all we will have to see what effect it has on the works cost. If the difference is substantial then in that case it may be expedient to have, if protection is given, a different tariff for the two.

*Mr. Townend.*—That may turn people off to wasters from primes or *vice versa*.

*Mr. Mather.*—There would be many administrative difficulties. You would need expert sorters in the Customs Offices.

*President.*—In any case we must get some idea as to what your fair selling price ought to be for primes.

*Mr. Townend.*—May I suggest a difference between tinplates and rails in this respect, *viz.*, that there is not a recognised market for second class rails.

*President.*—Yes, there is.

*Mr. Townend.*—Tata's can't sell theirs.

*President.*—There is a certain market for second class rails.

*Mr. Townend.*—Are prices quoted in the Trade papers for second class rails?

*President.*—I don't know. Apparently they manage to sell.

*Dr. Matthai.*—What you mean is there is no recognised market for second class rails.

*Mr. Townend.*—Yes. My point is that there is a recognised market for what are called tinplate wasters.

*Mr. Mather.*—If you assume that you are able to get a particular price for your wasters (which of course is lower than the price you get for primes) the true cost of your primes comes to a higher figure than the average cost you show here. Therefore you could not satisfactorily sell your primes at less than that.

*President.* In the allocation of your works cost that way, should we go far wrong if we allocated in proportion to the realised price?

*Mr. Townend.*—Did not you ask us just a minute ago to exclude the wasters as scrap for the time being, and to take our cost per box on the finished tonnage of primes?

*President.*—You must give credit to the works.

*Mr. Farquharson.*—Yes for the price realised for the wasters and then we would distribute the costs on the primes. For that purpose we may take the summary statement. You don't want all these in detail.

*President.*—You take the total works cost of the whole in each year.

*Mr. Townend.*—Yes.

*President.*—You have got the cost per ton. Multiply it by the tonnage. Deduct from the total the amount you receive from the wasters and divide the balance by the tonnage of primes.

*Mr. Townend.*—We will have to get an average price and apply it to the number of wasters.

*Mr. Mathias.*—What exactly is meant by unassorted?

*Mr. Townend.* They are primes and wasters all in one box.

*Mr. Mathias.*—Then the purchasers take their chance.

*Mr. Townend.*—No, there is a certain use for wasters. Some users want all primes, others take certain quantities of wasters and certain quantities of primes, and others again want all wasters.

*President.*—In this, the cost of tin per ton of tinplate has been varying a good deal in spite of the exchange being in your favour.

*Mr. Farquharson.*—Yes (handed in a statement showing the rate of exchange ruling between Straits and Penang per 100 dollars).

*Dr. Matthai.*—What particular rate is this? Is it telegraphic transfer rate? Bank's selling or buying rate?

*Mr. Farquharson.*—It is the rate that we have to pay on our drafts.

*President.*—If we take August 1923, the exchange has come down from 172 to 154 in June 1926, that is just about 10 per cent. Since June 1924 it has come down from 161 to 154, that is about 4 per cent. 4 per cent. on Rs. 4,000 is about Rs. 160 per ton.

*Mr. Farquharson.*—Yes.

*President.*—You have given the price of tin as Rs. 4,365 for January to March 1926. It does not make any allowance for the reduction in duty of Rs. 275 per ton.

*Mr. Farquharson.*—No.

*President.*—The duty of Rs. 525 per ton was not a specific duty, was it?

*Mr. Farquharson.*—It was a specific duty.

*President.*—Now there is a specific duty of Rs. 250.

*Mr. Farquharson.*—Yes.

*President.*—In that case there would be a further reduction in the cost of tin consumed per ton of plates.

*Mr. Farquharson.*—About Rs. 4 per ton.

*Dr. Matthai.*—It is about Rs. 5.5 per ton.

*President.*—That will bring down your nett metal cost to Rs. 32 from Rs. 37.

*Mr. Farquharson.*—Yes.

*President.*—The incidence of the duty is still Rs. 4.61. Is that correct?

*Mr. Farquharson.*—Yes.

*President.*—There is a bigish improvement in the quantity of tin used per ton of tinplate from 52.65 lbs. in 1924 to 41.34 lbs. in 1926.

*Mr. Farquharson.*—Yes.

*President.*—Is that due to better practice or the tin being better?

*Mr. Farquharson.*—Due to better practice. We have improved our tinning machine and we are now using a considerably less quantity per box than we previously used.

*President.*—Have you made any alteration in your machinery.

*Mr. Farquharson.*—Yes.

*Dr. Matthai.*—That is the principal thing.

*Mr. Farquharson.*—Yes.

*President.*—I thought that the principal thing that you had done was to remove the rubber suckers?

*Mr. Farquharson.*—We removed the whole machine.

*President.*—The place of the rubber sucker has been taken by a boy.

*Mr. Farquharson.*—Yes.

*Dr. Matthai.*—I suppose the improvement might have been greater but for the absence of skilled labour on leave. You explained your reduction in the yield of blackplate on account of increased output. That consideration would apply here but it has been counteracted by the improvement in your machinery.

*Mr. Townend.*—That is correct.

*Mr. Mather.*—As you pass more sheets through the tinhouse per day, you get less loss per sheet in tin scruff and so on.

*Mr. Townend.*—No, we cannot pass more than a certain number of sheets per shift through a tinning machine.

*Mr. Mather.*—You were not passing your maximum number before.

*Mr. Townend.*—Yes, we have been running each tinning machine to its maximum capacity.

*Mr. Mather.*—In 1924 you were not.

*Mr. Townend.*—I cannot say that we were using our tinning machines to their maximum designed capacity, but we were getting the maximum possible under the conditions obtaining in India. When our production increased, we saw that the only way to increase the output in the tinhouse was to alter the size of the machines.

*President.*—You have made the machine smaller.

*Mr. Townend.*—Yes, thus reducing the amount of expert supervision required.

*President.*—That is one thing.

*Mr. Townend.*—And our Indian workmen could work more efficiently than they could with the big machines.

*President.*—Do you expect any improvement still?

*Mr. Townend.*—Yes.

*Mr. Mather.*—What do you think you would be able to get that figure down to?

*Mr. Townend.*—I think that we will be able to reach the Welsh figure. We are really as good as many works in Wales now.

*President.*—What would be their consumption?

*Mr. Townend.*—I have been given 1 lb. 14 oz. per box as being an average Welsh consumption. We are getting below that now.

*President.*—It comes to 38 lbs. per ton.

*Mr. Townend.*—Taking the consumption of tin in the tinning machine, we are using about 1.65 lbs. per box which is about 1 lb. 10 oz., that is nett after taking credit for scruff. I think that that would be a very fair average for Wales. We hope some time to get down to 1 lb. 8 oz.

*President.*—1 lb. 10 oz. nett.

*Mr. Townend.*—Yes. I want to give the figure of 1 lb. 14 oz. as the gross in Wales. I think that the nett average for Wales would be 1 lb. 10 oz., that is what we are getting.

*Mr. Mathias.*—You are getting that at present.

*Mr. Townend.*—Yes. There are some works in Wales which will tell you that they get lower. We also hope to get down to a lower figure.

*President.*—What is scruff?

*Mr. Townend.*—Skimmings off the top of the tin pot.

*President.*—How do you take credit for that? In Statement IV (c) you have taken credit for Rs. 19.922. Is it because the price of tin has gone up?

*Mr. Farquharson.*—We get a much better price for scruff.

*President.*—Do you sell it?

*Mr. Farquharson.*—We ship it to England.

*Mr. Townend.*—That is another handicap of our trade out here.

*Dr. Matthai.*—Most of your refuse is exported I find.

*Mr. Townend.*—Yes.

*President.*—Rs. 19·922 is nearly a quarter of the cost of tin per ton of tinplate.

*Dr. Matthai.* In your note you account for Rs. 19 partly because of the improvement in the arrangements for recovery.

*Mr. Farquharson.*—That is recovery of the scruff, not of tin.

*President.*—It seems that you get about Rs. 1,000 a ton for scruff.

*Mr. Farquharson.*—Rs. 900.

*President.*—Is that nett?

*Mr. Farquharson.*—That is nett.

*President.*—It is a handicap in your case that you have to export it.

*Mr. Townend.*—Yes.

*Mr. Mathias.*—This disadvantage you suffer from having to export is really small when the price is considered.

*Mr. Farquharson.*—Yes.

*Mr. Mather.*—It might possibly make a difference of one rupee. I think that 5 per cent. of the selling value will probably cover that.

*Mr. Farquharson.*—We lose the duty on what we re-ship.

*President.*—What is happening is that your tin has gone up by Rs. 500 a ton in price?

*Mr. Farquharson.*—Yes.

*President.*—Your consumption per ton has gone down.

*Mr. Farquharson.*—Yes.

*President.*—You are getting better value for your scruff which accounts for a difference of about Rs. 11 in the cost of tin per ton of tinplate.

*Mr. Townend.*—Yes.

*Dr. Matthai.*—What happens to this scruff when it goes to England?

*Mr. Farquharson.*—Tin is taken out of it.

*President.*—But you must be getting the British price for this except what you lose on freight, and handling charges.

*Mr. Townend.*—Yes.

*President.*—How much does that come to?

*Mr. Farquharson.*—Rs. 8 to Rs. 10 per ton *plus* 30*d.* freight.

*Dr. Matthai.*—What is the position with regard to the price of tin now? Except for small variations, it is steadily going up.

*Mr. Farquharson.*—Yes.

*Dr. Matthai.*—Do you expect the upward tendency to continue?

*Mr. Farquharson.*—It was expected to go up a little while ago but it remained steady.

*Cost above metal.*

*President.*—I see that the cost above metal has come down from Rs. 55·592 to Rs. 37·473.

*Mr. Farquharson.*—Yes.

*President.*—I see the biggest drop is in labour—15·436 to 8·729 in 1926, and general works expenses—7·962 to 4·472. These are the two principal items.

*Mr. Farquharson.*—The drop in the general works expenses is due to increased production. Labour is similar.

*President.*—Then there is another big item, “packing and despatching”—Rs. 13·926 in 1924 and Rs. 12·788 in 1926. This seems to be rather a big item.

*Mr. Farquharson.*—The largest part of that is casing for the tinsplate.

*President.*—What does it consist of?

*Mr. Farquharson.*—Two pieces of tinsplate. One of these two pieces is treble size 20×30. The top one is single size and the bottom one treble size.

*President.*—That is about 4/5 sheets a box?

*Mr. Farquharson.*—Yes.

*Mr. Townend.*—The tin casing is included in the price.

*Mr. Mathias.*—This is the system of packing in Wales, I suppose?

*Mr. Townend.*—Yes, exactly the same.

*Mr. Mather.*—I take it that whenever you have them available you use waster plates and do you debit them as wasters in your costs?

*Mr. Farquharson.*—We charge these at the cost price not selling price.

*Mr. Mather.*—Works costs only?

*Mr. Mather.*—You take two sheets to wrap a bundle of saleable tinsplates. You charge these two sheets at some particular price; is that the average works cost price without overhead?

*Mr. Farquharson.*—Yes.

*Mr. Mather.*—And the usual practice is to use waster plates?

*Mr. Townend.*—We treat their costs in the same way as you want us to treat the wasters.

*Mr. Mather.*—These are not included in the production at all?

*Mr. Townend.*—Yes, but not in the costs per box.

*President.*—It comes to this that you are selling 1 ton and 84 lbs. for the price of 1 ton of tinsplate?

*Mr. Townend.*—That is so.

*Dr. Matthai.*—From your Statement IV, I find that you don't take any debit for spoiled sheets in 1924 though you do it in 1925.

*Mr. Farquharson.*—In 1924 we did not have this system. It started in 1925.

*Dr. Matthai.*—You give your total cost above metal as Rs. 213. That is cost above steel and tin, is it not?

*Mr. Farquharson.*—Yes.

*Dr. Matthai.*—I was looking at it this way. When you increase your output the direct effect of it will be on the cost above metal. If you add all your labour costs in all the three processes, I find your total labour cost in 1924 is 42 per cent. of the cost above metal, in 1925 it is 35 per cent., and in 1926, 33 per cent. That is to say the decrease in your labour cost is more than proportionate to the increased output. I tried to explain this by the presence of these covenanted men. Am I right?

*Mr. Farquharson.*—Yes.

*Dr. Matthai.*—Now take your fuel and power. In 1924 it comes to 17 per cent. of the cost above metal and that 17 per cent. is maintained right through 1925 and 1926. You have not taken advantage of the reduction in the cost of coal. You have simply brought it down proportionately.

*Mr. Townend.*—Power so outweighed fuel as to make the reduction in the cost of coal almost negligible in comparison.

*Dr. Matthai.*—Supposing you take your total consumption of fuel and electricity; that is an item which ought to come down with the increase in the output. If you take the three years together, fuel and power accounts for Rs. 36 in 1924, Rs. 29 in 1925, and Rs. 24·7 in 1926.

*Mr. Townend.*—We have made a reduction, but your point, I suppose, is that as compared to the total cost we have not made any reduction?

*Dr. Matthai.*—Supposing there had been no reduction in the cost of coal, you would still have made the same reduction.

All that I am suggesting is that the reduction has not been as it ought to be in view of the reduction in the price of coal.

Then I find that the materials stand at 7 per cent. right through. I am thinking of things like "Acid." Both in the tin house and in the intermediate process it stands exactly at 7 per cent. in 1924, 1925 and 1926.

*Mr. Townend.*—A great many of our items remain constant whatever the output. Acid, for instance, is just about the same whatever the production is.

#### *Note on Statements I—IV. Costs.*

*Dr. Matthai.*—In your note you make a statement about the scruff figure for 1926. I don't quite follow that. If you look at page 3 of that note explaining the costs, there is a statement "The credit for January to March 1926 (for tin dress) is however misleading as it is higher than the average for the year is likely to be." Why?

*Mr. Farquharson.*—Because we have collected more in these three months.

*Mr. Mathias.*—I am still puzzled about this packing and despatching. I gather the biggest amount in this is the cost of the tin sheets?

*Mr. Farquharson.*—Yes.

*Mr. Mathias.*—I find that the cost of packing and despatching was Rs. 13 in 1924 and Rs. 15 in 1925 whereas your cost of tinsplate per ton was 458 in 1924 and 380 in 1925. One would naturally expect the cost of packing and despatching to go down as the cost of sheets go down. On the other hand it has gone up?

*Mr. Farquharson.*—That is due to difference in accounting. Things that we had not taken into the warehouse in 1924 have been taken in the warehouse in 1925 and 1926. Some of the packing and despatching was not charged in 1924 to that department.

*Mr. Mathias.*—Does that also account for the figures of 1925 and 1926?

*Mr. Farquharson.*—Yes.

*Mr. Mathias.*—The cost of tinsplate has decreased from Rs. 280 to Rs. 213. There is a big difference there.

*Mr. Farquharson.*—Yes. We costed 1925 and 1926 in the same way. 1924 was different.

*Mr. Mathias.*—So that the figures for 1925 and 1926 justify rather a smaller drop than from 15 to 13. It is 390 against 313.

*Mr. Farquharson.*—You have a considerable increase in the production without a considerable increase in the labour.

#### *Combined costs.*

*President.*—I want to compare your costs made up rather differently. That is to say, your actual works costs with reference to the cost of your materials including your metal and what I call auxiliary raw materials and the cost above total materials. These figures are taken from this combined table. First of all take your works costs in 1924—Rs. 458-927 and in 1926, 313-816, that is a difference of Rs. 145-111. What happens is this that of that amount Rs. 261-375 is the cost of materials of which metal accounted for Rs. 169-587 and the auxiliary raw materials accounted for Rs. 97-88 and in 1926 metal accounted for Rs. 117-204 and the auxiliary raw materials Rs. 73-128, that is a total of Rs. 190-332.

*President.*—Out of a total of Rs. 428 in the first year and Rs. 313 in 1926, more than half is accounted for by raw materials.

*Mr. Farquharson.*—Yes.

*President.*—You have not got so much control over the prices of these because you have to buy them. Apart from improvements in practice by which you save a little tin or acid or something else over more than 50 per cent. of your total works cost you have got no control to speak of. The only directions in which you can reduce your costs are the costs above materials which in 1924 were Rs. 127-52 and in 1926 Rs. 123-484 nett.

*Mr. Farquharson.*—Yes.

*President.*—In that also there are certain items which you cannot reduce for instance in packing and despatching. Roughly 84 lbs. of tin plate must be given away with one ton of tinplate. Is not that so?

*Mr. Farquharson.*—Yes.

*President.*—So the scope for reduction is confined practically to Rs. 112 which is the cost above materials, not taking into account packing and despatching.

*Mr. Farquharson.*—Yes. But we have control over yield.

*President.*—That would affect the amount of materials used per ton of metal, if you improve your yield.

*Mr. Farquharson.*—Yes.

*President.*—If you take the proportions they appear very big. Take labour which was Rs. 89 a ton in the first year and it is now Rs. 46 a ton.

*Mr. Farquharson.*—Yes.

*President.*—I think you have explained that generally, but I don't see that it is fully accounted for. I don't find how you have been able to make this reduction of Rs. 43 a ton.

*Mr. Farquharson.*—We have doubled our output with the same number of men. If you refer to the later statements, you will find that the number of men has not gone up. In the meantime output has doubled. That will explain the very large difference.

*President.*—Looking at this table do you consider that there is room for economy from your point of view?

*Mr. Farquharson.*—The first economy is that we shall increase our production to a certain extent in the next two years.

*President.*—That would not be very much. Your output will be about a 1,000 tons more.

*Mr. Farquharson.*—Yes, that is a direct economy. We have an economy to make in the quantity of steel used. We will reduce our proportion of scrap. We are also going to reduce all our stores such as palm oil, acid, zinc chloride, etc., which 4 years' practice will allow us to do. The breakage of rolls will undoubtedly be reduced with more practice.

*Mr. Mather.*—Can you save anything in the general works expense?

*Mr. Townend.*—Yes. There will be a certain saving by reason of the increased production.

*President.*—So far as this is concerned we will have to consider it in the light of another statement you are going to give us.

*Mr. Townend.*—There will be another saving. We hope to improve our percentage of primes.

*Mr. Mather.*—Can you say how your practice compares with a good Welsh mill?

*Mr. Townend.* A Welsh mill will get 15 to 20 per cent. We are about as good as an average Welsh mill.

*President.*—What is your percentage?

*Mr. Townend.*—At present 19. We ought to get down to 15 per cent.

*Mr. Farquharson.*—We have brought it down to 17 per cent. for a month.

*President.*—Please explain to me what you really call a waster.

*Mr. Townend.*—A waster is any plate with a defect in it of any description. It may be a pin point showing black. It may be a corner slightly bent down. There may be a mark on the surface. There may be a patch on it that is not properly tinned. In our Waster Analysis sheet we have got about 60 different conditions making wasters.

*President.*—Does it affect its use or does it affect merely its appearance?

*Mr. Townend.*—With kerosine plate it is mainly appearance. Most of the plates we send out as wasters are perfectly good for any purpose unless appearance is a first consideration. The tea packers put a wrapper round the tin, and although they usually buy primes, most wasters would keep the tea in good condition, and it wouldn't matter what they looked like. Biscuit tins and cigarette tins also have paper wrapped round them. The kerosine tin above all is the one you look at. It has got no wrapper on it.

*President.*—Do you use it for petrol too?

*Mr. Townend.*—Yes, but petrol tins are painted.

*Dr. Matthai.*—Is there any considerable amount of wasters imported into this country?

*Mr. Townend.*—There is a constant demand for wasters.

*Dr. Matthai.*—All the dealers' demands are for wasters.

*Mr. Townend.*—Yes.

*Mr. Mathias.*—Are wasters not used for kerosine oil tins?

*Mr. Farquharson.*—Yes, they are used, but only to a limited extent.

#### *Overhead charges.*

*President.*—That disposes of that so far as your costs are concerned. Now we have got to take your overhead. You have given me so many different statements about your block value that I really don't know where I stand. Which statement do you suggest really represents your actual block value?

*Mr. Farquharson.*—This letter we wrote on the 24th June gives the actual block value.

*President.*—Statement XX will do for our present purpose. We will take the values in round figures. Rs. 145 lakhs is the block value as it stands in your books?

*Mr. Farquharson.*—Yes. This is for works alone without the town.

*President.*—We will take the works alone without the town. You say that you have divided it into dollar, sterling and rupee expenditure. Rs. 45 lakhs is the rupee expenditure.

*Mr. Farquharson.*—Yes.

*President.*—And we will say Rs. 16 lakhs is the sterling expenditure and Rs. 84 lakhs the dollar expenditure. You suggest, I think, in one of your letters so far as the rupee expenditure is concerned, there ought to be no deduction.

*Mr. Farquharson.*—No.

*President.*—But that as regards sterling and the dollar expenditure you think that you have spent about one-third more than the present day value. Is that right?

*Mr. Farquharson.*—Yes.

*President.*—But the rupee expenditure also would include expenditure, I take it, on structural material and various other things. What does this expenditure consist of?

*Mr. Townend.*—It would include foundations, brick-work, labour and the carrying charges from Calcutta to Golnuri.

*President.*—Rs. 45 lakhs is a good deal if it included only that.

*Mr. Mathias.*—Certain items of machinery are included in that. Machinery was Rs. 1,57,962 in 1921.

*Mr. Townend.*—That is not machinery bought here. It may be steel erection.

*Mr. Mather.*—You have got a separate heading for steel erection

*Mr. Townend.*—I should have said machinery erection.

*Mr. Mather.*—That shows nearly Rs. 11 lakhs merely for erecting the machinery.



*President.*—We really wish to know how to write down your block value to its present value. So far as your sterling and dollar purchases are concerned, there is no dispute up to one-third. As regards the other of course, we cannot yet tell what the position may be. I think I explained to you what we did in the case of the Tata Iron and Steel Company. In their case we wrote down the total block value from Rs. 15 crores to Rs. 10 crores whether it was dollar or sterling or rupee purchase and we arrived at the figure this way. We wrote down the value of the plant that was actually purchased in America in dollars. Then we wrote down the amount by the amount of money they had spent out of the depreciation fund meanwhile on extensions. And we came to the conclusion that Rs. 5 crores would be the amount that we should write off.

*Mr. Townend.*—Are you not endeavouring to get from us the amount that it would cost us to put down a plant to-day? It would cost a certain amount to put up a steel works, or to install a piece of machinery, irrespective of any question of depreciation on it.

*Mr. Mather.*—Do you think it would cost Rs. 11 lakhs to erect the machinery?

*Mr. Townend.*—That is a matter of arithmetic. I am assuming that these figures are correctly allocated.

*President.*—There are two things. The first thing is your block value on which you are entitled to depreciation. Another thing is the capital on which you can expect a return. They are two different things. Your block value may be a good deal more than the amount of capital on which you are entitled to claim a profit. The point I am trying to make is that though your replacement value may be a crore of rupees, yet your capital which is entitled to earn may be only Rs. 80 lakhs. Your block may be, for instance, Rs. 80 lakhs *plus* what you have got in your depreciation fund.

*Mr. Townend.*—In fact we have got nothing in our depreciation fund.

*President.*—I quite agree.

*Dr. Matthai.*—Supposing I bought three years ago machinery worth Rs. 100 lakhs and that same machinery could be bought to-day for Rs. 50 lakhs, it means the present day value of the machinery is Rs. 50 lakhs. But my machinery has been in operation for three years. It has been subject to wear and tear. Assuming that the wear and tear were about 10 per cent. a year then I deduct Rs. 15 lakhs from that.

*Mr. Townend.*—Yes, Rs. 5 lakhs a year on Rs. 50 lakhs. None the less, what you are doing is to reduce the amount of our block by three years' depreciation, and thereafter to allow us to calculate the depreciation on that reduced figure only.

*President.*—When you have set aside your depreciation, your block value gets down and your depreciation increases?

*Mr. Townend.*—If I may answer your question on Dr. Matthai's figures, what you wish us to do is to call our 100 lakh plant a Rs. 50 lakh plant less 3 years' depreciation on Rs. 50 lakhs.

*President.*—I lost sight of the fact that in the Tata Company's case they built some part of their extensions out of the depreciation fund. In your case whatever you built you built out of fresh capital.

*Mr. Townend.*—Yes.

*President.*—We will have to take into consideration by what amount your block value ought to be reduced in the light of any information that you have given us and any other information that we may get. But the way in which you have presented your block value it is difficult to follow. There is not much difficulty about the sterling and dollar expenditure.

*Mr. Mather.*—A further point arises in connection with the dollar expenditure. These dates against which you have shewn the expenditure are the years in which you made the remittances and not necessarily the years in which the contracts were entered into. There might be a considerable interval

in a big order like this. For instance, quite a large proportion of the dollar expenditure that you show against 1921 was presumably on 1920 contracts.

*Mr. Farquharson.*—It was.

*Mr. Mather.*—And therefore at higher prices than the average level of 1921, during which year prices fell substantially. I take it that that applies to the bulk of your dollar and sterling expenditure, that is to say the contracts were actually entered into in 1920?

*Mr. Townend.*—The beginning of 1921 was just as bad as 1920.

*President.*—Look at your letter of the 24th June. The dollar expenditure you have given in Statement XX is Rs. 83,67,936. According to your telegram from Messrs. Perin and Marshall the dollar expenditure of \$2,324,870 would be reduced to \$2,032,735, making a difference of nearly \$300,000. But you give the rupee equivalent of the dollar expenditure as Rs. 56-51,297, that is a difference of about Rs. 27 lakhs.

*Mr. Farquharson.*—That is the difference in exchange.

*President.*—That is what I wanted to know. Is that due to the exchange?

*Mr. Farquharson.*—Yes. I took that at the present rate of exchange.

*Dr. Matthai.*—What was your original figure?

*Mr. Farquharson.*—That is given in another statement.

*Mr. Mathias.*—At the present day exchange Rs. 56 lakhs represents Rs. 60 lakhs.

*Mr. Farquharson.*—Yes.

*President.*—Again in the sterling expenditure you have got Rs. 16,41,021. How does that come down to Rs. 5,28,027? You say that purchases in the United Kingdom at the present day would cost £39,602 against the original cost of £54,779. I don't find that figure anywhere. That is clearly wrong.

*Mr. Farquharson.*—The sterling figures are wrong.

*President.*—Rs. 5,28,027 is the equivalent of £39,602, I take it.

*Mr. Farquharson.*—Yes.

*President.*—But there is another £55,000 to come in.

*Mr. Farquharson.*—That has been omitted I am afraid.

*President.*—Then your block value as given there will go up by about £55,000.

*Mr. Farquharson.*—Are you prepared to allow that to come in the replacement cost?

*President.*—This expenditure on interest, loan, travelling, etc.—comes from the loan, that you took for the construction of the works from the Burmah Oil Company.

*Mr. Farquharson.*—Yes.

*President.*—During construction?

*Mr. Farquharson.*—Yes.

*President.*—We will have to consider that point.

*Mr. Farquharson.*—Are there any other figures we can give you? We can work them out in any way you like.

*Mr. Mather.*—Do you think that that method of getting an estimate of the present cost is really likely to give you the lowest figure at which keen buyers, as I expect you are, could really get machinery?

*Mr. Farquharson.*—We have no option.

*Mr. Mather.*—Do you really think that you would not be able to get it for less than \$2,000,000?

*Mr. Farquharson.*—Not in America.

*Mr. Mather.*—If you are not able to get it for less than that in America, is there no possibility of getting any machinery outside?

*Mr. Townend.*—We could not do it in 1920. We tried to buy all our machinery in England, but we did not succeed, not only because they were full of orders but apparently because they had not the facilities for building such big machinery.

*Mr. Mather.*—It would not be a question of facilities. Every year English and Continental firms are building mills of other types which are much bigger and heavier than your tin mills.

*Mr. Mathias.*—Have they any facilities now?

*Mr. Townend.*—It is difficult to say. The point arose like this. Our machinery is bigger than that of any tin mill in Wales and the manufacturers were so surprised with the specifications that one at least went up to our London Office and asked if a mistake had not been made.

*Mr. Mather.*—Even if that be so, don't you think that if you had to pay those very high prices now, you would consider the possibility of working on a different system if it enabled you to use cheaper machinery?

*Mr. Townend.*—I don't think that we could ever have adopted any other system. As to prices, we have been trying recently to get rolls from Great Britain but they are 30 per cent. more expensive than rolls from the United States.

*Mr. Mather.*—Does that apply to very many things?

*Mr. Townend.*—We don't know whether it applies to very many things or not.

*President.*—I think I told you last time that one of the principles we applied was the drop in the composite price of steel in the United States of America, assuming that the price of steel bears some relation to the price of machinery and I think that most people who have given evidence before us on that point have agreed that that is a principle that may be applied as machinery moves more or less in the same proportion as steel. Last time we had actual prices. In 1920 the composite price was 68 dollars in United States of America. It came down in 1923 to \$43. Since then, it went down a bit and then it rose again and it is now \$40. The drop is from \$68 to \$40 during this period.

*Mr. Mather.*—The average price for British plates in 1920 was about £23 a ton. In the first quarter of this year it was £7-10-0. The price of steel has not fallen in the United States as in other countries.

*President.*—The United States' prices are more reliable in this sense that there have been very few exchange complications there. It is a country which produces steel on a much larger scale than any other country in the world and which has a much better organised system of sales. Therefore the general level of prices in the United States is a fair indication of the price of machinery, at any rate of machinery imported from that country.

*Mr. Farquharson.*—That is a drop of about 40 per cent?

*President.*—I think that is the principle that we applied in the Tata Iron and Steel Company's case. Of course I don't dispute Messrs. Perin and Marshall's quotation but as you know there is a difference between the price quoted and price at which actual business is done. I think that if you took the composite price in that country and in the United Kingdom you will find that the comparison would be much more unfavourable because as Mr. Mather pointed out in Great Britain they take plates very often as typical of steel. There the drop has been a good deal more. What I am trying to point out to you is that this is one of the principles we shall have to consider. We have applied it before and we may have to consider how far it can be applied now. Of course we shall have to make allowance for other conditions and if you can suggest any other method of arriving at it we should be very glad.

*Mr. Farquharson.*—There is no other alternative except the one we have adopted, namely getting these quotations.

*President.*—We really cannot go by anything like that. You take in the composite price of steel, the price of 14 different articles.....

*Mr. Townend.*—I would like to put this point before you. We have not got very much of what you would strictly call machinery in our works except electrical machinery. I don't know how far electrical machinery has dropped in price with its very high proportion of fabrication cost.

*President.*—You will find that the cost of fabricated steel has come down in a greater proportion than the cost of ordinary steel.

*Mr. Mathias.*—Perhaps you have some information as to the cost of erecting a new works during the last two or three years?

*Mr. Townend.*—We have none at all.

*President.*—There is no plant that is comparable with yours in England at any rate?

*Mr. Farquharson.*—No.

*President.*—American cost of erection is no indication of what it would cost you?

*Mr. Farquharson.*—No.

*President.*—The price of course would be the same except that you will have to pay freight and other charges.

*Mr. Farquharson.*—That is right.

*President.*—However, you can consider this point and suggest any other alternative that you think might help us.

*Mr. Mather.*—I would like you to consider much more carefully this statement of yours about the inability to reduce the local expense. If this total of Rs. 44 lakhs represents the cost of building and erecting the works and if you say you cannot reduce it more, it is a severe criticism of the whole policy of erecting works in India. It is extremely difficult to believe that it will always be necessary to spend that amount of money. I can tell you that it is substantially more than the total cost of building, erecting and equipping a tinplate plant in Wales, shortly before the war with a production similar to yours and any statement to the effect that it is necessary to spend very much more on erection than the total cost of building, erecting and equipping a tinplate works elsewhere, requires very careful examination.

*Mr. Farquharson.*—We shall re-analyse this statement.

*Mr. Mather.*—It is a large proportion of the total. It is a very big sum; about quarter of a million at the present rate of exchange.

*Mr. Farquharson.*—We will analyse this statement very much more fully.

*President.*—It is very important to know how all this 44 lakhs of rupees was spent in this country.

*Mr. Mather.*—We should like you to analyse this more fully, not merely in the sense that you would give more detail but we would also like you to consider more carefully how far you would be able to avoid this heavy expenditure if you were doing work of that kind in future.

*Mr. Townend.*—I trust that you do not mean to imply that we did not exercise care in avoiding unnecessary expenditure when the plant was being erected.

*Mr. Mather.*—I imply nothing as regards the past, but I do presume that you would exercise great care if you came to extend the plant.

*Mr. Townend.*—Certainly.

*President.*—There is one other point. So far as your building is concerned, is it big enough to have a duplicate plant more or less?

*Mr. Townend.*—No. To extend the hot mills we would have to extend the buildings.

*President.*—I thought you had extra space for it already?

*Mr. Townend.*—In the pickling and annealing departments, and in the cold rolls, we have ample space available for extension, but not in the hot mills. That is about the only building we would have to extend in order to increase production, except for a small addition to the tin house.

*Mr. Mathias.*—Have you any rough estimate of the cost of extending?

*Mr. Townend.*—No. But it would be very easy to give you an idea of the cost, except that we cannot give you the present price of the machinery.

*President.*—So far as your machinery is concerned, you have not got any extra machinery?

*Mr. Townend.*—No, it is all being used to its full capacity.

*President.*—So far as the plant is concerned you will have to get an extra plant altogether?

*Mr. Townend.*—Probably what we would do would be to install another 2 or 4 hot mills and then increase the capacity of the finishing departments to deal with their output. We can increase our output by a very small expenditure relative to the original expenditure. These intermediate buildings that we have already got would save a large proportion of the cost of extension. We would have to spend money on the hot mills but not in proportion to the original expenditure. We spent our money in the first instance in places where it was a good investment to put up buildings of a convenient size. We did that to allow for expansion and we will reap the benefit if and when we decide to expand.

*President.*—We shall consider this point when we deal with your market. But the first difficulty is that there is not enough tin bar available in the country now.

*Mr. Farquharson.*—Tata's have given us the assurance that they would supply us with enough tin bar.

*President.*—They have enough tin bars at present to supply you 50,000 tons.

*Mr. Farquharson.*—The figure that Tata's put down is our requirement. I don't think that is their maximum capacity.

*President.*—That is what you require for your own tin mill. Then they require sheet bar for their own sheet mill. As far as their programme is concerned, there is room for about 50,000 tons of tin bar. I don't know what they will do in the future. They have given their total output as 560,000 tons of rolled steel and they show 50,000 tons for tin bar and the other steel is already used up for other kinds of rolled steel.

#### *Depreciation.*

After ascertaining your block value we have to determine the amount of depreciation. We allowed  $6\frac{1}{2}$  per cent. depreciation in our first enquiry. As regards depreciation one question has arisen which may not perhaps arise in your case. In your case it would be easy to alter the Articles of Association, if necessary, because you have only two shareholders. Supposing you earned the depreciation allowed you, the question that arises is whether you would lay aside the full amount. That is one of the points we have got to consider. Where an industry is protected and it is allowed a certain rate of depreciation, that depreciation must be used for replacement and renewals and obsolescence and things of that sort and not for other purposes. So far as you are concerned there may be no difficulty in satisfying the Government and the Legislature that this would be done. When you cannot raise fresh capital it may be used on extension but the idea is that the depreciation fund is intended for renewals and replacements and obsolescence and things of that kind. But if you want to increase your output and want to use the depreciation fund for that purpose, it may not be a legitimate charge. The point is that you are not to use this fund for paying dividends when times are lean. I don't say that a firm like yours would do that.

*Mr. Townend.*—Is it your point that if you give us protection on the basis of  $6\frac{1}{2}$  per cent. depreciation you want us to depreciate our plant to at least that extent and you want us to keep the depreciation fund intact without distributing it in dividends or anything like that? Your main point, I presume, is that we should set aside the  $6\frac{1}{2}$  per cent. and secondarily that we should keep that fund to be employed for the purpose for which it is intended.

I take it you would not question the propriety of our buying extra plant with it.

*President.*—We are not considering that. The point is that the State must have a guarantee that the depreciation fund which is earned is used for depreciation purposes.

*Mr. Faulkner.*—In what form is the guarantee to be given?

*President.*—One way would be to make it obligatory on the directors to set it aside for the purpose for which it is intended. You see, it is one of the things which we have to consider. The country is interested in seeing that the industry is put on a sure footing. You know what ordinary people do with depreciation. If there is a good year they may lay aside Rs. 50,000, if it is a bad year they may not lay aside anything because they must declare a dividend. That must not happen where an industry is protected.

*Mr. Townend.* Your essential point is that we should put aside at least this 6½ per cent. each year.

*Mr. Mathias.*—Yes, so that the plant may always be kept up to date.

*Mr. Mather.*—There are companies which provide in their articles that such and such an amount shall be set aside for depreciation before anything is distributed to the shareholders.

*President.*—Do you think that there should not be much difficulty in that so far as you are concerned?

*Mr. Faulkner.*—You have to put that to Tata's.

*President.*—We have done so.

*Mr. Faulkner.*—What did they say to that?

*President.* Mr. Peterson seemed to think, as far as I remember, that there should not be much difficulty. He has got to put it up to the Directors too. But we suggested to him that in their case it is far more important, because there are numerous shareholders who may want dividends in bad years without caring much about depreciation. In your case the difficulty is not so great and in fact none at all, because there are only two of you. We may not examine you orally again so you will have to give us your reply in writing.

*President.*—Then the other charge that comes under Interest on Works Capital, etc., is the interest on working capital. I take it that you claim interest on Rs. 30 lakhs on a 3 months' turnover at the rate of 7½ per cent.

*Mr. Farquharson.*—Yes.

*President.*—The incidence of that works out at about Rs. 7 a ton in round figures.

*Mr. Farquharson.*—Yes.

*President.*—How do you calculate the Head Office charges?

*Mr. Farquharson.*—These charges which we have given you are the actual charges.

*President.*—This year they are smaller than on the previous year.

*Mr. Farquharson.*—That is due to the increase in production. Our Head Office charges have not gone up, whereas the tonnage has increased.

*President.*—It comes to about Rs. 5,000 in round figures.

*Mr. Farquharson.*—Yes.

*President.* You have shown at the bottom of Statement V commission and brokerage which I presume have not gone into any of these other figures.

*Mr. Farquharson.*—They have been taken from the prices we realised.

*President.*—Are these nett realised prices?

*Mr. Farquharson.*—Yes.

*Mr. Mather.*—In Statement V you have given the actual price realised per ton as Rs. 346.33 during January to March 1926 and you want to deduct Rs. 2.22 for commission and brokerage.

*Mr. Farquharson.*—Rs. 346.33 is our nett realisation at our works.

*Manufacturer's Profit.*

*President.*—That completes the overhead charges. Then as regards the manufacturer's profit, if I understood Mr. Faulkner correctly, I think what he meant was that if the block value required to be written down, the share capital and the debentures would be written down *pro rata* so that the whole burden is not thrown on the ordinary shares.

*Mr. Faulkner.*—That is right.

*President.*—Supposing we write down 25 per cent. for the sake of argument we take off 25 per cent. from the ordinary share capital and 25 per cent. from the debentures.

*Mr. Faulkner.*—After finding out the amount to be written off, it will be allocated between the share capital and the debentures in proportion.

*Dr. Matthai.*—Practically 2 to 1.

*Mr. Faulkner.*—Rs. 75 lakhs to Rs. 125 lakhs. The debentures are considerably more than the ordinary capital.

*President.*—On the ordinary share capital you claim profit at the rate of 10 per cent. and on the other at 6 per cent.

*Mr. Faulkner.*—Yes.

*President.*—That would give you a fair selling price, works cost *plus* the overhead charges *plus* the manufacturer's profit calculated on this basis.

*Mr. Faulkner.*—Yes.

*Dr. Matthai.*—In this statement you have taken a capitalisation of Rs. 120 lakhs.

*Mr. Faulkner.*—Rs. 150 lakhs, including Rs. 30 lakhs for working capital.

*Dr. Matthai.*—You take your manufacturer's profit. I find each year it works out to Rs. 9 lakhs.

*Mr. Faulkner.*—Yes.

*Dr. Matthai.*—But according to the rates of interest that you have stated, it ought to come to Rs. 11 lakhs on a capitalisation of Rs. 150 lakhs.

*Mr. Faulkner.*—We have excluded Rs. 30 lakhs of working capital.

*Dr. Matthai.*—If you take 6 per cent. on debentures and 10 per cent. on the ordinary share capital, it would mean an average rate of  $7\frac{1}{2}$  per cent. which is the same rate as you have taken on your working capital.

*Mr. Townend.*—Are they usually differentiated at all?

*Dr. Matthai.*—If you borrow for a short period the rate of interest must be different from the rate of interest for the fixed capital which you borrow for a longer period.

*Mr. Townend.*—In practice you raise a certain amount of capital for your concern. Some if it is put into fixed capital and some becomes floating capital and you expect a return on the whole amount.

*President.*—You have taken  $7\frac{1}{2}$  per cent. from what we allowed the Tata Iron and Steel Company in the first enquiry.

*Mr. Townend.*—Yes.

*Mr. Mathias.*—Your working capital, I take it, is provided by capital. It is not a question of short term loans.

*Mr. Farquharson.*—No.

*Dr. Matthai.*—Suppose you borrowed, could you borrow at  $7\frac{1}{2}$  per cent.?

*Mr. Townend.*—I don't think the Tinsplate Company could borrow any money at all.

*Dr. Matthai.*—Ordinarily speaking.

*Mr. Townend.*—It depends on the concern.

*Mr. Mather.*—If you were in a sounder position, as you pre-suppose here for the future what rate would you be likely to get in Calcutta?

*Mr. Farquharson.*—About 6 per cent.

*President.*—But the trouble in your case is that your debenture capital is much larger than your ordinary share capital which is supposed to be represented by assets, is that not so?

*Mr. Farquharson.*—Yes.

*Dr. Matthai.*—Your credit in the market is good.

*Mr. Townend.*—Our greatest trouble would be that we have never declared a dividend. If we had declared dividends, people would not ask how much was debenture capital and how much was ordinary share capital.

*President.*—A bank which advances money can easily find it out. If your debenture issue is 60 per cent. of your assets, I don't think you will get any bank to lend much money.

*Dr. Matthai.*—7½ per cent. was a fair rate 3 years ago. Now it is somewhere near 6 per cent.

*Mr. Townend.*—We could never have got any money.

#### *Statement IX (d)—The Realised Prices.*

*President.*—In 1925 you realised Rs. 382-09 for primes. That was when your protection was Rs. 60 a ton.

*Mr. Farquharson.*—Yes.

*President.*—The average c.i.f. price for 1925 is £25-3-8. If you add landing charges Rs. 2-12-0, it comes to Rs. 337-12-0.

*Mr. Farquharson.*—Yes.

*President.*—And you add Rs. 60 to that which is the duty. If the value of the imported article rose to the full extent of the duty, you would be expected to realise Rs. 397-12-0 for your primes.

*Mr. Farquharson.*—Yes.

*President.*—But you have only realised Rs. 382-09.

*Mr. Townend.*—In addition to Rs. 382 we have to pay railway freight.

*Mr. Mather.*—This is nett realisation.

*Mr. Farquharson.*—We have got to pay the freight on tinplate from Jamshedpur to Calcutta. We have got to bring the tinplate to Calcutta before we can compete with the landed Calcutta price.

*President.*—How much does that account for?

*Mr. Farquharson.*—As. 8 a box or Rs. 10 a ton.

*President.*—That would give you Rs. 392 against Rs. 397. So the point arises that in determining the amount of protection which would enable you to get a fair selling price, this freight from Golmuri to Calcutta should be added. Is that your point?

*Mr. Farquharson.*—Yes.

*President.*—So that at the port of Calcutta as compared with the foreign manufacturer you are at a disadvantage of Rs. 10 a ton.

*Mr. Farquharson.*—Yes.

*President.*—Of course in the case of the Tata Iron and Steel Company that question arose also, but we dealt with it in another way, because they have got a large sale in the up-country markets where they get an advantage.

*Mr. Farquharson.*—We have no such advantage.

*President.*—So far as your market is concerned, it is mainly confined to Calcutta.

*Mr. Farquharson.*—Calcutta is our biggest market.

*Mr. Mathias.*—Your agreement is for delivery at Calcutta.

*Mr. Farquharson.*—Yes, for primes.

*President.*—Supposing you had no agreement.



*Mr. Farquharson.*—Still we should have to deliver the bulk of our goods in Calcutta.

*President.*—The principal consumers of your tinplate would be in Calcutta.

*Mr. Farquharson.*—Yes.

*President.*—You don't sell much up-country.

*Mr. Farquharson.*—No, not at present.

*President.*—I see that the demand of the Burmah Oil Company seems to vary from year to year.

*Mr. Farquharson.*—Yes, in relation to our production.

*President.*—That is to say they take 75 per cent. of your output.

*Mr. Farquharson.*—They have been taking the whole of our prime production. Until our production got large enough we could not start on these miscellaneous plates.

*Mr. Mather.*—There is no reason to assume that when you get to 36,000 tons the Burmah Oil Company will be unable to take the bulk of your primes?

*Mr. Farquharson.*—No.

*President.*—Do they still have to import any?

*Mr. Farquharson.*—No.

*President.*—You are able to meet all their requirements.

*Mr. Farquharson.*—Yes.

*Dr. Matthai.*—The Burmah Oil Company cannot claim from you more than 35,000 tons.

*Mr. Farquharson.*—No.

*Dr. Matthai.*—As the contract stands now, they can claim only 35,000 tons.

*Mr. Farquharson.* They can claim only the quantity of tinplates manufactured from 35,000 tons of steel.

*President.*—As regards your wasters, you got a price of Rs. 288.38 in 1925 against a price of Rs. 298.906 this year, a difference of Rs. 10. But you have put this foot note which I don't understand.

"This average price is inflated owing to our not having sold a large portion of our waster production during January/May." I don't understand the point of that.

*Mr. Townend.*—We didn't sell many of our wasters in January/February.

*Mr. Mather.*—You sold more in March and April.

*Mr. Farquharson.*—Than we did in January/February.

*Mr. Mather.*—Is there any reason why you should get a much higher price?

*Mr. Farquharson.*—It is due to the extra duty of Rs. 25.

*President.*—We haven't got any c.i.f. price for the wasters. We really don't know whether you are getting a proper price for your wasters or not.

*Mr. Farquharson.*—As regards the wasters, it is more a question of freight than a question of price.

*President.*—Why?

*Mr. Farquharson.*—Because a lot of our sales are in Karachi and such ports. We have got to compete with the Karachi price and pay the rail freight to Karachi.

*President.*—Can't you find a market for wasters here?

*Mr. Farquharson.*—We cannot get a sufficient market here.

*President.*—Why do you have it in Karachi?

*Mr. Farquharson.*—They are making ghee and oil tins for the vegetable oil trade. The dealers buy from us and they get tins made in Karachi.

*President.*—What is the freight from Tatanagar to Karachi?

*Mr. Farquharson.*—Rs. 1-12-0 a maund which is equal to Rs. 48 a ton.

*Mr. Mathias.*—Would that affect the price that you get from the Burmah Oil Company.

*Mr. Farquharson.*—No.

*Mr. Mathias.*—Is not that very low as compared to the price of primes?

*Mr. Farquharson.*—No. It is a higher price than we get from the market. Actually in Calcutta we are getting very much the Welsh price.

*Mr. Mathias.*—Half a crown per box less than for primes?

*Mr. Farquharson.*—3 shillings a box.

*Dr. Matthai.*—I find according to your figures you get each year somewhere about 75 per cent. of primes.

*Mr. Farquharson.*—Yes.

*President.*—If you have not got a market here at all and if you have got to send your stuff to Karachi, you are handicapped so far as this part of the industry is concerned.

*Mr. Farquharson.*—Yes.

*President.*—What proportion has to go to Karachi?

*Mr. Mather.*—Will it be 60 per cent?

*Mr. Farquharson.*—Nothing like that. We also send up-country to other markets.

*Mr. Mathias.*—As regards the price paid by the Burmah Oil Company for primes and wasters, the difference is nearly Rs. 100, primes being Rs. 382 and wasters Rs. 288 which is considerably more than Rs. 3 per box on the imported stuff. Approximately wasters would be Rs. 50 less than primes.

*Mr. Farquharson.*—Yes. In the case of primes under our contract with the Burmah Oil Company we pay freight up to Shalimar, no matter where they send it.

*Mr. Mathias.*—For wasters?

*Mr. Farquharson.*—No, for primes. In the case of wasters we have to send to other ports and bear the freight.

*Mr. Mathias.*—Even in the case of the Burmah Oil Company?

*Mr. Farquharson.*—Yes.

*Mr. Mathias.*—Do they buy as ordinary bazar dealers?

*Mr. Farquharson.*—Yes.

*President.*—As regards wasters, you are at a disadvantage as compared with the Welsh Tinplate Industry in that you cannot get rid of your wasters as easily.

*Mr. Farquharson.*—Our difference is greater.

*Dr. Matthai.*—Taking the f.o.b. price that you have given from February 1925, I find practically a sharp decline. Is that due to the fact that the stabilisation scheme broke down at that time?

*Mr. Farquharson.*—Very largely due to that.

*President.*—Your average price comes to Rs. 360.27 in 1925 against Rs. 397 that you ought to have got, that is to say you have got on an average Rs. 25 less than the scheme of protection provides.

*Mr. Farquharson.*—Rs. 35 less.

*President.*—Rs. 35 per ton less?

*Mr. Townend.*—Yes.

*President.*—There is no other way of considering this point except the one that I suggested to you. You will have to work how much you ought to get on primes and how much on wasters. If you take the average price realised for primes you are only short of the intended price by Rs. 5 but if you take the average for your production, you are short by Rs. 35. that is what it comes to

*Mr. Farquharson.*—Yes. At the same time it must be realised that we have got to produce these wasters.

*President.*—I don't say that you don't have to produce these wasters.

*Mr. Mathias.*—Don't you produce 20 per cent. of wasters?

*Mr. Farquharson.*—Yes.

*Mr. Mathias.*—Is that excessive as compared with the Welsh practice?

*Mr. Farquharson.*—No. The Welsh practice is between 15 to 20 per cent.

*Mr. Mathias.*—So that the point really is that if it is possible to manufacture only primes, you would require very little protection. The reason why you require protection is that you cannot sell your wasters profitably.

*Mr. Farquharson.*—Yes, and we are bound to produce wasters.

*President.*—Will you be able to get the c.i.f. price of wasters?

*Mr. Farquharson.*—Yes. The charges on the wasters will be exactly the same as those on primes.

*President.*—Did you take these prices from the Trade Journals?

*Mr. Farquharson.*—From the Trade Journals.



## Continued on 8th July, 1926.

### Wasters.

*President.*—I should like to know a little more about wasters.

*Mr. Farquharson.*—I have got here the imported price (statement handed in).

*President.*—The difficulty in this case is this. Even if you take the difference between primes and wasters to be £3 on an average, you ought to get only Rs. 40 less than you get for the primes. But as a matter of fact you get Rs. 100 less per ton. Having regard to the fact that you have got the same specific duty on wasters as on primes, you ought to get a little more for your wasters. The specific duty of Rs. 85 on £21 sends up the price of wasters, does it not?

*Mr. Farquharson.*—It will only alter the percentage. It will not affect the actual price.

*President.*—The incidence of the duty on wasters is surely higher.

*Mr. Farquharson.*—Yes, the percentage is higher.

*President.*—The difference is Rs. 40 in the c.i.f. landed price.

*Mr. Farquharson.*—Yes.

*President.*—Then, there is the difference in the incidence of the duty on the two which may be Rs. 5—I don't know what it actually is.

*Mr. Farquharson.*—The duty is the same whether for primes or wasters.

*President.*—What I mean to say is that a specific duty of Rs. 85 on £21 has a higher protective effect in proportion than the specific duty of Rs. 85 on £24.

*Mr. Farquharson.*—Yes.

*President.*—Therefore you would be expected to realise a little better price than you would otherwise.

*Mr. Townend.*—We would, if we did not have to bear freight and other charges.

*President.*—I am coming to that. Where is your principal market for your wasters? You have told us generally about it, but I want to know how much you sell in Calcutta and how much in other places.

*Mr. Farquharson.*—I shall send you a statement later.

*President.*—You must give me the freight from your works to your various markets.

*Mr. Farquharson.*—Yes.

*Mr. Mather.*—May I ask whether you have got these prices from any source that is publicly available?

*Mr. Farquharson.*—Our tin bar price is according to our agreement with Tatas. The tinplate price we have taken from the Iron and Coal Trades Review.

*Dr. Matthai.*—What you have given is the Iron and Coal Trades Review f.o.b. quotations plus the average freight charge.

*Mr. Farquharson.*—Yes.

*President.*—If you take £21 as the price of wasters and £24 as the price of primes, then the rupee price works out at Rs. 280 for wasters and Rs. 320 for primes.

*Mr. Farquharson.*—Yes.

*President.*—This is the point. The wasters become 365 and the primes 405, but the *ad valorem* duty works out on the wasters at about 30 per cent. and on primes at about 27 per cent. So that it is distinctly favourable to you. For that reason the price you realize ought to be in proportion higher.

*Dr. Matthai.*—May I know whether the market for wasters in this country would be different from the market for wasters in a country like Wales? You have got here great supplies of kerosine oil tins. Won't wasters to some extent be a sort of rival?

*Mr. Farquharson.*—We sell a certain quantity of wasters for the manufacture of tins to supplement the supply of second hand kerosine oil tins but the market for wasters is not influenced by the second hand kerosine oil tins.

*Mr. Townend.*—Before there was a tinplate factory in India there was a market for wasters, independent of the demand for second hand kerosine oil tins.

*Mr. Mathias.*—Have you any reason to think that the market for wasters would expand in the near future?

*Mr. Farquharson.*—Undoubtedly. Last year and the year before we had to export, in spite of small production; now we are finding a market here.

*Mr. Mather.*—I suppose to some extent you are in the position of other relatively new companies manufacturing articles which were previously being imported, and for which the market is a diffused one; it takes you, some time to capture the market. One might presume that your market is still open to a certain amount of expansion and it is not unreasonable to expect that in the course of another year or two you would be in a better position to market your products at a reasonable price in India than you are at present.

*Mr. Farquharson.*—Yes.

*Mr. Mather.*—So that some of these disadvantages that you labour under now might decrease to some extent?

*Mr. Farquharson.*—Undoubtedly. The prejudice against us is decreasing. Dealers always bought Welsh plate but now we have practically got the whole of the Calcutta market for this type of wasters.

#### *Import Prices.*

*President.*—We have got to go now into the c.i.f. landed price in order to determine the amount of protection, if any, that you should get. The measure of protection ordinarily is the difference between that price and what we consider your fair selling price. I want to know what the position is at present as regards this combination of tinplate manufacturers that used to exist about 1925. Can you give us any information on that point?

*Mr. Farquharson.*—As far as I know, there was an endeavour to re-form it and to sustain the price at a higher level but there has been no sign of that and nothing has been actually done. They had many meetings but from our information obtained from the trade papers very little has been done.

*Dr. Matthai.*—There was a suggestion last February in the Iron and Coal Trades Review that there was a meeting at which details of another fresh scheme was considered. Has it materialized?

*Mr. Farquharson.*—As far as we can ascertain, no.

*President.*—It was stated in one of the trade journals that they were making arrangements for the pooling of prices.

*Mr. Farquharson.*—I don't think they have come to any definite understanding.

*President.*—Should that combination again come into being our calculations may all go wrong, and that is a factor which we have to take into account.

*Dr. Matthai.*—It seems to be a very important factor. One has seen that when stabilization breaks down, it is not merely that there is undercutting but

they begin to use Continental bars whereas under the stabilization scheme they have to use British bars. So that in two ways prices may come down when the stabilization combine breaks down.

*Mr. Farquharson.*—They are certainly using more Continental bars now than they have been using previously and it looks as if there is no stabilization combine.

*Mr. Mather.*—It is not my impression that your statement is correct, at least for the first quarter of this year as compared with a year or two ago, that a bigger proportion of Continental bar is being used in tinplate manufacture in Wales. I don't want to contradict you definitely as I cannot say that my information is absolutely accurate, but that is my impression. If the price of sheet bars drops in Wales consumption will go up.

*Dr. Matthai.*—Here is an extract from the *Manchester Guardian* of January 28th, 1926. "At a meeting of the manufacturers in Swansea on Friday last, an agreement was come to whereby the pooling scheme definitely comes into operation on February 8th." I don't know how far that is true.

*Mr. Farquharson.*—I think it has been reported since then that nothing has been done.

*President.*—But it may be a very disturbing factor in any future estimate of the price.

*Mr. Farquharson.*—Yes.

*President.*—Speaking generally have you any suggestions to offer as to how we might deal with that? Supposing it came in at a later stage and had the effect of either reducing the price or increasing it?

*Mr. Townend.*—In the past you did not take any such thing into account.

*President.*—We cannot go on making the same mistakes.

*Mr. Townend.*—First fix something and let the future take care of itself.

*President.*—But the future has not taken care of itself; Government has had to step in to some extent.

*Mr. Mather.*—It was obviously more permissible to do that for a period of three years than for the longer period that you are now pressing on the consideration of the Board.

*Mr. Townend.*—Of course it is entirely a matter for the Board.

*President.*—I would like you to consider this point.

*Mr. Townend.*—May I draw your attention to the report of the meeting at Home on the 21st December 1925 of Messrs. Richard Thomas and Company dealing with the lower price—"For sometime the tinplate industry of Wales, by agreement among the makers, had maintained prices at a level which ensured a certain margin of profit both for the steel works and the tinplate works employed in the business, but we were forced to the conclusion that the high price was not only encouraging existing foreign competition, but also encouraging erection of new plants abroad and at Home. We have passed through similar conditions in our industry in South Wales in past years; we have invariably regained the business by reducing the selling price" which, I presume, means stifling foreign competition and then putting up prices again.

*Dr. Matthai.*—That is to say that the most efficient firms in Wales have always regarded this stabilization combine as an uneconomical scheme?

*Mr. Townend.*—That is fairly clear. It may be that the stabilization scheme will not come back again.

*Dr. Matthai.*—It is not to the interest of efficient firms and apparently what one gathers from these trade reports is that the opinion of many of these less efficient firms is beginning to assert itself.

*Mr. Townend.*—How is their opinion going to assert itself?

*Dr. Matthai.*—It is impossible for us to say. If there is a reasonable prospect of the stabilization coming into existence and prices rose in consequence

you don't suggest that we should lay a heavier burden on the consumer here than circumstances really justify.

*Mr. Townend.*—I am not suggesting anything. I was just following your line of thought.

*President.*—Here is an extract from the *Times Engineering Supplement*, dated November 28th, 1925. This is what it says:—"Tinplate manufacturers have, in the substantial proportion of 95 per cent. of the mills operating, now definitely adopted a pooling of prices scheme which will come into operation at the commencement of the new year. It is different from the old stabilization of prices scheme which for two years had so beneficial an effect on the trade but collapsed owing to the circumstances which recall incidents in the earlier history of the industry. It provides for machinery which will prevent the possibility of any cut-throat competition by the formation of a pool which will be so apportioned that makers selling above a fixed price will recompense those less unfortunately placed in regard to orders and thus while healthy competition in seeking orders and in quality of manufacture will not be interfered with, under-selling will be entirely prevented."

*Mr. Townend.*—If that stabilization scheme has come into force it has not had the result of raising prices.

*President.*—We have got to consider what provision it may be possible to make against its materializing. Taking the c.i.f. landed price just before we reported in 1924 the tariff valuation was Rs. 400 in 1923. It is a very curious thing that the months of January, April and August seem to be rather typical of sudden changes. Perhaps it is purely an accident. In August every year there is a big drop. Take January 1923 for instance. The c.i.f. price was £25-5-11, in April it rose to £29-17-3 then in August it came down to £27-15-10 and the average price in 1923 was £27-13-10. In January 1924 the price was £28-13-7. Curiously enough, again in April it rose the price being £28-19-7 and then in August it came down to £27-6-7. Take 1925. In January it was £27-16-3; then there was a slight drop in April £26-9-3 but in August it went down still further to £23-8-4. I want to know whether there is any explanation of this fact. About April it seems to go up and about August it comes down. It has happened in three years and there has been a big difference.

*Dr. Matthai.*—Has it anything to do with the conditions in America? That is to say the export season in America begins in August and their agricultural products would need a great deal of tinplate just about that time. Would that account for it?

*Mr. Townend.*—I don't think Wales exports to America very largely.

*Dr. Matthai.*—I mean in sympathy with world prices. It might move like that.

*Mr. Townend.*—That would mean prices going up in August because of the demand.

*Dr. Matthai.*—I should put it rather earlier than August because the orders might be placed a few months ahead.

*President.*—I think the Board thought that, so far as 1925 was concerned, this drop of £4-8-0 between January and August 1925, was probably due to the collapse of this combine.

*Mr. Townend.*—It never went up again as high as in January 1925.

*President.*—The combine has not come into being again.

*Mr. Townend.*—You have read that, in 1926, it was to have come into force again. The price if anything has dropped.

*President.*—It has gone up a few shillings since 1925.

*Mr. Townend.*—Yes, taking 1925 prices. Compared with January 1926 the prices if anything have dropped a little. They certainly have not gone up since the Stabilisation Committee was formed.

*President.*—Whether you take the average price of 1923 or whether you take January 1925, it is a drop of nearly £4. That is not wholly explained by the drop in the price of tin bar.

*Mr. Townend.*—It might be explained by the general drop in the price of every commodity since 1923.

*Mr. Farquharson.*—I think there is a drop in profits too. The tinplates are only just paying, whereas previously they admitted that they had very good profits.

*President.*—We have not come across any statement as definite as that.

*Mr. Farquharson.*—I think you will find it in the Iron and Coal Trades Review.

*President.*—If you can draw our attention to any reports, we should be glad.

*Mr. Farquharson.*—Yes.

*Dr. Matthai.*—As regards the general prices the wholesale index number in the United Kingdom in 1923 was 159 and in 1925 it was 153.

*Mr. Townend.*—How does that apply to the Steel Industry generally?

*Dr. Matthai.*—What I am suggesting is that, as far as steel is concerned, prices have moved differently from the general level of prices.

*Mr. Townend.*—I would say possibly tinplate has followed the general course of steel.

*Dr. Matthai.*—Very little fluctuation.

*Mr. Townend.*—Steel, I understand, is almost down to pre-war level.

*Dr. Matthai.*—Not quite.

*President.*—Then tinplate is comparatively in a fortunate position compared to other classes of steel. The pre-war price was 13s. 1<sup>1</sup>/<sub>2</sub>. Just now it is 19s. 4<sup>1</sup>/<sub>2</sub>d. So there is a rise of 50 per cent. In 1923 it was £1-3-2<sup>1</sup>/<sub>2</sub>. It was somewhere about 70 per cent. more than pre-war.

*Mr. Townend.*—How does steel generally compare if tinplate is 50 per cent. above pre-war level?

*President.*—You must take plates which are taken as typical of British steel. Plates were £7-17-9 and they were £8 to £8-15-0 in August last.

*Mr. Townend.*—Then tinplates are still far above their position compared to pre-war?

*President.*—Compared to any other form of steel.

*Mr. Townend.*—The inference, outside the stabilisation scheme, would be that prices will fall still further, unfortunately for us.

*President.*—If you take plates, for instance, then price has reached the lowest level £8 was the lowest price in August 1925, the highest being £8-15-0.

*Mr. Townend.*—So that on that basis we might look to tinplate falling even considerably further.

*President.*—It is very difficult to say.

*Mr. Townend.*—We are very apprehensive about that. We don't regard the stabilisation scheme as so permanent an affair as the world price.

*Mr. Mather.*—The price of tin is not affected by the same considerations as those of other forms of steel. There is relatively little production on the Continent of Europe and practically no export. And the price of tin itself is a very important factor.

*Mr. Townend.*—The price of tin is very high now. It might come down.

*Dr. Matthai.*—We shall soon have the problem of a limited supply with continual increase in demand.

*Mr. Townend.*—Any increase in price on account of tin will affect us.

*President.*—Tin you must treat as a constant factor. You and they alike have to import it. The curious position is that tinplate bar which was £5-4-0 before the war, is £6-5-0 now.



*Mr. Townend.*—That is probably due to the stabilisation scheme.

*President.*—I am speaking of tin bar.

*Mr. Townend.*—If you remember what I read just now, the selling price of tinplate has given a reasonable profit alike to the tinplate sellers and to the steel works. Evidently, there is some arrangement between them.

*President.*—Here is the pre-war price of tin. It was £139-10-0. It went up to £255-15-0 in June 1925 and in 1926 it is £273-5-0.

*Mr. Farquharson.*—That would naturally affect the price of tinplate.

*President.*—You use 1/60th ton of tin roughly for one ton of tinplate.

*Mr. Farquharson.*—Yes.

*Mr. Townend.*—1/60th of £273 is £4-11-0 in 1926, as against £2-6-0 in 1924.

*President.*—What is the difference in the incidence of tin?

*Mr. Townend.*—£2-5-0

*President.*—How much is it on a box?

*Mr. Townend.*—2½ shillings.

*President.*—If you deduct 2½ shillings from 19s. 4d., it is 17s.

*Mr. Townend.*—As compared with 13s. pre-war.

*President.*—That is a rise of 33 per cent.

*Mr. Farquharson.*—Yes.

*President.*—That may be in keeping with some forms of steel. Of course plates are the worst so far as the British prices go. Angles are about the same, so that if there was the same sort of movement in the case of tinplate, there is a tendency for prices to settle down more or less at pre-war level. Then it may be possible that the price of tinplate may come down like other forms of steel.

*Mr. Townend.*—Yes.

*President.*—When we last reported the price of imports landed was taken at Rs. 400 which was the tariff valuation. Apart from a drop in the sterling price there has been a rise in the rupee exchange.

*Mr. Farquharson.*—Yes.

*President.*—That has affected your rupee price by about Rs. 40. Would that be correct?

*Mr. Townend.*—Yes, 10 per cent.

*President.*—If we take the present prices at about £23-13-4 in May, that would reduce it by about . . .

*Mr. Townend.*—The fluctuation would approximately be 10 per cent. On Rs. 400 it is Rs. 40.

*President.*—On the present level of prices it is Rs. 30. The Welsh Tinplate gets an indirect bounty of about Rs. 30 by reason of exchange.

*Mr. Farquharson.*—Yes.

*President.*—Have you been able to secure any information as to the works costs in Wales or America?

*Mr. Townend.*—No.

*President.*—You have no information.

*Mr. Townend.*—Not very much. In 1924, when I was at home on leave, I tried to visit various Welsh works. But I gathered that the Welsh tinplate manufacturers had sent round a circular to their members saying that I was home on leave and warning them against allowing me to enter their works. Had I been allowed, I should certainly have asked about their costs.

*President.*—What forecasts are you prepared to make as to the future in the matter of price?

*Mr. Farquharson.*—I think before the strike prices were expected to fall. Consumers were not placing orders and were working from hand to mouth waiting for prices to fall further and if you read the Iron and Coal Trades

Review you will find reported week after week that there was a lack of orders as consumers were holding on.

*President.*—If we were to judge by tendencies, it may generally be stated that there has been a consistent drop more or less with slight fluctuations in the opposite direction, in the price of this commodity since 1924.

*Mr. Farquharson.*—Yes.

*President.*—There has been now and again a little rise, but on the whole, and speaking generally, it looks as though there is a tendency for prices to drop. Can we go on assuming that this tendency will always continue? What I mean is there must be a certain limit.

*Mr. Townend.*—Perhaps the limit can be found in the figures given for other forms of steel, subject to this fluctuation of tin. It doesn't look as if tinplate has stopped falling compared with steel plates.

*Dr. Matthai.*—Subject to tin and stabilisation.

*Mr. Townend.*—Yes.

*Mr. Mather.*—And to the fact that there is no continental competition, which makes an important difference?

*Mr. Townend.*—The Welsh manufacturers themselves are complaining of American competition.

*Mr. Mather.*—That is a different thing.

*President.*—There is not the same amount of competition in tinplate as in other forms of steel.

*Mr. Townend.*—Can we not say that hitherto Wales has been secure in the knowledge that nobody but Wales could produce tinplate?

*Mr. Mather.*—And the United States of America.

*Mr. Townend.*—Yes.

*President.*—In the Iron and Coal Trades Review of the 2nd April 1926, tinplate statistics of the principal countries are given. The other countries are practically negligible. The biggest manufacturing country of tinplate is the United States of America, but the biggest exporting country is Great Britain. The United States of America does not export much. It produces 1½ million tons but exports only about 160,000 tons. On the other hand, Great Britain produces 850,000 tons, of which more than 50 per cent.—550,000 tons—is exported, and the other producing countries are importing still. If the United States of America does not export tinplate—and there is no other competing country so far as this part of the world is concerned—then the probabilities of tinplate getting down to the same level of prices as other forms of steel may not be very great.

*Mr. Townend.*—I quite see your point. It leads to this, that the Welsh manufacturers are sure of their high prices so long as they control the export markets of the world; in other words, so long as they supply everybody but America. The true significance of Wales objecting to this industry is that if India proves its capability of producing tinplate, then any country in the world that has a Steel Industry can also make tinplate.

*President.*—What do you want us to infer from that?

*Mr. Townend.*—I want you to infer that the security that Wales has in its ability to keep prices up will gradually fade away as foreign competition starts up.

*President.*—So, it would be to their interests to keep down the prices.

*Mr. Townend.*—Yes, to prevent other concerns starting up. It is a very expensive business to start a tinplate factory.

*Dr. Matthai.*—We are just now on the question of price. Is it your inference that in view of the possible competition of other countries on the lines of India there might be a tendency for the prices to come down?

*Mr. Townend.*—Yes, and I have quoted the speech of Mr. Thomas exactly to that effect.

*Mr. Mather.*—You do not attach, do you, unlimited importance to the speech of the Chairman of a company meeting when he has an unfavourable report to present? Any inferences should be drawn cautiously.

*Mr. Townend.*—I place a great deal of importance on the statement of the Chairman of a big combine in Wales, to whom a Stabilisation Committee is the least important of all.

*President.*—As regards the effect of Continental exchanges on the prices of tinplate, have you any remarks to offer as to how the collapse of Continental exchanges might have affected them? It might have operated in this way. The price of Continental tin bar goes down and it brings down the price of British tin bar owing to the reaction of the Continental exchange.

*Mr. Townend.*—I don't think that we can say that that has any effect.

*Mr. Farquharson.*—We can say that the price of Welsh tin bar has come down on account of Continental competition.

*Dr. Matthai.*—Seventy-five per cent. of the tin works in Wales make their own steel and therefore the question of Continental competition does not touch them to that extent.

*Mr. Townend.*—Yes.

*President.*—We have no figures whatever to show how much tin bar is produced in the United Kingdom and how much is imported. We have got the import figures of sheet bar and tin bar together but not of tin bar separately.

*Dr. Matthai.*—It is stated in the Iron and Coal Trades Review of 5th February 1926:—"While the stabilisation scheme was in force it was an understanding that the tinplate works (in Wales) should use nothing but native bars."

*Mr. Mather.*—In 1924, the total production in England of all forms of sheets and tinplates was nearly 2 million tons and in that year only 380,000 tons of sheet and tin bars was imported. So the ratio of English to Continental steel in sheets and tinplates of different kinds was probably about 4 to 1.

*Mr. Townend.*—The question arose out of the depreciated exchange, which got worse after 1924. Have you got any figures for 1925?

*Mr. Mather.*—They are not out yet.

*President.*—What I am trying to point out is this. Taking British bar in 1923 the average f.o.b. price was £8-11-8 and the Continental bar was £7-1-0, the difference being about £1-10-0. The British bar came down to £6-3-0 in 1926. The difference between the averages for 1923 and 1926 is £2-8-0. The Continental bar came down from £7-1-0 to £5-3-0, the difference being £1-18-0.

*Mr. Farquharson.*—The Continental bar fell less on the percentage basis.

*President.*—The point I was trying to make is this. If the British tinplate manufacturer makes his own tin bar, you would not see such a big fluctuation. Unless there was some other cause, such as the Continental exchange, or something else, why should the price of tin bar in Great Britain drop by £2-8-0?

*Mr. Townend.*—I suppose that the quotations are for tin bar sold by steel works to outside tinplate works. Therefore that price might be affected by the Continental price, but we do not know how far. There is a very general drop in the price of steel from the beginning of 1924, which seems to be consequent on the general drop in all prices.

*President.*—If you take the drop of £2-8-0 and work it out into tinplate adding another 25 per cent., it gives you just about £3 which accounts very largely for the difference between the prices of tinplate then and now.

*Mr. Townend.*—I think that the price of tinplate does correspond with the price of tin bar.

*President.*—My point is this that so far as the reduction in the price of tinplate is concerned, it is represented only by a few shillings. The bulk of it, 75 per cent. or 80 per cent., may be due to the drop in the price of tin bar.

*Mr. Townend.*—That is correct. Whether it is affected by the Continental price or not, we do not know. It looks simply as if it is a world price.

*President.*—Would it not be better than to direct our attention more to the fluctuations in the price of tin bar in making any forecasts as to the future because, as I told you just now, excluding the effect of a drop in the price of tin bar, there is only a drop of a few shillings in the selling price of tinsplate?

*Mr. Townend.*—We have always taken it that tinsplate does vary more or less directly in proportion to tin bar.

*President.*—We do not know whether the price of tin has gone up at the same time. Of course if you make allowance for the rise in the price of tin, then the price of tinsplate has dropped 10 or 12 shillings *plus* the difference in the cost of tin.

*Mr. Townend.*—I suggest that you will get as accurate a forecast for the future by considering the price of tinsplate as you can get by considering the price of tin bar. I think that more or less they are on all fours.

*President.*—So that if there is not much room for a drop in the price of tin bar, the chances are that there is not much room for a drop in the price of tinsplate.

*Dr. Matthai.*—Supposing with regard to the general steel question we come to the conclusion that the steel price has reached bottom, on that basis it must be assumed the price of tin bar has reached bottom and therefore the price of tinsplate also.

*Mr. Townend.*—It might be right or it might be wrong. Tinsplate is a further stage of production. Whether the Welsh manufacturer is relying on his security to keep the price up artificially we do not know.

*President.*—We have not gone very much forward, have we?

*Mr. Townend.*—It is very difficult for us to make any suggestions.

*Dr. Matthai.*—I am inclined to think that the only economic factor is the price of tin and that the other would be an artificial factor.

*Mr. Townend.*—I hope you are not right.

*President.*—A change in the price of tin would not affect your position very much relatively.

*Mr. Townend.*—No, if that is the only reason for the tinsplate price being higher, but that is not the only reason.

*President.*—I think that that disposes of the main part of your case. We have now got to determine the c.i.f. landed price in order to measure the difference between that and your fair selling price. Before we pass on to your other tables, I would like to question you about the expansion of the industry, that is to say, the market. I think that the market may be roughly put down at 60,000 tons.

*Mr. Townend.*—Yes.

*President.*—Of which you will be manufacturing about 35,000 tons.

*Mr. Farquharson.*—36,000 tons.

*President.*—So that there is room for another say 24,000 tons on the present figures.

*Mr. Townend.*—Yes, but the consumption is expanding year by year.

*President.*—It has risen from 58,000 tons to 60,000 tons since we last reported.

*Mr. Townend.*—That is about 3 to 4 per cent.

*President.*—That you consider would be a normal rise.

*Mr. Townend.*—We do not know. You have access to more figures than we have.

*President.*—It is a matter of conjecture.

*Mr. Mather.*—On this particular point, the Tinsplate Company might be good enough to furnish us with their output for the official year ending

31st March 1928, so that we can add it to the import figure and get the total consumption for 1925-28.

*Mr. Farquharson.*—We will.

*President.*—At present I take it that the Burmah Oil Company are the biggest consumers.

*Mr. Farquharson.*—Yes.

*President.*—And then I suppose comes the Standard Oil Company.

*Mr. Farquharson.*—Yes.

*President.*—I think that the Standard Oil Company's figure in 1924 was 7,500 tons. Have they got their own tinplate works?

*Mr. Farquharson.*—No. They buy from the United States Steel Corporation and also buy from Wales for export to India.

*President.*—The one point that we shall have to consider is this. It may be that you have captured all the markets in the vicinity of your works which is your legitimate market.

*Mr. Townend.*—We regard India as our legitimate market.

*President.*—True, but there is the question of freight. If you have to compete in Bombay against the foreign manufacturer, his freight will be the same whether he sends to Bombay or Calcutta but your freight will be different.

*Mr. Townend.*—That is true. The next potential market is the Standard Oil Company in Calcutta, which would be another 3,000 tons I suppose.

*President.*—You can't have a scheme of protection ordinarily which would enable you profitably to capture these very distant markets. They have not been able to accomplish it even in America. On the West Coast, for instance, foreign steel does go in because it is so very difficult to devise a scheme that would prevent its coming in.

*Mr. Farquharson.*—I understand America is devising means to prevent that.

*President.*—That is altogether on a different ground. It is on the ground of dumping. But supposing there was no question of dumping and India could sell on the West Coast, I don't think they would raise their general tariffs to such an extent as to make it impossible for India to compete there. If you were to apply the same principle here then the additional market that you can capture is a very limited one. You cannot compete in Karachi, for instance, because you have got to rail your tinplate, unless of course you get a very high price in these parts and you get rid of your surplus in other markets at a lower price.

*Mr. Townend.*—You mean to imply that we would have to forfeit a certain amount of profit in order to supply distant markets? After all, our distant markets are presumably not half so distant as they are in America, although it is very difficult for us to follow up some of these questions because we have not got the information. When thinking of the tariff schedule in India, there is no idea in our minds of fixing the tariff differently for different parts of the country.

*President.*—There is no country in the world which has got different tariffs for different parts of the country. I am just trying to point out to you that the expansion of the market that you expect is not so very great.

*Mr. Farquharson.*—It is very much a question whether the expansion of production would not enable us to pay our freight to Bombay or Karachi. We have already pointed out to you that we can extend these works at a very much smaller cost per ton of tinplate.

*President.*—It would perhaps be convenient if you could give us some idea how much more it would cost you to increase your output by, say, 25,000 tons.

*Mr. Mather.* Would you be prepared to consider expanding up to 25,000 tons or would you consider expanding to a smaller extent?

*Mr. Townend.*—We could afford to put in additional mills to produce 12,000 tons. Would you like me to show you a sketch plan of the buildings and so on? (shown)

*President.*—It would be useful if you could give us some sort of estimate as to what it would cost you to do it.

*Mr. Townend.*—May we give you an estimate of what it will cost compared with what it originally cost us? It will be very difficult for us to give you present costs. We can tell you how much additional expenditure is required as compared with the original cost.

*President.*—Supposing you had done it at that time; you can give us the cost and we can write it down.

*Mr. Townend.*—Supposing we had to put up two or three extra buildings with all the cold rolls and other appliances, that would indicate to you how much we have already included in our original expenditure for these extensions.

*President.*—Take the same figure for the extensions and we shall write them down.

*Statements submitted by the Company.*

We will now take up the statements. I have nothing to ask on Statements I-IV.

*Statement V.*—Are the figures for overhead and profit based on the reduced value of the block?

*Mr. Farquharson.*—They are on the reduced value, on a capitalization of Rs. 120 lakhs.

*President.*—Then you say on this years figures, you ought to get a realized price of Rs. 368.73—that is, your fair selling price. You are only Rs. 5 below that on an average.

*Mr. Farquharson.*—That will be our average when we get the full benefit of Rs. 85 a ton.

*Dr. Matthai.*—You mean Rs. 368 will be the average?

*Mr. Farquharson.*—That is our fair selling price for the year. Granted a protection of Rs. 85 per ton our return becomes Rs. 363.

*Dr. Matthai.*—In your works costs for 1926 you have taken into account the reduction of the duty on tin, so that in March you had the benefit of the reduced duty?

*Mr. Farquharson.*—Yes.

*President.*—That brings down your works costs by about Rs. 5, we will put it that way. You get Rs. 363. It would bring your fair selling price down.

*Mr. Farquharson.*—Yes.

*President.*—On this balance sheet you have lost about Rs. 56 lakhs in these two years in spite of the protection.

*Mr. Farquharson.*—Yes.

*President.*—But some of the loss is due to wasters, by your getting a much lower realized price for them than for primes.

*Mr. Farquharson.*—Wasters are only 20 per cent. of our total on which we lose.

*Dr. Matthai.*—Actually on 20 per cent. you lose 25 per cent. of the price.

*Mr. Farquharson.*—That is so.

*Mr. Mather.*—20 per cent. lowers your average price by nearly Rs. 20 a ton.

*Mr. Farquharson.*—Yes.

*President.*—Supposing your wasters came to about 10,000 tons a year, you would lose Rs. 10 lakhs a year. The rest of the loss, so far as 1925 was concerned, is accounted for by reason of the drop in the exchange.

*Mr. Farquharson.*—Yes, drop in the price arising out of the exchange.

*President.*—That explains the whole loss more or less.

*Mr. Farquharson.*—Yes.

*Mr. Townend.*—If it is a fact that our total return has been reduced by the percentage of wasters produced in the plant, it must still be kept in mind that a percentage of wasters goes with the trade. We cannot make all primes. That is a handicap to every tinplate industry. They all realize a lower price for their wasters.

*President.*—They realized £3 less for wasters and you realized £8 less than for primes.

*Mr. Townend.*—But the point I wanted to emphasise was that by no power on earth can we entirely do away with wasters.

*President.*—I am not suggesting that to you. Here is a factor which complicates matters, that for wasters the Welsh manufacturer gets only £3 less whereas you get nearly £8 less.

*Mr. Farquharson.*—The cause of that to a certain extent is that we have got to find a market for our wasters.

*President.*—The difficulty may be taken more or less as inherent to the condition of the market for the time being. Anyhow there is this difference in price. Does this balance sheet include your expenditure on Golmuri?

*Mr. Farquharson.*—Yes, it includes everything.

*President.*—You will be deriving some revenue from the town?

*Mr. Farquharson.*—We have given a nett expenditure.

*President.*—So far as the rupee expenditure is concerned, you said yesterday that there would not be any reduction, but if you look at the drop in Indian prices you will find that there has been a tremendous drop since 1920-21.

*Dr. Matthai.*—When was the construction actually commenced?

*Mr. Townend.*—1921.

*President.*—You are trying to establish in this statement that if you get this protection of Rs. 85 a ton, your loss would be wiped out, and you would be just even.

*Mr. Townend.*—On this reduced capital.

*President.*—And that you will have to write off a loss of Rs. 66 lakhs on the working in addition to what you may have to write off on account of the plant. That is what it comes to.

*Mr. Farquharson.*—Yes.

*President.*—This does not take into account what happened to you in the earlier years.

*Mr. Farquharson.*—You asked for figures from April 1924.

*President.*—Quite. I think it would be convenient if you gave us figures, on that basis from the commencement so that I can see how much money you have lost.

*Mr. Farquharson.*—Yes.

*Mr. Mather.*—It is clear that the figure under this heading 'loss' is not loss in the ordinary sense in which it would be shown in the Company's profit and loss account. This is not money which you had definitely to provide from elsewhere, but is merely the deficiency in what you think your profits ought to have been.

*Mr. Townend.*—We had to borrow money to keep the mill going.

*Mr. Mather.*—Part of it in the earlier year may have been actual loss. In the first quarter of this year for example this Rs. 2 lakhs which you show as loss merely means that your profits are less by Rs. 2 lakhs than you think it should have been on this basis and that doesn't mean that you have to find Rs. 2 lakhs in order to keep going.

*Mr. Townend.*—In all previous years, we had to find the money.

*Dr. Matthai.*—Please look at the 1926 figure where you estimate a loss of Rs. 2 lakhs. For three months from January to March 1926 your realized price was Rs. 346. Against that, assuming that you had the full benefit of the duty, the normal landed price should be Rs. 380 in that year. but you realized only Rs. 346 for wasters and various other things. I have just taken the c.i.f. price at 1s. 6d. and added the duty of Rs. 60.

*Mr. Townend.*—You are again assuming that all our production is primes  
*Dr. Matthai.*—Yes.

*Mr. Townend.*—We have promised to give you our cost on that basis.

*Dr. Matthai.*—With a duty of Rs. 60 the normal landed price is Rs. 380 and your realized price is Rs. 346 on primes and wasters. With a duty of Rs. 85 the normal price would be Rs. 405. In the same proportion your realized price would be Rs. 368. That would give you Rs. 22 more per ton for the rest of your output in 1926.

*Mr. Townend.*—I think you are saying that from now onwards our realizable price will equal the fair selling price on your figures.

*Dr. Matthai.*—Precisely.

*Mr. Townend.*—It does not agree with our figures. Our actual realized price is Rs. 346. With the full incidence of the duty that will rise to Rs. 368.

*Mr. Matthai.*—Suposing your realized price bore the same proportion to the normal price for the rest of the year 1926 as it has done for the three months from January to March, what would be your realized price for the rest of the year? My calculation gives me precisely your fair selling price.

*Mr. Townend.*—We make it that your conclusion is substantially correct.

*President.*—Putting it differently, in the first year 1924, April to December, your works cost was Rs. 466.95. Now we are trying to estimate the actual loss.

*Mr. Farquharson.*—In rupees.

*Mr. Townend.*—You must add depreciation.

*President.*—I mean on the works cost.

*Mr. Townend.*—Otherwise you would be letting the plant fall down.

*Mr. Farquharson.*—Our loss was Rs. 70 a ton in that year.

*President.*—Your loss was Rs. 73. That is about Rs. 10½ lakhs. Then in the next year your works cost was Rs. 381 against your realized price of Rs. 362. In round figures you were down by Rs. 20 a ton over the works cost.

*Mr. Farquharson.*—Rs. 6 lakhs.

*President.*—In this year you are down by Rs. 14 lakhs on the works cost in spite of protection.

*Mr. Farquharson.*—Yes.

#### *Statement VI—Hot mills.*

*President.*—When we visited Golmuri in 1924, practically only two hot mills were working.

*Mr. Farquharson.*—Originally, yes.

*President.*—All the mills came into operation before we actually reported. The 3rd and 4th mills were actually working, but the 5th and 6th had just started. I think it would be convenient here to examine you as to the comparative merits of the Welsh plant and your plant. You claim that, generally speaking, your plant is more modern than anything they have got in Wales.

*Mr. Farquharson.*—Yes.

*President.*—That is one of your points, is it not?

*Mr. Farquharson.*—Yes.



*President.*—I want to know precisely as to what you mean by up to date. I don't want you to enter into any technical details. What are precisely the salient points in which you claim that your plant is more efficient.

*Mr. Townend.*—I don't think we claim that our plant is more efficient.

*President.*—What do you claim then when you say that your plant is more up to date?

*Mr. Townend.*—I suppose what we are really claiming is that we have got loftier buildings, we have got more elaborate machinery, we have more devices for cooling the works. I suppose they are more modern in the sense that we copied America.

*President.*—That does not give me the kind of idea that I want. What I want to know is how much has been added to the efficiency of production by your having adopted this kind of plant compared to Wales.

*Mr. Townend.*—I don't think we could have operated six mills inside of 3 years if we had adopted the Welsh system.

*President.*—What is the principal difference between that system and yours?

*Mr. Townend.*—As regards the mills, the difference is that the American system that we have copied has divided the number of jobs to be done on the mills into a greater number of parts. Each man on the mill in our system is responsible only for one operation, following the mass production idea of America. In Wales, a man in one position on the mill has to do a lot of different things. They have six men. We have 18 men. The whole of their six men move from the one stand of rolls to the other stand of rolls as one operation gets finished and the next one is due to start. Our 18 men stay where they are put.

*President.*—It comes to this. Each man in Wales has to attend to three operations compared to one here.

*Mr. Townend.*—It might be put in that way, but the essential difference is this, that each man on the mill in Wales has got to be an expert tin worker, an expert handler or roller of sheets. The actual roller on the mill is the head of the crew. That man in Wales has had to work right up from the bottom. He has got to know every job on the mill. In our system we can put a man to any job on the mills and within two or three months he is able to do that job.

*President.*—Because he specialises in that.

*Mr. Townend.*—He has got only one thing to do the whole time.

*President.*—That eliminates, so to say, the human effort to a certain extent.

*Mr. Townend.*—Precisely; then to help us further to eliminate the human effort, we have got this doubling machine which takes the place of probably the most difficult job in Wales, viz., the doubling of the plates by hand, or rather by foot. The doubler places his foot on the edge of the pack of plates on the floor, and with his tongs bends it and pushes it under the squeezer. The effort of doubling packs of plates weighing up to 50 lbs. each for 8 hours is considerable in itself, and I doubt if we could get anybody in this country who could stand the manual effort, and who would have the skill necessary to fold a red hot plate so as to get the edges exact and then to press it under the squeezer and shear it.

*President.*—That has been entirely eliminated in your case.

*Mr. Townend.*—Yes, by the mechanical doubler, which I should like to say here is wasteful as compared with the expert human doubler. There is more possibility of the pack not being doubled as economically. The doubler wears a pair of wooden soled boots shod with iron. We provide a similar kind of boots for our workmen. That is one very big job which we have cut out. Speaking generally, the experience has been eliminated from all the jobs. It is not necessary to have 10 or 15 years' experience.

In Wales they won't allow a man to become a roller or to handle the pack until he had been 10 or 15 years in the works.

*President.*—By that time the man will get considerably older. Will he have the same physical strength to do the work after say 10 or 15 years?

*Mr. Townend.* Yes. We had a roller who came out to us at the age of 56. He declared his age as 40 but his real age was 56. We have adopted the American system whereby the skill is confined to the learning of one particular job only.

*President.*—What else?

*Mr. Townend.*—In order to adopt this system, we have had to install different and more expensive furnaces. Generally, all the machinery is heavier and more costly. In order to compensate for using 18 men instead of six, the Americans devised machinery capable of giving three times the output. To get three times the output we have got to have bigger and heavier rolls and bigger and heavier housings and to incur a great deal of expense connected with the whole system. I have dealt with the temperature for which we have loftier buildings. Mr. Mather has told us that there is a growing tendency in Wales also to have big buildings, but none the less I have been in tin mills in Wales where the roof is certainly not higher than the roof here (Board's room).

*Mr. Mather.*—That was built 40 or 50 years ago.

*Mr. Townend.*—Those are the majority of tin mills in Wales.

*Mr. Mather.*—Even in Wales the mills built in the last few years before the war were by no means small and cramped as the ones you saw. They were fairly high and spacious buildings.

*President.*—In the handling of material, are there more mechanical devices?

*Mr. Townend.*—We have, I think, more cranes but I don't think that we can claim to have many more devices for handling material.

*President.*—It is about the same, is it?

*Mr. Townend.*—I should think so.

*President.*—There are three main things; you have got to divide the operation into more stages, you have to employ more machinery, and, in order to mitigate climatic conditions, you have to provide cooling arrangements.

*Mr. Townend.*—Yes, but you have left out about having to have heavier machinery for the increased output.

*President.*—That is not necessarily an advantage. I am talking of the advantage that you derive from this more complicated plant.

*Mr. Townend.*—In a sense none of them are advantages. They are compensating factors which enable us to operate in India.

*President.*—The advantage comes in this way. Wales can supply a good deal by the human element, for which you have to use machinery.

*Mr. Townend.* Yes.

*Dr. Matthai.*—It is almost a cottage industry in Wales from your description!

*Mr. Townend.* It can scarcely be called that, except perhaps in the sense that you find plants with just two mills, but you must remember that I have not seen the more modern mills in Wales which Mr. Mather has seen.

*Dr. Matthai.*—It is extraordinarily interesting—the way in which you have applied the American idea here.

*Mr. Townend.*—I think that it was inevitable. The Americans had the same problems to tackle as we have.

*President.* There was scarcity of suitable labour in America as you have here.

*Mr. Townend.* Yes, also high temperatures there and high temperatures here.

*President.*—It would be idle, in these circumstances, to make a real comparison between the conditions in Wales and here.

*Mr. Townend.*—I agree. It would be much better to make a comparison between the conditions in America and here.

*President.*—The only thing is that in spite of what may appear to be primitive methods, from your description, they are able to sell tinplate cheaper than you are.

*Mr. Townend.*—I would not call their methods primitive.

*President.*—They waste human muscle on a thing which can be done by a machine.

*Mr. Townend.*—Their methods suit the wonderful class of labour they have got in Wales.

*President.*—You have not got that labour.

*Mr. Townend.*—No. Therefore we have to make it good by what we have called more modern machinery.

*President.*—What is the good of comparing the conditions of a country which has got excellent labour as a partial substitute for machinery with those of a country which has not got such excellent labour, and has to use more machinery.

*Mr. Townend.*—I quite agree.

*President.*—Unfortunately, no American manufacturer is coming in to give evidence.

*Mr. Townend.*—No American manufacturer would come to give evidence, because he would not object to our starting a plant.

*President.*—It is not a question of objection. We simply want to know how far you have reproduced so to say American conditions in this country and how far it is possible for you to progress along the lines on which America has progressed in this manufacture.

*Mr. Townend.*—We have copied their buildings and their practice. We take hope from the fact that their trade has expanded out of all proportion to the Welsh trade since they first started.

#### Statement VII.

*President.*—As regards this contract for the supply of electricity with the Tata Iron and Steel Company it does strike me that the rates you are paying may be a trifle higher than they ought to be. Is it a long term contract?

*Mr. Farquharson.*—For 5 years ending on 31st March 1928.

*President.*—Is the rate liable to revision?

*Mr. Farquharson.*—Yes, any time during the period of the contract, but the rate is dependent on the price for coal.

*President.*—What happens after 1928?

*Mr. Farquharson.*—We have the option of renewing it for a further period of five years.

*President.*—Yesterday on going through the cost sheets I found that you were paying four times what they were charging their works.

*Mr. Farquharson.*—The point will come up again for consideration in 1928.

*President.*—As regards water, is this rate for 1,000 gallons of water?

*Mr. Farquharson.*—Yes.

*President.*—As regards sulphuric acid, you pay 10 per cent., over Tatas Works cost. How does it compare with the market price?

*Mr. Farquharson.*—We were paying more than this

*President.*—What is the difference?

*Mr. Farquharson.*—Rs. 10. We were paying Rs. 95.

*President.*—Was it f.o.r. works?

*Mr. Farquharson.*—Yes.

*President.*—Against Tatas?

*Mr. Farquharson.*—Rs. 85. But since then the price of sulphuric acid has come down. We have got this reduction of Rs. 5 from Rs. 85 to Rs. 80 and we have applied for a further reduction.

*President.* Do you consume about 1,600 tons?

*Mr. Farquharson.*—Our consumption is 2,800 tons a year. Tatas never supplied us fully hitherto but they have promised to supply us fully from this month.

*President.*—Were you buying sulphuric acid at Rs. 95 a ton?

*Mr. Farquharson.*—Partly at Rs. 95 a ton, i.e., from outside and partly at Rs. 85 a ton, i.e., from Tatas. The average rate will be Rs. 88 or Rs. 89.

*President.* You are now paying Rs. 80 against that.

*Mr. Farquharson.*—Yes.

*President.*—Then, you have no long term contract for the purchase of coal. You buy wherever you can.

*Mr. Farquharson.*—Yes.

#### *Statement VIII.*

*President.*—I take it that you have no very intricate sales organisations

*Mr. Farquharson.*—No.

*President.*—The bulk of your output is taken by the Burmah Oil Company.

*Mr. Farquharson.*—Yes.

*President.*—What sort of arrangements have you for your other sales?

*Mr. Farquharson.*—We have a firm of brokers who sell for us in Calcutta and as far as Delhi. They are interested at the same time in other businesses. They take orders for us and send them to us.

*President.*—On commission?

*Mr. Farquharson.*—Yes. People like the Tea Companies we deal with direct. It is only in the case of dealers that we deal through our brokers.

*President.*—I take it that that is the only way in which you can get into touch with the bazar.

*Mr. Farquharson.*—Yes.

*President.* Are these dealers interested in imported tinplate also?

*Mr. Farquharson.*—To a certain extent.

*President.*—It very often happens that if a man sells also the foreign article, unless the business is made very attractive to him, there is not sufficient inducement for him to push the Indian ware.

*Mr. Farquharson.*—We get practically all the Calcutta business and we are well on the way of getting the Bombay business too. We have in Calcutta a combine of dealers who buy nothing but our plates, except the gauges which we don't make. None of these importers import wasters now into Calcutta.

*President.*—That may not be the best way of pushing your wasters. cannot of course suggest how you may do it better.

*Mr. Farquharson.*—We are getting very nearly the Welsh price.

*President.*—You have promised to give us your Calcutta prices which would give us some idea. Your average price is not the Welsh price.

*Mr. Farquharson.*—No.

#### *Statement IX-A.*

*President.*—I want to know who are the Tank Storage Company?

*Mr. Farquharson.*—They are the people who store petrol. Petrol is a dangerous thing to work and a company has been formed to store petrol and pack and this is that Company.

*President.*—I thought that the Burmah Oil Company made their own tins.

*Mr. Farquharson.*—It is always done by the Tank Storage Company which is a subsidiary company.

*President.*—Is it a recent company?

*Mr. Farquharson.*—No, it was started some years ago.

*Mr. Mathias.*—Can you tell me why the Tank Storage Company have to pay Rs. 380 for their wasters while the Burmah Oil Company pay Rs. 262?

*Mr. Farquharson.*—It is all a question of where they want delivery.

*Mr. Mathias.*—Do you mean that delivery would account for a difference of Rs. 118?

*Mr. Farquharson.*—Not entirely. That price of Rs. 262 is subject to future adjustment.

*Mr. Mathias.*—In the previous year the Tank Storage Company paid Rs. 327 against the Burmah Oil Company's 296.

*Mr. Farquharson.*—In the previous year we delivered to the Tank Storage Company at Calcutta. That would mean that we got a better price because we paid less freight.

*Mr. Mathias.*—Where did you supply to the Burmah Oil Company?

*Mr. Farquharson.*—They were sent to various places, Rangoon, Chittagong and so on.

*Mr. Mathias.*—You had to pay freight?

*Mr. Farquharson.*—Yes.

*Mr. Mathias.*—You say this price of Rs. 262 is subject to adjustment. Presumably when the adjustment is made there would be a considerable increase. Is that correct?

*Mr. Farquharson.*—That is the arrangement with the Burmah Oil Company as regards wasters. We supply wasters at 5 per cent. below the prime price and bill provisionally for 80 per cent. only. We then take back any sheets they cannot use and we re-sell them in the bazar and then there is adjustment.

*Mr. Mathias.*—Do you think adjustment accounts for in full for the low figure of Rs. 262?

*Mr. Farquharson.*—I think so.

#### *Statement IX (a).*

*Mr. Mather.*—In statement IX (a) you show a better price for primes from the Tank Storage Company than from the Burmah Oil Company. I take it the question of delivery charges come in again?

*Mr. Farquharson.*—Yes.

#### *Statement IX-C.*

*President.*—What are these exports you refer to in statement IX-C.

*Mr. Farquharson.*—We were unable to dispose of the whole of our production in India and we exported to Hong Kong, which is our best market. Since then we have found a better market for the whole of our wasters at home and there is no further export.

*President.*—Supposing you were to do any export business that is the sort of price you would get for wasters?

*Mr. Farquharson.*—Yes.

*President.*—Is there any export of primes?

*Mr. Farquharson.*—No.

#### *Statement X.*

*Dr. Matthai.*—I find that the freight in 1923 was £2-7-8 and £2-5-6 in 1926. That is too narrow a margin. Freight has varied much more considerably, have they not?

*Mr. Farquharson.*—These are actual freights.

*Statement XI.—Raw materials.*

*President.*—I just want to know what you do with these different things. Take 1925 figures. You imported materials worth about Rs. 3,63,938 of which palm oil is Rs. 1,27,092. It is African palm oil?

*Mr. Farquharson.*—Yes.

*President.*—Is no palm oil produced in this country?

*Mr. Farquharson.*—No. Tatas were suggesting that we should try Cocogem!

*President.*—Is there no Indian substitute for it?

*Mr. Farquharson.*—We have not found any.

*President.*—In what process is it exactly used?

*Mr. Farquharson.*—In tinning. After the plate is passed through the tin it has to pass through palm oil.

*President.*—What is the effect of it?

*Mr. Farquharson.*—It is to keep the tin fluid and allow the rolls to squeeze the excess tin off.

*President.*—Do you mean to say that the Welsh tinplate industry has been using this palm oil for 100 years or more?

*Mr. Farquharson.*—Certainly.

*President.*—Then "Pink Meal". That is gypsum. You have it here?

*Mr. Farquharson.*—We cannot get gypsum in India that will do the work, and we get it cheaper from England. It is not untreated gypsum. It is treated in some way.

*President.*—"Zinc Chloride". In 1925 you got Rs. 72,611 worth of zinc chloride against Rs. 13,256 in the previous year. Is it because you were carrying more stock or has your output gone up?

*Mr. Farquharson.*—Partly increase in stock and partly lower consumption.

*President.*—"Hot Neck Grease," what is it used for?

*Mr. Farquharson.*—For greasing the necks of the rolls in the hot mills. The rolls run at a temperature of 300° F. and we have got to keep them lubricated and this is a very specialized grease to prevent the necks of the rolls from getting too hot.

*President.*—"Cold Neck Grease." *निम्न तैल*

*Mr. Farquharson.*—The same thing.

*President.*—"Tanned Fleeces" what are they used for?

*Mr. Farquharson.*—They are used in the tinning machine for polishing the plates, to give them a high polish.

*Dr. Matthai.*—In your letter of the 5th July you make a statement "We assessed our financial disadvantages in respect of the imported raw materials at Rs. 1-8-0 per box which works out at over Rs. 30 per ton," that is to say, you are comparing your position with imported tinplate. I don't see how you have worked out this Rs. 30 per ton.

*Mr. Farquharson.*—I would like to explain that we assessed the disadvantages two years ago.

*Dr. Matthai.*—But you write that in your letter of the 5th July 1926.

*Mr. Farquharson.*—We assessed that in our application . . . . .

*Dr. Matthai.*—Leave alone this Rs. 30. I want to get at the nett protection on tinplate, that is to say, if you took into account all the import duties that you have got to pay on these materials, what is the amount of protection that you would enjoy on tinplate?

*Mr. Farquharson.*—I will have to work it out.

*Dr. Matthai.*—What is the freight on these materials?

*Mr. Farquharson.*—We cannot say off-hand.

*Dr. Matthai.*—When you calculated this two years ago what did you include?

*Mr. Farquharson.*—The statement on page 133 of the Evidence regarding the grant of supplementary protection to the Steel Industry will give you all the information.

*Statements XIV, XV and XVI.—Labour.*

*Mr. Mather.*—Have you ascertained at all what the total number of people employed in a tinplate mill in South Wales is and their average wages for comparison with your figures?

*Mr. Farquharson.*—No.

*Mr. Mather.*—On the information that I have available the total number of people you employ is naturally very much greater, but what is more important is that your cost per ton of labour is substantially greater than in South Wales.

*Mr. Townend.*—May I ask you what figures you are comparing with?

*Mr. Mather.*—Your 1926 figures. I would like to ask you what you think will be the extent of the reduction of your labour cost per ton of output. You have told us that at the hot mills you have two Indians working in place of one European. The ratio of your total labour to that employed in South Wales is very much higher. Do you think it would be possible, in the course of the next few years, to reduce your total labour per ton of output by, say, 20 or 25 per cent.?

*Mr. Townend.*—No. We are looking forward mainly to a reduction in the imported labour. We think we will reduce the total cost of imported labour within the next ten years by about half.

*Mr. Mather.*—You mean that the reduction would be gradual?

*Mr. Townend.*—Yes, taking advantage of a man wishing to leave us and so on. We cannot contemplate a wholesale discharge of imported labour.

*Mr. Mather.*—You show on your hot mills 86 covenanted men—2 men per shift.

*Mr. Townend.*—I think we ought to be able to reduce that by 25 per cent.

*Mr. Mather.*—That is 3 men for two shifts and still have a fair margin for sickness, leave and so on?

*Mr. Townend.*—Yes.

*Mr. Mather.*—That in itself would reduce your cost by approximately Rs. 4 or Rs. 5 per ton, but so far as the Indian labour is concerned you don't see any probability of reducing the number per ton substantially?

*Mr. Townend.*—Not by 20 per cent., though we hope to reduce a certain percentage. But then you must remember that we are looking to the Indian taking the place of the imported workman.

*Mr. Mather.*—To that extent a very small proportion of them would require increased wages as they get more skilled but by far the greater proportion of these 2,323 men that you have in your works are on comparatively unskilled work and cannot by any interpretation be said to be taking the place of Europeans.

*Mr. Townend.*—By far the larger proportion, but we are not looking to a reduction in the Indian labour cost.

*Mr. Mather.*—You are not looking to a reduction in Indian labour cost per ton?

*Mr. Townend.*—I don't think we can. For instance, a Superintendent may be getting as much as the whole Indian labour in his department. If we replace him we shall have to give his substitute a reasonable percentage of his salary. So the reduction in numbers of Indians would be more than off-set by the increase in wages we will have to give. In fact I take it that we have got to do that.

*Mr. Mather.*—You feel that you will have to continue your total labour costs per ton at something like the present scale.

*Mr. Townend.*—With a very substantial reduction in covenanted hands.

*Mr. Mather.*—Except a reduction due to covenanted hands being replaced.

*Mr. Townend.*—You mentioned just now a figure of Rs. 5 per ton by reason of covenanted men being replaced by Indians. That seems to me to be very small.

*Mr. Mather.*—That is just on the assumption that you reduce your hot mill covenanted employees from 36 to 24. You suggest 25.

*Mr. Townend.*—That will give us a reduction of 33 per cent. on imported labour. That will save a third of our wages.

*Mr. Mather.*—If you apply it to the whole of the covenanted employees.

*Mr. Townend.*—We expect to get somewhere near Rs. 10.

*Mr. Mather.*—If you reduce all your European labour in the same proportion, it would come to about that figure.

*Mr. Townend.*—Yes.

### *Labour Welfare.*

*President.*—Before we quit the subject of labour, I should like to know what sort of housing arrangements you have for your labour. Take your total labour force at about 2,300. What accommodation have you got?

*Mr. Townend.*—We have built for our employees in the village 318 houses, i.e., pucca built houses.

*President.*—How many does each house hold?

*Mr. Townend.*—It is a difficult thing to answer. In the case of superior staff, i.e., clerks, etc., each house will provide for one man and his family. Sometimes 5 or even 10 of the lower paid men form a mess. On an average about four employees will be in one house.

*President.*—That means about half the labour population has been provided for.

*Mr. Townend.*—I should think so. In addition to that we have a loan system whereby 364 houses have been built by the employees themselves in the neighbouring villages to which we provide water, so that altogether the quarters in which we have had a hand, roughly speaking, would be 680.

*President.*—That will probably accommodate the whole of your labour.

*Mr. Townend.*—Most of our labour is accommodated very close to the works.

*President.*—Of course in your case it will have to be accommodated somewhere because you are a town by yourselves.

*Mr. Townend.*—Yes.

*President.*—What is the system by which you are advancing money?

*Mr. Townend.*—We simply advance the money.

*President.*—At what rate?

*Mr. Townend.*—We don't charge them much. We charge a small rate of interest in certain cases. I think it is 5 per cent. But we don't lend the money all at once. If a man wants Rs. 200 for building a house, we lend him Rs. 50. With this he buys bricks and sand, etc. When we see that he has done about Rs. 50 worth of work, we give another Rs. 50. In consequence, we have practically no bad debts and we can rely on a reasonable standard of construction.

*President.*—Do you recover the loan by instalments?

*Mr. Townend.*—Yes, usually 10 monthly instalments.

*Dr. Matthai.*—It is recovered almost in a year.

*Mr. Townend.*—Yes, but we extend the time in the case of a man who is sick or who has any disability.

*President.*—In that way how much money have you lent out?



*Mr. Townend.*—Rs. 10,000, of which Rs. 7,020 is outstanding.

*President.*—For 300 houses.

*Mr. Townend.*—We don't lend the whole value of the house. This was up to 1st of January.

*President.*—It averages about Rs. 20 a house.

*Mr. Townend.*—That might be the average. One man wants Rs. 500 and another man only Rs. 10. They have their own money as well. In fact we insist—I forgot to say this before—on their doing a certain amount of work before we give them any loan at all.

*Dr. Matthai.*—He has an interest in remaining there.

*Mr. Townend.*—Yes, but if he wishes to sell his house, we arrange it for him. We have a scheme whereby he applies to the Land officer when he wants to sell his house, and we see that the money passes into his hands and title deeds are properly given and so on.

*President.*—Regarding the Rs. 16 lakhs that you have spent on the town, was the expenditure incurred on houses or does it include roads and other things?

*Mr. Farquharson.*—It includes all. All the pucca built houses have water borne sanitation except a few quarters in one neighbourhood, where we could not put in water-borne sanitation.

*President.*—I suppose you have copied Mr. Temple's methods.

*Mr. Townend.*—Yes, we have followed Mr. Temple in everything.

*President.*—Apparently all your labour is housed, that is what it comes to.

*Mr. Townend.*—Yes.

*Dr. Matthai.*—For the house you provide, what sort of rent do you charge?

*Mr. Townend.*—From Rs. 2 to Rs. 20.

*Dr. Matthai.*—Rs. 2 for one room?

*Mr. Townend.*—Every quarter has at least one room, a little place for a kitchen and always a walled compound, which is another room in essence.

*President.*—Have you got any welfare arrangements?

*Mr. Townend.*—Not as such.

*President.*—Have you got any hospitals?

*Mr. Townend.*—Free medical treatment for everybody—not only for our own employees, but for everybody in the neighbourhood.

*President.*—Medicine and attendance.

*Mr. Townend.*—Yes. I can give you figures of attendance for 1924 which will interest you. The average attendance per month ranges from 7,000 to 9,000.

*President.*—Do you mean to say that they take full advantage of the facilities?

*Mr. Townend.*—They do.

*Dr. Matthai.*—Do you provide any schooling facilities for the children?

*Mr. Townend.*—There we join with Tatas. We have a small school in Golmuri and give a contribution to the general fund at Jamshedpur for schools as well as all Municipal activities.

*Dr. Matthai.*—Are you a part of the Jamshedpur Municipality?

*Mr. Townend.*—Yes.

*President.*—They have got a sort of Municipal Committee in Jamshedpur.

*Mr. Townend.*—It is called the Jamshedpur Board of Works. We all contribute to that.

*President.*—You have no special educational facilities like the Tata Iron and Steel Company.

*Mr. Townend.*—We have got one small school at Golmuri. We have got no school directly connected with the plant as such, nor have the Tata Iron and

Steel Company, except their technical institute. The schools are now being run by the general fund and we have one small school which our community requires and doubtless we will have to have more schools.

*President.*—What is the population of the town?

*Mr. Townend.*—I should say 5,000 or 6,000, but that is a sheer guess.

*President.*—Where do you get this labour from?

*Mr. Townend.*—From all over the country. We have got a large number of men from Sylhet and Dacca. I don't know how they discovered the Tinplate works as being a place to get a job.

*Dr. Matthai.*—Are there people in Jamshedpur from Sylhet?

*Mr. Townend.*—They have now joined the sheet mill, but there were very few before we started up. It is a most curious thing. But we get our labour from all over India.

*President.*—Have you got any labour organisation in your town like the one in the steel works?

*Mr. Townend.*—No.

*President.*—I think they have got some sort of labour union which is now officially recognised.

*Mr. Townend.*—No. We don't recognise any union of our Welsh operatives either.

*President.*—You don't.

*Mr. Townend.*—No.

*President.*—But you have not had any labour troubles in your works.

*Mr. Townend.*—Very little.

*President.*—One point arises in trying to estimate your future costs. We more or less assume that wages would be stationary in this country. I think that we might find ourselves mistaken. Labour has not reached a stage in this country when you can say that it has reached the limit of economic wages.

*Mr. Townend.*—So far as Golmuri is concerned, our people are certainly getting a living wage.

*President.*—The living wage in India is very low.

*Mr. Townend.*—I was talking about this to one of our Superintendents the other day. He said the improvement was remarkable, compared with when we started up. All our people are well fed, well clothed, and, of course, we know that they are well housed.

*Dr. Matthai.*—You don't know the cost of living figures of Bihar and Orissa.

*Mr. Townend.*—Our people send Rs. 30,000 from the Golmuri Post Office each month.

*President.*—Your total wages come to about a lakh of rupees.

*Mr. Townend.*—Yes, to remit a third of their pay is pretty good.

*President.*—Probably they have got their families in their villages to support.

*Mr. Townend.*—That is perfectly true. When we compare our rates of wages with other centres like Calcutta for instance, we know we are paying much higher. In that sense it is a handicap. Our rates at Jamshedpur are much higher than the rates in other parts of India.

*President.*—I don't know. It is a very uncertain factor at present. Of course, we must assume that labour wages would remain more or less at the same level.

*Mr. Townend.*—We are rather looking, as I was saying before, to an increase in our total Indian pay roll.

*Mr. Mather.*—It will be more than off-set by the decrease in covenanted labour.

*Mr. Townend.*—Unquestionably.

*Dr. Matthai.*—It comes to this that as far as the near future is concerned you don't expect that the substitution of Indian labour will mean a reduction in the aggregate cost of labour.

*Mr. Townend.*—Yes, I do.

*Dr. Matthai.*—Would that come down?

*Mr. Townend.*—Yes.

*Dr. Matthai.*—I thought what you were suggesting to Mr. Mather this morning was supposing one imported hand was replaced by two or three and you gave him a reasonable proportion of the other man's pay, then ultimately it would mean simply a replacement of indigenous labour but not necessarily a reduction in the cost of labour.

*Mr. Townend.*—We ought to look to a reduction in the total cost at the expense of the imported wages. You say one Welshman will be replaced by two or three Indians. I say one Welshman will be replaced by one Indian, because we cannot replace a man in charge of a crew by two men. We are here getting to the point of experience and judgment, expertness generally. That presupposes we have got one Indian replacing one European.

*Dr. Matthai.*—Taking a long view.

*Mr. Townend.*—It will come fairly soon. 10 years is not a long period in an industry like this.

*President.* The point that has to be remembered is that your wages on an average work out at about Rs. 32 a month.

*Mr. Townend.*—That is fairly high for an average.

*President.*—If you say you are not going to reduce the number of men, the chances are that the incidence of the labour charges may increase.

*Mr. Townend.*—You misunderstood me in one point. I think we will reduce the numbers by some percentage. But I was saying to Mr. Mather that I thought it would be off-set by the extra wages we have to pay to others. Let me give you a case in point. The heater on the mill is now getting Rs. 2-10-0 a shift. The man who starts to-day gets a rupee a shift which in itself I claim to be a high wage compared with other places. But the man on Rs. 2-10-0 is not always going to be content with Rs. 2-10-0. We will have to give him something more as he gains more experience. In other words this increase in the labour wages of Indians is irrespective of replacing Europeans. But even if we have to pay higher wages to our Indian employees I don't think that the total should go up; in fact, I am certain that it should go down.

#### Statement XVII.

*President.*—I should like to understand a little about your system of bonus. You say "Outside the hot mills, a flat bonus rate of 35 per cent. of salary applies to all covenanted employees." What is the point of paying a bonus? Why not increase the pay, if it means that everybody gets an increase of 35 per cent.?

*Mr. Townend.*—It is not necessarily permanent.

*President.*—Is it a war bonus or what is it?

*Mr. Townend.*—No, it corresponds to the production bonus in the hot mills. Each man gets a salary and a bonus. Outside the hot mills we fix the bonus, and at present it is 35 per cent. of the salary.

*President.*—It is simply an addition to the wages. The idea of a bonus is that you give your labour an interest in production.

*Mr. Townend.*—Yes.

*President.*—Here you pay a flat rate. You give 35 per cent. more pay than a man actually gets.

*Mr. Townend.*—It is true, but the way we arrived at it is this. When we came to start the bonus system on the basis of production, we realised that we had no basis to go on for the finishing departments. Each day or each week, the finishing departments have to finish all the work that the hot

mills produce. This 35 per cent. therefore is simply for getting through to the next department whatever the hot mills have produced. We found that it was hard to frame a scale on production. So we said to them "while production is at its present level we will give you 35 per cent." They started in the early days with 25 per cent. It might be that we might reduce them again to 25 per cent.

*Dr. Matthai.*—That is the nearest approach to your production bonus.

*Mr. Townend.*—Yes.

*President.*—Is the bonus that you pay in the hot mills based on the number of boxes produced?

*Mr. Townend.*—On the number produced in a shift of 8 hours during which the man is superintending his mill.

*President.*—How many boxes would they manufacture in a shift?

*Mr. Townend.*—This year the average number of boxes was about 160.

*President.*—Each mill?

*Mr. Townend.*—Each mill and each shift—that is about 8 tons of plate. Individual shifts might go as high as 10 tons. We have had 12 tons.

*President.*—How did you arrive at the basis figure of 125 in the case of hot mills?

*Mr. Townend.* We thought that 125 was about the number of boxes that they ought to produce in a shift with an efficient crew and it has been a matter of adjustment from time to time. I do not know why the particular figure was taken. We were prepared to pay a bonus of so much per cent. of their wages and we worked out a scheme which we thought would give it.

*President.*—The hot mills do not produce boxes at all.

*Mr. Farquharson.*—Their production is checked on the floor of the hot mills.

*President.*—In the case of steel, for instance, they know what they are turning out in the open hearth.

*Mr. Townend.*—We go by the weight of a box which is about a cwt.

*President.*—This box limit of 125, which is the finished article and on which they get their bonus, does not represent their work necessarily, does it?

*Mr. Farquharson.*—These are hot mill boxes.

*President.*—I don't understand that.

*Mr. Townend.*—A man gets 9 annas for every cwt. of blackplate that he rolls.

*President.*—I read it in the sense that you meant tinplate boxes.

*Mr. Townend.* No, it is not tinplate boxes.

*President.*—Is this provided for in their agreements or is it simply a gift?

*Mr. Townend.*—It is in the agreement, but the rate of bonus is subject to announcement from time to time.

*President.*—There is no limit fixed in the agreement?

*Mr. Townend.*—No.

*Dr. Matthai.*—Is there any bonus system for the uncovenanted labour?

*Mr. Townend.*—No.

#### Statement XVIII.

*President.*—This is rather interesting. The result is summed up at the end of the note. In 1924, the difference is comparatively slight between the hot weather and the cold weather output. It is only about 13,000 boxes.

*Mr. Farquharson.* We could have made more in the cold weather if we had steel. We were short of bars at the end of the year.

*Mr. Townend.*—You can see by looking at the beginning of 1925 what we could have made at the end of 1924 if we had steel.

*President.*—The figures for 1924 are not of much use from that point of view. 1925, I take it, gives a better indication. The production in the cold weather is about 46,000 boxes more, that is about 10 per cent. more.

*Mr. Townend.*—Yes.

*President.*—Is that purely due to climatic conditions?

*Mr. Townend.*—Yes.

*President.*—The cost for the hot weather months would necessarily be higher.

*Mr. Townend.*—Yes.

#### *Statement XIX.—Future Estimate of Costs.*

*President.*—You have actually given Rs. 316 as works cost per ton for 1926 when your costs from January to March 1926 were Rs. 313.

*Mr. Farquharson.*—That is explained by the fact that our cost of Rs. 313 is for four good months. We have now 4 bad months to come.

*President.*—You will have another 3 good months. This year you had 3 good months, viz., January, February and March in the first half of the year and you will have 3 good months in the next half.

*Mr. Farquharson.*—Yes. We have six bad months in all when our costs would be high. The average of the year would be about Rs. 316.

*Mr. Townend.*—That was the point you made just now that our costs during the bad months must be necessarily higher.

*President.*—How have you made this estimate?

*Mr. Farquharson.*—The estimate is made down at the works—the production which they expect to get, the increase in the percentage of yield and the reduction in the wastage and all the other various reductions that we hope and expect to get. In the first two years, the reductions will be largely on account of further increase in production.

*President.*—From Rs. 316 in 1926, you expect to bring down your works cost to Rs. 282 in 1936, which means a reduction of Rs. 34 per ton.

*Mr. Farquharson.*—Yes, when our production will be higher.

*President.*—This will not enable you even at the end of 10 years to do without protection, if you want Rs. 35 now.

*Mr. Farquharson.*—No, but at the same time I would say that in this we have not taken into account any extensions at all. We have not had the opportunity of going into it.

*President.*—This time we have to give a finding that the industry will be able to stand on its own legs. You want a price of Rs. 368, that is what you have stated.

*Mr. Farquharson.*—Yes.

*Mr. Mather.*—Provided of course your works costs are as they are at present.

*Mr. Farquharson.*—Yes.

*President.*—You say you want an average price of Rs. 368, your works costs being Rs. 316. The difference between the two is Rs. 52. But a difference of Rs. 52 on your past experience will not enable you to get a price of Rs. 368 because so far you have always been able to get Rs. 20 or so less than the c.i.f. price plus the duty, is that not so?

*Mr. Farquharson.*—Yes.

*President.*—Supposing this figure is increased by Rs. 18 in round figures, which brings it to Rs. 70. Well, you show a reduction of only Rs. 32. Therefore you would still require protection even at the end of 10 years. Of course these are purely hypothetical figures.

*Mr. Mather.*—You want Rs. 336 as your selling price. Do you anticipate that you would be able to sell at Rs. 336 without the assistance of a duty?

*Mr. Townend.*—We will still be about Rs. 13 short.

*President.*—I will put it to you this way. Take the average price of £23 16s. 9d.; that works out to Rs. 317-13-4; landing charges Rs. 2-12-0 or a total of Rs. 320-9-4. To that add Rs. 60 duty for the time being, because Rs. 85 has not come into operation. That gives you Rs. 380.\* When you ought to realize Rs. 380, you have realized an average price of Rs. 362. The Rs. 18 that I took was quite right. In order to enable you to get a price of Rs. 368 on your works cost of Rs. 316, first you want to add Rs. 52—the difference between Rs. 368 and 316—then an additional Rs. 18 to get the average. That makes Rs. 70. You add Rs. 70 to Rs. 320 which is the landed price. You want Rs. 368; Rs. 48 *plus* Rs. 18 that is Rs. 66. The reduction you show is Rs. 32. In 10 years therefore you would still require a duty of Rs. 34.

*Mr. Townend.*—A duty of 10 per cent. We will always have a duty of 10 per cent. on a valuation of Rs. 400.

*President.*—That just about covers it. But that is a revenue duty. It is doubtful whether you can consider a revenue duty as a permanent part of your fiscal system. It may go off after a time.

*Dr. Matthai.*—You would get back to where you started.

*Mr. Farquharson.*—Rs. 40 a ton.

*President.*—It is near enough. But it is still possible that you may not be able to do without protection if you have to depend on the revenue duty.

*Mr. Townend.*—It has never been looked upon as protection.

*President.*—Supposing the country were to say it did not want this money, this revenue duty will have to go.

*Mr. Farquharson.*—Then presumably the duty on our stores and tin would go also.

*Dr. Matthai.*—Yesterday we were talking about the replacement value of the machinery. We made a suggestion that if you looked at the fall in the price of composite steel in America, there was a fall from somewhere about 68 to 40. The difficulty which occurred to me was that when we are thinking of a thing like tinplate machinery, if we want primarily on the basis of composite steel, we might reach a misleading estimate for this reason that the price of a particular kind of machinery will depend on the demand there is for the product of that machinery, and not merely the cost of producing the machinery. I saw a reference in an American Iron journal that Mr. Mather gave me yesterday, that 1925 was apparently a record year for tinplate in America; the consumption was 10 per cent. higher than in any previous year. It occurred to me that if that meant there was a record demand for tinplate, there would be a great demand for renewals, extensions, new plant and so on. Would not that mean that the cost of production would cease to be the primary factor in determining the price of tinplate machinery?

*Mr. Farquharson.*—You get demand coming in.

*Dr. Matthai.*—The demand might make a very big difference. Have you any views on that?

*Mr. Farquharson.*—No. The point never occurred to me.

*Dr. Matthai.*—If the machinery is something in regard to which the demand is fairly constant for these years, then the question may be set aside, but supposing you had a phenomenal increase in the demand, then you might be faced by a new factor.

*Mr. Farquharson.*—The only contribution that I can make is that it is certain that new tinplate mills are not being built every year; there might be more built in a year in which there is a very big demand for tinplate.

*Statement IV.—The Tinhouse and Warehouse.*

*Mr. Mather.*—I want to make quite sure about the interpretation of this. Statement IV (a) shows the steel consumed per ton of black plate and then works costs per ton of black plate which finishes up at Rs. 192 per ton. In statement IV (b) you carry on that price of Rs. 192 per ton of black plate and get down to a cost of Rs. 215 in the intermediate stage. But no allowance appears to have been made in that for spoiling any sheets at that stage. Is that where the debit comes in? If any black plate is spoiled during this process that comes back here?

*Mr. Townend.*—Yes.

*Mr. Mather.*—At the next stage you discuss first the tin element of the cost and then the cost above metal, the working cost in that department and then the cost of black plate per ton. If you start with pickled black plate at Rs. 215 per ton you make more than a ton of tinplate?

*Mr. Farquharson.*—Not on this way of costing. We actually work on the number of boxes. It works backward from the tinhouse.

*Mr. Townend.*—Yes, our figure of production is necessarily the tinhouse figure.

*Mr. Mather.*—For one ton of tinplate you don't require one ton of pickled plate, because of the weight of tin you put into it.

*Mr. Townend.*—The weight of steel you lose by pickling is about counter-balanced by the weight of tin you put on in the finishing process. It is one of those practical assumptions that is generally accepted in the trade.

*Mr. Mather.*—It is to be expected that it does show the final cost quite accurately, but I wanted to be quite certain about the distribution between the different departments. Are you in a position to give us the output for the second quarter of this year now?

*Mr. Farquharson.*—Not yet. We have not got our April cost sheets, but we shall send them across to you as soon as they are received.

*Mr. Mather.*—Can you give us the total coal consumption in tons or cwt. per ton of plate in the different departments for 1926?

*Mr. Farquharson.*—Yes.

*Mr. Mather.*—I take it your packing and despatching cost includes all sorting as well?

*Mr. Townend.*—Yes.

*Dr. Matthai.*—I should like to get some idea as to the effect of the variation in the price of tinplate on the price of kerosine oil tins in this country.

*Mr. Townend.*—That is a question we are not able to answer.

*Dr. Matthai.*—Is it possible to get any figure for the years 1923 to 1926 as to the relative variations?

*Mr. Faulkner.*—I shall find that for you.

*Dr. Matthai.*—I don't think I got an answer to the question whether any allowance was made for the reduction in the price of tin. Will you give us the actual figure for that?

*Mr. Farquharson.*—Yes.

*Mr. Townend.*—I think we took 1.652 per lb., which is Rs. 3,700 per ton.

*Mr. Mathias.*—You say the reduction in your estimated works cost up to 1928 is chiefly on account of increased production.

*Mr. Farquharson.*—Yes.

*Mr. Mathias.*—From 1928 onwards to 1936 there is a further reduction in the works cost of Rs. 18.

*Mr. Farquharson.*—Yes.

*Mr. Mathias.*—Am I to understand that of the Rs. 18, Rs. 10 represents the reduction in the cost of labour as you told Mr. Mather just now?

*Mr. Townend.*—I think that is the difference. We worked out Rs. 10 as being the saving by cutting the European staff down to about 2/3rds.

*Mr. Mathias.*—So you have only Rs. 8 for the other reduction.

*Mr. Townend.*—Yes. The way we got the 1936 figures of consumption throughout the plant was by taking the best results we have had to date, but instead of their occurring in different months, we have taken the best practice we have ever had as coming simultaneously.

*Mr. Mather.*—Your best monthly average on each item?

*Mr. Townend.*—Yes, on each item of our best month, and we don't grant for a moment that that is the lowest limit to which we can ultimately attain.

*Mr. Mathias.*—It is calculated on the best month on each item.

*Mr. Townend.*—Yes.

*Mr. Mather.*—So your position about this is that you feel confident that you can get to this and you also feel quite possibly you may get a further reduction.

*Mr. Townend.*—Yes, anyhow after 1936, if we cannot get it before.

*Letter of the 5th July 1926.*

*President.*—Your statement of the 5th July is full and complete. I have only very few questions to ask. I should like to know a little more about the origin of the Company. I want to know precisely the kind of difficulties the Oil Company had in connection with tinsplate during the war.

*Mr. Faulkner.*—I am afraid I cannot answer that, because I was not here.

*Mr. Townend.*—I remember that tinsplate was most difficult to get and that many cargoes containing tinsplates were torpedoed. In Bombay, at any rate, they were trying all sorts of containers for kerosine oil. They also arranged for second hand tins, instead of going into the bazaar as usual, to be sent back to the packing place to be used again. As far as possible, oil was sent up-country in bulk in tank wagons.

*President.*—From the military point of view, I should like to consider what was the actual experience owing to the absence of tinsplate.

*Mr. Townend.*—I don't know exactly what the result was, but they had the greatest difficulty in getting tins, and they required millions of them for ghee, sugar and so on for the troops. How they fared when they could not get the kerosine tins, I don't know at all.

*President.*—But apart from tinsplate being used for containers, it is used for other military purposes for cartridge boxes and so on.

*Mr. Townend.*—I suppose they came ready from home. The consumption of the Ordnance Department in the matter of tinsplates is almost negligible. It is extraordinarily small. Their representative came to our Works the other day.

*President.*—I am speaking of war time. What place would tinsplate have as part of a war equipment.

*Mr. Townend.*—I know we got permission to ship by transport all tinsplates sent to the Anglo-Persian Oil Company.

*President.*—That is for containers.

*Mr. Townend.*—Yes.

*President.*—Have you been in communication with the Army Department?

*Mr. Townend.*—Yes. One of their representatives recently came and saw me at the Works. He examined our plates and told me that in time of war they would be able to call on us for supplies. Meanwhile he showed me a list of peace-time orders, a great number of orders for a few boxes in each. I told him that at the present moment we were not prepared to take orders of that kind for so many miscellaneous sizes.

*President.*—Can your works turn out any other war material besides tinsplate?



*Mr. Townend.*—I don't think so, but we would certainly be kept fully occupied with tinplate. There is no question about that.

*Mr. Mathias.*—Is it a fact that during the war the result of the increased price in tinplate imposed a fairly heavy burden on the poor consumer of kerosine oil?

*Mr. Townend.*—Probably not, because the price of tinplate has hardly any effect on the small consumer of oil. He buys his oil in bottles.

*Mr. Mathias.*—I put it to you that the retail dealer had to pay so much more for his kerosine oil tin and that he did not get the same proportion back in selling it second hand.

*Mr. Townend.*—I have no information.

*Mr. Mathias.*—And therefore he had to charge a larger sum per bottle to the poor consumers.

*Mr. Farquharson.*—I am certain that the difference between the price at which he bought a tin containing kerosine oil and the price at which he resold the tin was very much greater than it was before the war.

*Mr. Mather.*—Unless prices were controlled as they were during the war, you would probably sell it at the market price.

*Mr. Townend.*—How do you mean?

*Mr. Mather.*—Unless your price was controlled, you would automatically sell to the Burmah Oil Company at the world price for tinplate, so that if there was a scarcity price for tinplate during a war in the next 10 years or during the operation of the contract, the small consumer of oil or tinplate in the bazaar would still have to pay the world price whether it was your tinplate or anybody else's.

*Mr. Townend.*—To that may I say this? I know that the Oil Companies send oil upcountry in bulk as well as in tins, and that the price of the bottle of kerosine oil is very largely governed by the price of the bulk oil which has got nothing to do with the container; so that in any place where there was bulk oil, the dealer who brought his oil in tins would presumably never be able to get any more for his bottled oil even if the price of tinplate went up.

*Mr. Mathias.*—I am speaking mainly of agriculturalists in small villages where oil is not stored in bulk and my point is that owing to there being no Tinplate industry in India during the war, the actual consumer of kerosine oil had to pay more for kerosine than he would if there had been a Tinplate industry in India.

*Mr. Townend.*—He may have done so.

*Mr. Mather.*—It is a very minor point. Near the bottom of page 10 you say: "The result of starting this industry in India has already shown itself in the saving of a crore of rupees per year that previously went abroad to pay for foreign tinplate.....". Quite an appreciable proportion of that amount would still have to go abroad for tin even if you make tinplate here.

*Mr. Townend.*—Yes.

*Mr. Mather.*—It is not a nett saving of as much as a crore.

*Mr. Townend.*—Quite so.

*President.*—At page 14 you complain of there being not a sufficient market for by-products. The only by-products are scrap and scruff. Is there any other by-product?

*Mr. Farquharson.*—No. There are different types of scrap.

*President.*—Is there any tin scrap?

*Mr. Townend.*—Yes.

*President.*—What do you do with tin scrap?

*Mr. Townend.*—We throw it outside.

*President.*—Has it got a market anywhere else.

*Mr. Townend.*—Yes, in England or Germany.

*President.*—What do they do with it?

*Mr. Townend.*—They take the tin out of it.

*Mr. Mather.*—Your production of that would be very small.

*Mr. Townend.*—20 tons a month.

*President.*—That 20 tons will contain 800 lbs. of tin.

*Mr. Mather.*—Between 3 and 4 tons of tin every year.

*President.*—You are talking of the manufacture of small castings. Will that enable you to use your light scrap?

*Mr. Townend.*—We simply want to make our own castings instead of buying them from elsewhere.

*Mr. Mather.*—Do you think that it is a sound proposition?

*Mr. Townend.*—Yes. We think we can make simple castings for Rs. 5 a cwt. We have to pay double that if we buy from elsewhere.

*President.*—What is your consumption of castings? I take it that it is small.

*Mr. Townend.*—It all mounts up.

*Mr. Mather.*—Rs. 5 per cwt. is low for a very small foundry, at the present price of pig iron.

*Mr. Townend.*—We pay Rs. 10. It should not cost us more than Rs. 5 to make our own. We made careful enquiries about that from a jute mill where they make their own castings in the same way. They have a very small overhead.

*President.*—Are you talking of steel castings?

*Mr. Townend.*—No, iron castings.

*President.*—But that has got nothing to do with your scrap. I thought you wanted to utilise some of your scrap.

*Mr. Townend.*—That is not the object, although we will use some of our cast iron scrap.

*President.*—You have not got any cast iron scrap.

*Mr. Townend.*—Discarded machinery and so on.

*President.*—You get about 10,000 tons of scrap.

*Mr. Townend.*—This foundry won't help us to get rid of that.

*President.*—You do not propose to make any steel castings.

*Mr. Farguharson.*—No. We have gone into that question and found that it doesn't pay us.

*President.*—You have got the Peninsular Locomotive Company. They want to build locomotives. They are building wagons and they use large quantities of steel castings.

*Mr. Townend.*—It is a specialised industry like the Hukumchand Electric Steel Works.

*President.*—Here you have got scrap which is doing nothing.

*Mr. Townend.*—We shall be glad to sell it to Hukumchand's.

*President.*—I was simply wondering whether instead of exporting it you could have a local market for it.

*Mr. Townend.*—It is probably an industry which somebody will start sooner or later in Jamshedpur, because there is any amount of raw material. It is an ideal position for a steel casting plant.

*President.*—These are the sort of minor improvements you want to make to your equipment.

*Mr. Farguharson.*—Yes.

*Mr. Townend.* I would like to say something there, from the Works point of view. We have not been able to suggest improvements to our Company, because we knew they had not got the money, but there are certain definite

necessities which will arise in the course of the next year or two such as a second annealing furnace, etc. Compared with these, a small foundry is a minor thing, but still it is not as minor as it may seem. Even a small reduction in costs is important to us, and any equipment that the Company can afford to put in, we will certainly recommend if it is to reduce costs. There are other big items such as extra cranes which we badly need.

*President.*—What is the estimated cost of these improvements that you have mentioned here?

*Mr. Townend.*—In the machine shop? About half a lakh of rupees.

*President.*—That is not very much.

*Mr. Townend.*—The new cranes- we need two—will probably cost another lakh, and so on.

*President.*—On page 15 of your letter of 5th July 1926, you are again talking of a reduction of the duty on tin. The Board recommended a refund of the whole duty. Do you get a rebate?

*Mr. Townend.*—No, it is to every user of tin in India.

*President.*—It is a reduction of the duty.

*Mr. Townend.* Yes.

*President.*—But we recommended a rebate.

*Mr. Townend.*—Yes.

*Mr. Mathias.*—My impression from the examination is that there are three chief disadvantages from which you suffer in comparison with the Welsh tin trade. The first is the duty on tin, the second is the increase in the exchange which has risen to 1s. 6d. and the third is that you have a very poor market for your wasters and scruff. These are the main disadvantages.

*Mr. Farquharson.*—Yes. The other disadvantage is the imported stores generally.

*Mr. Mathias.*—Would you consider that the money measure of these disadvantages is also a measure of the amount of protection that you require. Will you put it in that form?

*Mr. Farquharson.*—We have never looked at it in that form. It could easily be calculated.

*Mr. Mathias.*—You would not be prepared to give an answer off hand?

*Mr. Farquharson.*—No.

*Representation by the Welsh Plate and Sheet Manufacturers, dated 16th June 1926.*

*President.*—Have you read the representation which we have received from the Welsh Plate and Sheet Manufacturers Association? They make very general allegations. It is very difficult to examine them, but they make two or three points against you. One is "the only hope of compliance with the basic conditions lay in a substantially lower 'labour cost' in view of the enormous disparity between the wages in the Golmuri Works and those paid in Wales". What they mean is that the scale of wages paid in Wales is very high and yet in proportion your total wages are higher.

*Mr. Townend.*—Don't you think that they mean that the wages of Welshmen in this country are enormous compared to what they get in Wales?

*President.*—They may mean that.

*Mr. Townend.*—Otherwise how do they say "labour costs must continue to be higher"?

*President.*—They contend that you pay much higher wages here to the Welshmen.

*Mr. Townend.*—We do.

*President.*—You will have to continue to employ them.

*Mr. Townend.*—That is their meaning.

*President.*—So they think that your costs must be high.

*Mr. Townend.*—You have seen our reduction so far.

*President.*—The next point is that you cannot make different varieties of tinplate.

*Mr. Forquharson.*—The answer to that is that we can, and that we are already doing it.

*President.*—What are the different varieties that you make?

*Mr. Townend.*—We are making 156 lbs. plates, 136 lb. plates and 90 lb. plates, as well as the 30 gauge plate on which we first standardised.

*President.*—That is 108 lbs.?

*Mr. Townend.*—Yes.

*President.* Are these the principal varieties of tinplate that they make in Wales?

*Mr. Townend.*—They have a bigger range of varieties. They can get down to 60 and can go up to 196 lb. plates. They say “They would be vitiated if and when the general manufacture of tinplates on commercial lines were undertaken”. By that I suppose they mean when we start to make every possible kind of tinplate. Our production in the Golmuri Works is limited and I think you will agree with me that it must be our policy to concentrate first on the plate which is in greatest demand, *i.e.*, the kerosine plate. If we overreach the demand for kerosine plates, then we can start to meet other demands.

*Dr. Matthai.*—They say “The ownership and control of the works, the nature of the production, and the conditions of the disposal of the production show that the Tinplate Company of India has not started an industry in the accepted commercial sense of the term”

*Mr. Townend.*—I cannot interpret that.

*Dr. Matthai.*—What they are trying to suggest apparently is “here is a concern which is owned by two shareholders, which produces only two kinds of articles and sells the bulk of it to one consumer”. That is not an industry in the commercial sense of the term. I am not commenting on the validity of that statement.

*Mr. Townend.*—I think that that is their idea.

*President.* That is undoubtedly the case.

*Mr. Townend.* The Tariff Board are familiar with all the circumstances of our Company. I think that you will find many a tinplate works in Wales allied to a steel Works. You will certainly find many a tinplate works in Wales which would be very glad to have a long term contract with a big oil company. As to the two shareholders being identified as buyers and sellers, the Board have already considered that aspect of the question. As to the statement that we cannot manufacture other tinplate and sell it, our answer is that we can, we have and we will.

*Dr. Matthai.*—You cannot on a large scale for sometime to come except by increasing your costs.

*Mr. Townend.* It always costs more if you have a number of different articles to make. It is our policy to concentrate on the kind for which there is a great demand in the country. For instance, as regards the Ordnance Department contract, it would be nothing short of folly for us to roll 10 boxes of one size, 25 boxes of another, 35 boxes of yet another and so on, and finish up with a total of 200. It would scarcely keep one of our mills occupied for one shift.

*President.*—One other point they make is “The problem of ‘wasters’ is a fundamental handicap to success”. I think that we have discussed this point. It is difficult to understand what they mean except the statement you made in the former enquiry that you could not find an easy market for your wasters.

*Mr. Townend.*—I think they mean the disposal of wasters. If they mean the percentage of wasters, we believe we are doing fairly well now, and we are confident of doing better.

*President.*—They refer to the disposal.

*Mr. Townend.*—Yes. May we point out one other thing? They say that “the use of tinplates is being checked owing to the protected operations of the Company”. I would just draw your attention to the fact that the consumption of tinplate is increasing in India.



## WELSH PLATE AND SHEET MANUFACTURERS' ASSOCIATION.

ORAL.

### Evidence of Sir EDGAR REES JONES, K.B.E., recorded at Calcutta on Tuesday, the 3rd August, 1926.

*President.*—The Board is very much indebted to you for coming all the way from England to assist us in this very difficult enquiry, and I am sure that we should derive very valuable assistance from the information that you should be able to give us. Before dealing with your special representation I should like to go generally into the question of the trade conditions in the Tinplate Industry at present in Wales. Do you represent this association officially?

#### *Trade Conditions in the Welsh Tinplate Industry.*

*Sir Edgar.*—Yes, the whole of the Welsh Tinplate Manufacturers.

*President.*—Are you interested in the manufacture of tinplates?

*Sir Edgar.*—Not myself personally.

*President.*—Do you hold any office in that Association?

*Sir Edgar.*—I represent the Association in all difficult questions of this kind whenever they arise. I act for them as a whole and deal with all kinds of questions of parliamentary and diplomatic character. We deal with every country in the world.

*Dr. Matthai.*—May I know what are the functions of your Association? Does that correspond to the Chamber of Commerce in this country or is it a selling organisation?

*Sir Edgar.*—Originally it was an Association purely for the regulation of wages and conditions of the workmen. Then, after the war, they asked me if I would come along and assist them to recover their world trade which had been entirely shut out during the war. But in so far as I am acting for them, they are functioning for the purpose of protecting themselves as to the large questions of policy affecting the trading conditions in various countries of the world.

*Dr. Matthai.*—Generally a propagandist organisation I expect.

*Sir Edgar.*—More a protective organisation.

*President.*—I don't think that you approve of protection of any kind elsewhere.

*Sir Edgar.*—Spiritual, and not material.

*President.*—I take it that you are in close touch with the conditions of the industry.

*Sir Edgar.*—Oh yes, from day to day.

*President.*—As far as I can gather from the trade papers the industry has not been in a particularly prosperous condition since 1924, is that right?

*Sir Edgar.*—As far as production and sales are concerned we have been doing quite well. But apparently hardly any of the firms have been making much profit. Of course, that is common to all steel firms in England and good many others.

*President.*—Are all the plants fully at work just now in Wales?

*Sir Edgar.*—At present, there is the coal strike on.

*President.*—Before the coal strike?

*Sir Edgar.*—We were all going before the coal strike. There were always a few mills shut down here and there for various local reasons, but speaking of the industry as a whole, they are all employed.

*President.*—Are they working at full capacity?

*Sir Edgar.*—We never work at full capacity in South Wales, because as I said certain mills were shut down for local reasons. But we are working to normal capacity.

*President.*—I find that in the reports of some of the companies, at least so far as last year was concerned, they were not doing particularly well.

*Sir Edgar.*—Not in the matter of making profits. There was a period at the very beginning of last year when they temporarily slacked off a bit, but recovered later in the year. Our total exports for 1925 were quite good.

*President.*—Here is a report of the speech made by Mr. F. Thomas of Messrs. Richard Thomas and Co. Ltd. This is what he says:—

“Whereas in 1924 the exports of tinplates from South Wales averaged nearly 50,000 tons per month, for the first three months of this year the exports only averaged 40,000 tons per month and in April only 35,000 tons. In that month we had about 40 per cent. of our plants idle.”

*Sir Edgar.*—That is right. That was the beginning of the year and then it picked up later in the year. It recovered the whole position, so that for the year as a whole it was fairly satisfactory.

*President.*—Except that prices were not particularly remunerative?

*Sir Edgar.*—No.

*President.*—Sometime ago, I understand, there was some combination among the tinplate manufacturers for pooling orders, pooling prices or for some such purpose, was it so?

*Sir Edgar.*—Yes, for a short time when the general slump in trade took place in England.

*President.* When do you say the slump took place?

*Sir Edgar.*—It took place in 1923. In 1923 prices were falling so badly without any apparent reason outside due to competition by merchants with a world market that was a bit short and so certain members of the trade thought it to be a good thing for the whole trade to try to fix a bottom price below which they would not go without agreement and they formed what was known as the Stabilisation Committee for stabilising prices.

*President.*—What was the bottom price fixed?

*Sir Edgar.*—It was changed every month or so. It was round about 20s. 3d. for the ordinary basis box.

*President.*—When was this?

*Sir Edgar.*—January 1923. A number of firms however declined to go into this stabilisation scheme. They objected on principle. They did not like any interference with prices. Their view was that it was to our advantage to sell tinplates as cheaply as we could subject always to reasonable profit. They stood out for various other reasons. The thing dragged on for a year or so and then the whole arrangement was done away with.

*President.* When did it break up?

*Sir Edgar.*—I am not sure about the date. I think that it officially lasted for about 18 months, but in practice it broke down after about 12 months.

*Dr. Matthai.*—Somewhere about the middle of last year probably it broke down.

*Sir Edgar.* It officially ended in the middle of last year. I shall have to give you this date again. I am not quite certain about the date now.

*President.*—Did that lead to a sudden collapse of prices?

*Sir Edgar.*—No.

*President.*—It did not make any difference.

*Sir Edgar.*—Not immediately, but steadily, after that, prices went down. Of course coal and other prices fell. The price of Belgian bar kept on cheapening the price of bar and there was a general fall. But I don't think that the steady fall in price after that had much to do with the removal of this scheme, though it might have something to do with it.

*Dr. Matthai.*—May I know if the people who did not enter the Stabilisation scheme were mainly the larger and more up-to-date firms? It was the smaller ones that were interested in the stabilisation scheme?

*Sir Edgar.*—It is rather the other way about.

*President.*—Was not one of the difficulties this? Some people wanted to use the Continental bar whereas under the scheme of stabilisation they were forced to use the British bar at a certain discount or rebate. What I understood was that under this combination if a Tinsplate Works did not manufacture its own bar, it bought British tin bar and got a rebate of 7s. 6d or so—I forgot the exact figure.

*Sir Edgar.* The meaning of that was that so long as a Tinsplate Works purchased all its bars from one of the local steel works, it got the rebate, but if it purchased some foreign bar, it lost that rebate.

*President.* That was one difficulty.

*Sir Edgar.*—No, the question of bar did not have much to do with the stabilisation scheme. The difficulty was that all the merchants in London who had for years handled the bulk of our tinsplate business, were bitterly opposed to it and made difficulties all along the line. It was the difficulty on the selling end of what was a very complicated industry with so many varieties of tinsplates and varieties of customers that broke it down. It was the industry that was too complicated for a rigid scheme of that kind.

*Dr. Matthai.*—Most of your works in Wales make their own tin bars.

*Sir Edgar.*—No, the bulk of the tinsplate is made from Welsh bar. But if you take all the works—we have 68 separate works and some of them are very small—it is only the smaller works that buy the foreign bar. Bigger works like Baldwins, Gilbertson, and Richard Thomas' produce their own bar. They have steel works as well.

*President.* Baldwins did not do very well over the tinsplate according to this account given in the Statist.

*Sir Edgar.*—I have not seen that.

*President.*—This is what Sir William Charles Wright says:—"On the other hand, the tinsplate trade, which was very prosperous in 1924, has been depressed this year, and the output has declined about 20 per cent. At the beginning of the year the demand amounted to only 60 per cent. of the capacity of the industry."

*Sir Edgar.*—That is the same thing dealing with the earlier part of the year.

*President.*—Sir William Charles Wright goes on to say "But during the last month or two, I am glad to say, an improvement has taken place."

*Sir Edgar.* That is right.

*President.*—But the position is this. Even if the production has increased, they are not getting any return on their capital. That I gather even from your representation.

*Sir Edgar.*—I would not go so far as to say that they were not getting any return. They were not getting what you might call normal profit.

*President.*—What do you call "normal profit"?

*Sir Edgar.*—If they get one shilling a box, they reckon that they do well.

*President.*—They are not getting that.



*Sir Edgar.*—No.

*Mr. Mathias.*—Is that nett profit after allowing for depreciation.

*Sir Edgar.*—We mean nett profit by that.

*Mr. Mathias.*—After allowing charges on working capital, depreciation, etc.

*Sir Edgar.*—Not working capital but only depreciation. We do not take the working capital in estimating costs at all. We only take depreciation.

*Dr. Matthai.*—One shilling a box would roughly correspond to about 10 per cent. on your fixed capital. Have you any idea of that?

*Sir Edgar.*—I am afraid I could not answer that.

*Dr. Matthai.*—Taking the estimate that you have given of £350,000 as the fair block value of a works producing 35,000 tons, I think that it would exactly be 10 per cent. on the fixed capital.

*Sir Edgar.*—That is about right.

*President.* In your letter of the 24th June, 1926, you say "With reference to the question of interest on working capital and manufacturers' profit, the position to-day is that practically none of the steel works in this country have been able to pay much in the way of interest on working capital. Practically all the fixed preference shares have their interest in arrears. An enormous writing down of capital has had to be made in the case of most firms producing steel and tinplate." Earlier you have said that you did not take anything for depreciation because depreciation had been written down.

*Sir Edgar.* Yes, in the case of smaller works.

*President.*—Therefore the position is that most of them may be selling at works cost.

*Sir Edgar.*—Not as low as that.

*President.*—How much would you add to the works cost on an average?

*Sir Edgar.*—As much as we can get.

*President.*—Undoubtedly you would add as much as you can get.

*Sir Edgar.*—If we cannot get a little bit, we shut down. It is very rarely that we have to do that since the war.

*President.*—When the interest on preference shares remains in arrears in many cases, it does mean that there is no profit made.

*Sir Edgar.*—Yes, for that period.

*President.* That is the point.

*Sir Edgar.*—Of course our industry has always been subject to periods of ups and downs.

*President.*—I am speaking of the last two years. My inference from those facts is that when the interest on preference shares has remained in arrears, it is evident that the industry is not making any profit—not only that but it is being run at a loss.

*Sir Edgar.*—Yes, strictly speaking.

*President.*—Most of your plants are very old and depreciation has been written down years ago.

*Sir Edgar.*—Yes.

*President.*—So, you need not charge anything for depreciation.

*Sir Edgar.*—There is always some.

*President.*—It would be very little.

*Sir Edgar.*—It would not be a big thing.

*President.*—Therefore it may be that some firms may make a little profit but as regards most of them their selling price during this period may be taken more or less as being in the neighbourhood of the works cost.

*Sir Edgar.*—You can take it that way. With the price of 19s. 3d. that was about true, but since the price moved up to 19s. 5d. and 19s. 6d., it is not.

*President.*—We shall take 19s. 3d. as covering more or less the works cost.

*Sir Edgar.*—Welsh bar was £6-5-0 per ton.

*Mr. Mather.*—And tin?

*Sir Edgar.*—You can take it on an average at £280.

*Mr. Mather.*—If tin is about £280 a ton and bar about £6-5, you think the works costs would be roughly about 19s. 3d. per box?

*Sir Edgar.*—The actual works costs we will take at 18s. 10d.

*President.*—We shall work on that figure later on. Speaking generally, as regards prices, if you look at page 374 of our printed publication you will find that of all the four years that are given the price in 1924 was the highest, an average of £25-18-4½. Are these for basis boxes?

*Sir Edgar.*—I succeeded in getting this book yesterday afternoon and I puzzled a good deal about these figures last night. They are not our basis box; I don't know what they are. They are not f.o.b. prices for Welsh basis boxes.

*Mr. Mather.*—What price were you taking, Sir Edgar,— prices published in the trade papers or average prices at which business was actually done?

*Sir Edgar.*—Trade paper quotations and business quotations are practically the same. During the bulk of the time they were subject to the stabilization scheme and the prices were practically the same. There was no difference.

*Mr. Mather.*—Are the figures given here too high or too low?

*Sir Edgar.* I have got a few of them here. Take 1925 figures for instance. I have got some figures for 1925 that we can compare with. Take May. Our price was 20 shillings, they give £23-5. I don't know where they got it from.

*Mr. Mather.*—Have you got annual averages?

*Sir Edgar.*—I have got the months and that is for the month of May.

*Mr. Mather.*—And the next month?

*Sir Edgar.*—We can work that out; June 5th, 1925, it was 19s. 1d., next week it was 19s. 10½d., next week 19s. 9d. and the last week it was 19s. 9d. If you divide that by four you get the average per month at about 20 shillings and they give £23-5. That is for 108 lbs. basis box.

*Mr. Mather.*—That makes £20-16 a ton according to your price. Is that at the mill or f.o.b.?

*Sir Edgar.*—These are f.o.b. prices.

*Mr. Mather.*—Does this price that you have taken include anything for the tin lining?

*Sir Edgar.*—No.

*Mr. Mather.*—Supposing you did allow for the tin lining, that would bring these figures practically into line with your figures, would it not?

*President.* Then £23-5 would be about right.

*Sir Edgar.*—There must be a confusion there because f.o.b. price as quoted by us to enquiring customers or quoted in the papers never includes tin lining and hooping. I notice in your previous reports you give actual figures taken out of the Iron and Coal Trades Review. That would not include tin lining and hooping.

*President.* Supposing that these figures do include that, I don't think there is any difference to speak of?

*Sir Edgar.*—Of course that is very interesting.

*President.* (To Mr. Farquharson of the Tinplate Company of India) are tin lining and hooping included in these prices, Mr. Farquharson?

*Mr. Farquharson.*—Yes. These prices are made out on the basis on which we make out our sale prices.

*President.*—The point that I was trying to examine was that between 1924 and May 1926 there was a drop of about £4-10. Of course there may be causes to explain it, but I am unable to account for this big drop.

*Sir Edgar.*—There is a considerable drop in the price of bar, in the cost of coal and all other material, and then again when the bars drop wages automatically drop on a sliding scale.

*Mr. Mather.*—Is it correct to say that all other prices have fallen except tin?

*Sir Edgar.*—Yes, except tin, although I should say as between 1924 and 1926 tin has fallen, I forget exactly how much.

*President.*—Your explanation is that the drop is due primarily to the drop in the price of tin bar?

*Sir Edgar.*—And coal and materials, and then of course the drop in wages that automatically follows any drop in the price of bar.

*President.*—Can you give us some idea of the drop in the wages due to this?

*Sir Edgar.*—I have not got the figures.

*President.*—According to the figures you have given wages cost 4s. 1d. per box?

*Sir Edgar.*—Yes. That was in June 1926.

*President.*—This would not account for such a big difference.

*Mr. Mather.*—What class of wages is subject to this sliding scale?

*Sir Edgar.*—It is a very complicated business, most of it I should think. It is a most difficult thing to answer because we have to deal with half a dozen Trade Unions.

*Mr. Mather.*—There must be different agreements of course, and perhaps all these do not contain the sliding scale.

*Sir Edgar.*—I cannot answer that off-hand.

*Dr. Matthai.*—May I know if the failure of the stabilization scheme early in 1925 had anything to do with the drop in prices?

*Sir Edgar.*—To a small extent.

*Dr. Matthai.*—Between February 1925 and June 1926 there is a drop of about £3; that is about the time when the stabilization scheme broke down.

*Sir Edgar.*—As a matter of fact circumstances had been bringing down the prices in fact and that is what broke the stabilization scheme. It was not so sudden as this. Nominally the scheme was kept in being for some time with considerable dissatisfaction, but behind the scenes circumstances were forcing tinplates down to a lower price.

*President.*—There was a big drop of £4 in five months. You would not attribute that to the drop in the price of materials there must be other special reasons for it?

*Sir Edgar.*—There was the loss of profit resulting from the stabilization scheme; they sacrificed profit to keep their trade.

*President.*—That is the point. I take it there have been no new plants erected in Wales since the war?

*Sir Edgar.*—Not a complete works but there have been constant expansions in the number of mills in the existing works.

*President.*—But nobody has scrapped an old plant completely and erected a new one?

*Sir Edgar.*—Not at all. There is one works which is being built at the present time but it is far from completion yet.

*President.*—We don't know what it might do until it has started work?

*Sir Edgar.*—Quite so.

*President.*—Is there a tendency to use more Continental bar now in the tinplate industry in Wales?

*Sir Edgar.*—It is all a question of price and quality.

*President.*—I am speaking of the general tendency. Is not more tin bar being imported now than before?

*Sir Edgar.*—I don't think there was much more bar imported say, a year before, and people who were importing in 1924 are probably importing about the same quantity this year. Of course the big firms all produce their own steel.

*President.* I take it that the price of British bar would be regulated more or less by the price of the Continental bar?

*Sir Edgar.*—We will put it this way—competition of Continental bar forced steel works at Home to drop their prices to bedrock, but they have not fallen an inch since—of course the Belgian prices are lower—they stopped at what they considered the bottom price.

*President.*—Then if the price of tin bar goes up, I take it the price of your tinplate naturally goes up?

*Sir Edgar.*—Circumstances in tinplate industry make the question of price very very complicated. It might be a question of what was the price of tin at the time.

*President.*—Supposing everything else remains the same but the price of tin bar goes up?

*Sir Edgar.*—If it goes up substantially but not if there is a slight rise.

*President.*—Let us say there was a rise of £1?

*Sir Edgar.*—That would affect the price of tinplate.

*Dr. Matthai.*—Apart from the price of tin the only other factor that is likely to affect the price of tinplate would be the cost of tinplate bar. That is a big factor?

*Sir Edgar.* Also coal, wages and materials.

*Dr. Matthai.*—Supposing you made a forecast as to the near future what would be the main factor which you would consider was likely to affect the price of tinplate?

*Sir Edgar.* Market conditions of course, not cost of production. Cost of production is the bottom rock below which we cannot go, but our prices are naturally fixed by very complicated world conditions in various countries all over the world. Now that the coal strike is on we are selling wasters at 30 to 40 per cent. above what was the cost of primes before the strike. People cannot get them. They are taking the stuff and competing against one another. The bulk of our business is an open business handled by merchants; it is an open trade, since the stabilization scheme has been done away with.

#### *Points raised in the Association's Representation—Works costs in Wales and India.*

*President.*—I want to go into some of the points raised by you. First of all you say that tinplate cannot be manufactured as economically in India as in Wales. The works costs, you say would be higher, as a matter of course than in Wales. Then you also say that India will not be able to do for an indefinite period without protection.

*Sir Edgar.* I mean this existing works.

*President.*—At present that means India. Another argument of yours is that the protection given is excessive, both as to the amount and as to the extent, and you say, that in any case they are getting far more protection than they need on their own figures.

*Sir Edgar.*—That is so.

*President.*—And you also say that protection extends to kinds of tinplate which are not manufactured in the country. I think these are the main points?

*Sir Edgar.*—Yes.

*President.*—It is no good going into each individual item and say this item is cheaper in Wales and more expensive in India. The thing is to see whether on the whole India can manufacture tinplate at about the same cost as Wales can. For that purpose we have got the costs of the Tinplate Company of India. We tested some of the figures in the oral evidence which will be published in due course. As regards Welsh costs we have not much information. I was suggesting that one way of comparing costs may perhaps be this. We take what may be called your present selling price. We will take that figure of 19s. 2½d. that you gave us as being very near the works cost or we will take this figure of 18s. 11d. that is given in this letter of the 3rd June 1926. Then we take the price of tinbar in both cases. The difference between a ton of tinbar and the final figure is the spread. We may, thus get some idea of what is being done in Wales and what is being done here.

*Sir Edgar.*—You know the cost of bars is one-third of the cost of tinplate.

*President.*—In that case the Indian cost would be about the same. We have got detailed costs so far as the Tinplate Company of India is concerned, but we have no such detailed costs so far as you are concerned.

*Sir Edgar.* If you wish to have them, we can give them to you.

*President.* We should very much like to have them.

*Sir Edgar.*—I have here some costs in detail showing how they are arrived at (handed in). My difficulty is this. I have no objection to putting in these details to the Tariff Board, but for obvious reasons as they have been supplied by one of our groups of firms, I could not allow the details to be published. I have already given the total. These figures were actually taken out from the routine accounts which big firms keep in their costing department. They were actually taken out from their sheets in my presence and handed to me. This is one of a big combine and therefore a good many of its items of cost are very considerably more than would be in many of the 68 works, because a big concern has expenses that don't occur in the smaller ones. The Members of the Board will understand that while this is a sample of one of our big works at the present time, it does not necessarily represent the costs in all the others.

*President.*—The Tinplate Company of India may fairly be regarded as a big works by itself. It is comparable with a big one.

*Sir Edgar.* To that extent this would be comparable. I am quite agreeable to letting the Members of the Board to have these costs for their private information, but I could not agree to their publication.

*President.*—What has been supplied to us previously is not confidential.

*Sir Edgar.*—No.

*President.*—We will work on that basis for the public examination. There 18s. 11½d. per box is given as the cost or market value. This is near enough for our purposes. 20·74 boxes make a ton. The price of one ton of tinplate therefore is about £19·14·0. From that I deduct the price of the tin bar £6·5·0.

*Sir Edgar.*—You have got to correct that as you proceed. In your cost of tinplate, you have to allow for the wastage of bar.

*President.*—I am taking here the spread. That is one way of doing it. That wastage goes into your cost above. The difference is £13·9·0. That would include wastage. I will convert it into rupees now. At 1s. 6d.—I am not going into fractions of a penny—it comes to Rs. 178·14·0 or Rs. 179 in round figures. Now we have got to see how this figure compare with their spread. The last figure they have given is about Rs. 313 altogether. That excludes depreciation and profit. That is the works cost, but in a year or two as you will find they expect to work up to Rs. 300 and eventually to Rs. 282. That is their estimate. We are not concerned with this year at all in our scheme. If you take that figure about two years hence.

*Sir Edgar.*—It will be a gamble.

*President.*—It is not. It is arrived at on the results.

*Sir Edgar.*—You don't know what is going to happen as regards prices in the next two years.

*President.*—We have got to estimate. If you take the actual works cost, it is Rs. 313. For purposes of argument we will take the actual results. Their cost of tin bar is Rs. 84. The spread therefore is Rs. 229. You are not paying any duty on any of your raw materials. There is no duty as far as I remember in England on any of your raw materials.

*Sir Edgar.*—I don't think so.

*President.*—Here they calculate that they are paying a duty at the present moment of Rs. 13-12-0 per ton. That means Rs. 215-4-0 against your Rs. 179, or a difference of about Rs. 36 just now. The position has changed in your favour apart from anything that you have done by the fact of exchange since 1924. On this £19-14-0 you get an advantage by reason of the exchange of Rs. 34. That has nothing to do with your costs. They are at a disadvantage of Rs. 2 compared to you on those figures. You get a benefit of Rs. 34 in exchange, by the mere fact that the rupee has risen from 1s. 4d. to 1s. 6d. If you didn't have that advantage, then your Rs. 179 would go up by Rs. 34. I am just pointing out that this difference between them and yourselves is very largely accounted for temporarily by this difference in the exchange.

*Sir Edgar.*—I am thinking over it.

*President.*—If the exchange had not come in as a factor, their works cost would not have been any higher than yours on those figures and they expect to work them down.

*Sir Edgar.*—I am trying to follow the argument, but I don't. The argument, as I understand it, is this. You say if £19-14-0 had been our cost of production in 1924, when did the exchange change?

*President.*—Soon after that.

*Sir Edgar.*—Our price would have been higher than Rs. 179 now.

*President.*—Rs. 34 higher.

*Sir Edgar.*—Their price in 1924 was much higher.

*Mr. Mather.*—That is totally due to different causes. You were manufacturing then on a normal scale and they were not.

*President.*—Of course when the new exchange leads to an adjustment of prices, you will not get this advantage, but since 1924 by the fact of the exchange having risen, you have got an advantage against them of Rs. 34.

*Sir Edgar.*—I cannot follow the argument for this reason. With our price of tinsplate, I don't think we are making any more profit.

*Mr. Mather.*—If the value of the rupee in sterling had remained at 1s. 4d. as it was in 1923, the rupee price of Welsh tinsplate would now be higher than it is by Rs. 34. If you compare the rupee spread between the cost of a ton of tin bar in Wales and the selling price of tinsplate on the basis of 1s. 4d. to a rupee with the corresponding figure in India, you will find the actual cost of conversion of tin bar into tinsplate to be the same in the two countries.

*Sir Edgar.*—I see.

*President.*—I don't say that you are not entitled to the benefit of the exchange, but we are trying to compare values and for the time being the exchange has helped you to the extent of Rs. 34. If it had not helped you, either you would have had to reduce your works costs or your selling price by Rs. 34. So your point that tinsplate cannot be manufactured in India as economically as in Wales does not appear to have been established.

*Sir Edgar.*—On the counter side all the purchases of tinsplate are affected also by that improvement in the rupee exchange.

*President.*—That is true, but the amount is not large. If there is a readjustment of prices in this country you will be on the same footing as

they. In the meanwhile Rs. 9 or Rs. 10 per 100 boxes or about Rs. 2 per ton is all the reduction we have been able to estimate in Indian prices. If their works costs go down to Rs. 282 as they expect—a reduction of Rs. 12 to Rs. 19 according to the evidence that they have given is almost in sight. Their works costs will be nearly as low as yours.

*Sir Edgar.*—In that case they would not require protection.

*President.*—They may want protection for other reasons. I am now talking merely of the cost of production of tinplate in the two countries. We will take one or two other items from these figures. Your wages come to 4s. 1'3d. per box.

*Sir Edgar.*—From 3s. 9d. to 4s. 1'3d. That is all everything—insurance, workmen's compensation, etc.

*President.*—That goes as part of the wages.

*Sir Edgar.*—Yes.

*Mr. Mather.*—Does that include office staff?

*Sir Edgar.*—No.

*President.*—If you take the exchange at 1s. 6d. it works out to Rs. 55-4-0 and at 1s. 4d. to Rs. 63-12-0. If you look at their figure on page 379, it is Rs. 59-27. That is not a very much higher figure.

*Sir Edgar.*—That is what I have said in my evidence. Of course what astonished me was this. We didn't have complete figures like this and I was in my evidence dealing with 1924-25.

*President.*—Much water has flown under the bridge since then.

*Sir Edgar.*—I gather that in 1924-25 their labour costs were the same as ours. We expected their costs would be much less. I find now from the table given on page 379 that in 1924-25 their labour costs were enormously higher than ours.

*President.*—Because their output was much smaller.

*Sir Edgar.*—The statement I made about the labour costs was that it was slightly more than ours.

*President.*—I am just trying to point out there is not much difference.

*Sir Edgar.*—Not under labour costs.

*President.*—That depends on the rate of exchange you take. If you take the exchange at 1s. 6d. to the rupee, it is in your favour, but if you take the exchange at 1s. 4d. to the rupee, it is about the same.

*Dr. Matthai.*—This 4s. 1'3d. includes the cost of labour in the bar department, does it not?

*Sir Edgar.*—Everything in the works.

*Dr. Matthai.*—What is the bar department?

*Sir Edgar.*—That is the department that cuts bars—that is where we begin the tinplate works.

*President.*—The three important items in the manufacture of tinplate are tin bar, labour and tin.

*Sir Edgar.*—Yes.

*President.*—As regards labour, you have not got much advantage. In the case of tin bar, at present they are paying precisely the same price as you are paying. But there is one factor to be considered. I think you have not had the advantage of reading the recent evidence, but if you had you would have noticed that they were buying tin bar for Rs. 84 a ton. In their future estimate, the price is Rs. 83. It is a point of some importance that the price of their tin bar may remain in the neighbourhood of £8-5-0 for all practical purposes, but there is no certainty that yours would remain in that neighbourhood, if the accounts that we read in the trade journals correctly represent the situation.

*Sir Edgar.*—It won't go much lower.

*President.*—It may go up.

*Sir Edgar.*—I don't think so.

*President.*—That may mean that you had an unusual amount of resting power. All the reports that we read certainly point to the probability that steel works are being run without profit, depreciation and other things and that they cannot go on for ever like that.

*Sir Edgar.*—It is not so bad as that—particularly the works that make tin bar.

*Mr. Mather.*—You told us before that none of the steel works in the country had been able to pay much in the way of interest.

*Sir Edgar.*—I was referring to all the big steel firms in the country. But that is not the case with those particular firms which are making steel bars.

*Mr. Mathias.*—What is the position of firms making steel bars?

*Sir Edgar.*—Just about living.

*Mr. Mathias.*—Are they paying dividends on their shares?

*Sir Edgar.*—I don't think that Baldwins paid any dividend, but I think that Richard Thomas paid on their preference shares.

*President.*—We must assume from the ordinary business point of view that no industry can go on for ever like that.

*Sir Edgar.*—No. On the other hand they are expecting cheaper coal. Now of course the coal strike is on.

*President.*—We are not taking that factor into account for the moment.

*Sir Edgar.*—You are speculating on the future price of bar. You have got to take that into account.

*President.*—I don't understand. Supposing the normal conditions returned in the Coal Industry, then do you expect the price of tin bar to remain at £6.5.0?

*Sir Edgar.*—Thereabouts.

*President.*—You don't expect it to go up.

*Sir Edgar.*—It may go up by half a crown but nothing substantial.

*President.*—Is tin bar in a more fortunate position than other steel products?

*Sir Edgar.*—I think it is.

*President.*—An attempt may be made to raise the prices on the ground that at present they were not remunerative. This is what Baldwins' Chairman said while talking of subsidiaries:—"With regard to our subsidiary companies: The Port Talbot Steel Works, which, as you know, is chiefly engaged on the manufacture of heavy steel, such as sections, plates and rails, like all other concerns in the country on this class of work, has had a very bad year, resulting in a considerable loss. In the trading period they have been up against most severe Continental and home competition and shortage of orders, and owing to the heavy losses in meeting the Continental prices for heavy sections, plates and rails and high costs through working short time, it was decided in September of this year to close down the heavy section and plate mills for the present and operate the light plate mill and light bar mill only." It does not look as if they are doing very well.

*Sir Edgar.*—That is the heavier steel industry.

*President.*—It includes rails.

*Sir Edgar.*—I admit that the heavy steel industry is in a serious position.

*President.*—When a firm like Baldwins shut down part of their plant it does not look as if the position of the industry is good.

*Sir Edgar.*—It was a new works built during the war.

*President.*—I am just putting the position to you. If that is your opinion, I have got nothing to say.

*Sir Edgar.*—As far as I can estimate I should say that the price of bar is not likely, without some new unforeseen factor coming in, to rise very much. It may be a small increase but not a serious one.



*President.*—Then, as regards your other material, viz., tin, I take it that you are dependent on imported tin.

*Sir Edgar.*—Mainly Straits tin.

*President.*—The same as India.

*Sir Edgar.*—More or less.

*President.*—Excepting the duty.

*Sir Edgar.*—That is balanced by the extra freight to some extent.

*Mr. Mathias.*—Can you give us any figures on that?

*Sir Edgar.*—I have not worked it out. I could work it out for you. The duty is now fixed on Rs. 250 ton value.

*President.*—Rs. 250 is the duty on tin per ton. It works out at Rs. 4.61 per ton of tinplate. They will still have to pay that.

*Sir Edgar.*—Of course I cannot say, because I have not worked it out.

*President.*—I think that most of your materials are of British manufacture except palm oil.

*Sir Edgar.*—Yes, most of them are British.

*President.*—Palm oil you have got to import.

*Sir Edgar.*—We buy from West Africa.

*President.*—Can you give us some general idea as to how many pounds of tin the works in Wales use per ton of tinplate?

*Sir Edgar.*—Of course that is a point about which you can never get any information.

*President.*—What would you consider good practice in Wales?

*Sir Edgar.*—Per box?

*President.*—We generally talk in tons.

*Sir Edgar.*—I can give you per box. If we are selling tinplates at a regular price for the distribution of oil, it will be about  $1\frac{1}{4}$  to  $1\frac{1}{2}$  lbs. per box. But if we are selling plates for other purposes such as canning, it is usually more. It varies with every customer practically and the purpose for which the plates are required. For instance if a firm in South Africa tells us that it is buying plates for packing lobster we see that there is a good substantial coating of tin. A thin coating will not be very good for canning lobster.

*President.*—Is that nett or is that gross? You recover a certain amount of scruff, don't you? How much would you use at the works?

*Sir Edgar.*—Nobody can ever give you a figure for that. It varies from day to day.

*President.*—We must take that as the nett figure.

*Sir Edgar.*—I should think so. If you talk to a manufacturer who is discussing efficiency he will say that he does it on a lb. per box. It is a difficult thing to base any calculations on. As I say it all depends on the requirements of the customer and the purpose for which the plates are to be used.

*President.*—We simply want to get a general idea whether the practice that these people have attained is reasonably comparable.

*Sir Edgar.*—They are getting now about  $1\frac{1}{2}$  lbs.

*Mr. Mather.*—A little over that.

*Sir Edgar.*—If they are doing that and keep it up, they are doing very well.

*President.*—As well as a similar kind of works in Wales?

*Sir Edgar.*—Yes, there is nothing to complain about. But of course it would not do if they were to sell tinplates to somebody who was packing foodstuff.

*Wasters.*

*President.*—Then, of course, there are three things as you have pointed out, in which the Tinplate Industry of India is at a disadvantage. The first is the question of wasters.

*Sir Edgar.*—That I consider absolutely fatal. I find here figures much worse than those that were available when I drew up my evidence.

*President.*—First of all as to the percentage of wasters I think that you claim that in Wales you get about 15 per cent.

*Sir Edgar.*—Yes, as a general rule. But a good deal depends on the sorting and the purpose for which you are selling the plates.

*President.*—Taking the general average, what would it be?

*Sir Edgar.*—On all plates it would be about 15 per cent.

*President.*—As regards America I think that you have given a figure of about 22 per cent.

*Sir Edgar.* So we understand.

*President.* I think that they are doing just under 20 per cent. here.

*Sir Edgar.*—They have no check on the sorting. They can make whatever they like.

*President.*—How do you say that?

*Sir Edgar.*—I have dealt with that point in my evidence.

*President.*—After all it is a matter for the purchaser.

*Sir Edgar.*—Quite.

*President.*—If the purchaser says "I take this as a prime" do you mean to say that you will go out of your way to say that it was not a prime.

*Sir Edgar.*—In this case the purchaser is the maker.

*President.*—That is another matter. We shall deal with it later. Is it the duty of the manufacturer to be so very particular?

*Sir Edgar.*—Otherwise he gets his consignment rejected by the independent sampler.

*President.*—The purchaser says "I am satisfied that these are primes and that there are no wasters." Is it the duty of the manufacturer to bring experts from outside to examine the plates to see that they were primes and contained no wasters. I don't understand that position myself. Why should it be so?

*Sir Edgar.*—The point is this. We know that our plates are going to be inspected by independent samplers, and as it is such a loss to have these rejected and sent back, the works take special care to send as far as possible consignments that would go through without trouble.

*President.*—If you had a purchaser as they have, would you still employ samplers?

*Sir Edgar.*—We have got to recognise that we are making plates which will have to be passed by independent samplers. Naturally we take as much care as we can to see that they are reasonably delivered.

*Mr. Mather.*—In the case of the Tinplate Company of India if they failed to do their own sorting properly, they would get into trouble with their customers. Therefore as a matter of ordinary business precaution, it is they would be fairly careful. If they are not, they may lose their reputation or fail to get any reputation, if they send out their tinplates to miscellaneous customers.

*Sir Edgar.*—That is negligible. A substantial portion of their output goes to the Burmah Oil Company.

*President.*—The Burmah Oil Company would not go on buying indefinitely tinplates which were unsatisfactory.

*Sir Edgar.*—The history of that Company shows that they never bought wasters before.

*Mr. Mather.*—Do you know what the purpose of that is?

*Sir Edgar.*—No.

*Mr. Mather.*—Then you cannot draw any certain deductions.

*Sir Edgar.*—They have no use except for their cans.

*President.*—If they get their wasters cheaper and if they can use them in place of primes, why should they not?

*Sir Edgar.*—They never did that before. No other Oil Company would take a single waster.

*President.*—According to you, the difference in price is a shilling or 18 pence per box.

*President.*—If they get a difference of 3 shillings or 2s. 6d. and if they find that they can use wasters, it is good business for them. Why should they not use wasters if they can get them cheaper?

*Sir Edgar.*—It is good business for their consuming side as against their manufacturing side. That of course is the difficulty. We are not dealing with an independent concern. It is very difficult to get to the bottom of this thing at all.

*Dr. Matthai.*—Is the proportion of wasters higher in your larger works than in your smaller works?

*Sir Edgar.*—I should not think so.

*Dr. Matthai.*—Where there is mass production the proportion of wasters is very much higher?

*Sir Edgar.*—I should not think so. It is a very difficult thing to say with any accuracy.

*President.*—You yourself say that in America it is about 22 per cent.

*Sir Edgar.*—They have a different method of manufacture. Their arrangement of furnaces and mills causes some of that.

*Dr. Matthai.*—As far as the proportion of wasters is concerned don't you think that it is a circumstance in their favour? They have been increasing their output in the short period of two years.

*Sir Edgar.*—My point is that I cannot very well accept their figure of wasters for comparison purposes because they have not been subject to any independent inspection.

*Dr. Matthai.*—Assuming that it is a correct proportion.

*Sir Edgar.*—If it has been done on some recognised principles then the argument would be right. Of course I cannot accept that as correct because there has been no check.

*Mr. Mather.*—On the other hand you have no information to show that their sorting is inferior.

*Sir Edgar.*—I think their sorting is far inferior. I may say that I saw some of their plates which we would never have passed. Any sampler would have rejected them.

*President.*—When was this?

*Sir Edgar.*—January last year.

*President.*—I want to know how you apportion your cost of wasters. In what proportion do you take them? For instance you say plates are 18s. 11½d. and wasters 16s. 6d. I take it that is in proportion to the market price?

*Sir Edgar.*—For that particular sheet for purposes of cost we have taken 23 per cent. wasters though as a matter of fact wasters were only 15 per cent. We always take cover for 8 per cent. in selling to the general trade.

*President.*—How do you adjust the cost?

*Sir Edgar.*—We took 1s. 6d. and 23 per cent. to be on the safe side. I have got the Metal Bulletin here which I can put in. It is always a fixed thing. It is from a shilling to 1s. 6d. per box. Wasters are difficult to dispose of. In America there has been great difficulty as regards that. Some-

times wasters will accumulate for a time and then we get a market, but we are able to merchant these only at 1 shilling to 1s. 6d. below the cost price. The Oil Companies have often gone into the question of having their own works in South Wales but they always had to drop it because they found that the industry was faced with ruination because of their not being in a position to dispose of the wasters. At the present day negotiation is going on for the establishment of a new works in conjunction with an Oil Company and that is their only hope because that firm being in the general business might dispose of their wasters. This waster question is fundamental to their success.

*Dr. Matthai.*—The waster question would be a difficulty in the case of any country, both Wales and America. But in view of the fact that you have in this country a large village industry in tinplate which is prepared to absorb the inferior tinplate, don't you think that for a tinplate works in India the waster problem is likely to be less acute than in any other country?

*Sir Edgar.*—In fact it is worse.

*Mr. Mathias.*—I think you say in your evidence that at present a large number of second-hand kerosine oil tins are used by the village people. If the people are educated up to it and the tinplate industry out here advertizes in the villages, would it not be possible to dispose of a large amount of tinplate direct in place of or in addition to the second-hand kerosine tins now used.

*Sir Edgar.*—My point was that if you did not levy a duty we could sell to-day primes to the village industry cheaper than what they are paying for second-hand kerosine cans.

*Mr. Mathias.*—In that case if sales were pushed in the villages then there is a prospect of that being a profitable market for the wasters of the Indian Company.

*Sir Edgar.*—They would not have a big enough market for that. I find now that they are selling 15 per cent. of their output at 25 per cent. less than the price of primes to dealers. For any concern to dispose of 15 per cent. of their output at 25 per cent. below the cost of primes of course means commercial ruination.

*Mr. Mathias.*—They still have to find their market, isn't that so? Two years is a very short time for the tinplate industry to establish a market for their wasters?

*Sir Edgar.* The position at present is that if you leave out the duty we can sell primes to that market cheaper than the price at which they are selling wasters.

*President.*—Take the wasters and primes together and you get an average price for the two and we will say that is the price of tinplate. It is not necessary to deal with wasters separately.

*Sir Edgar.*—My point is this that it is the waster question that is putting their prices wrong.

*President.*—The position would be this. If we took your waster price at a higher figure as you claim according to your selling price then your average would be higher. Let us take it this way—20 shillings for primes and 18s. 6d. for wasters and then take 15 per cent. wasters and then average it. We do the same with them. We take their primes and say 20 per cent. wasters. That would bring the prices into relation, would it not?

*Sir Edgar.*—But their figure here is not 20 per cent.

*President.*—There are other factors in it. Their point is that at present the market for wasters is much further off than the market for primes. That is true and that is one of the reasons why you find the realized price of wasters smaller than it should be. You sell your wasters practically in the same market as you sell your primes. Their position is different; they sell primes in a market which is nearer than their market for wasters. That is

the reason, and therefore when that market is developed the realized price for wasters would go up.

*Sir Edgar.*—I was simply looking at it from this point of view—supposing the Welsh manufacturers were successful in carrying on tinplate business in India, they would look at the position of wasters and say that they can never carry on.

*Mr. Mather.*—If you carry on active propaganda in India, you will be able to get a good market!

*President.*—As you yourself point out, there is large use of second-hand kerosine tins in the country. People have got to learn the use of wasters so that second-hand tins might go out practically and there may be a market for wasters. But in two years time you cannot say that the industry ought to get over this difficulty?

*Sir Edgar.*—They won't get over it in ten either because they have made no progress in the last three years. The figures this year are as bad as they were two years ago.

*President.*—In what respect?

*Sir Edgar.*—The sacrifices they have to make is just as serious. It does not seem to me to have improved.

*Mr. Mather.*—The price of wasters in 1926 is Rs. 10-8-0 higher than in 1925 whereas the price of primes is only 7 rupees higher than in 1925. It ought to be explained in connection with this price, that these are nett prices received by the Company after they had paid railway freight to the customer. The selling prices would be higher than this.

*President.*—If we take the price f.o.r. works it would be very much higher. In your case it is f.o.r. works.

*Sir Edgar.*—A lot of our plates have got to go 40 miles.

*President.*—We call that distance nothing here in this country!

*Sir Edgar.*—But you often do not charge as much as we do. Our freights are heavier.

*Mr. Mathias.*—Still there is not very much force in what you say because a very considerable portion of the tinplate company's business is carried on with Karachi which is 1,600 miles from Golmuri.

*Sir Edgar.*—In that sense we sell our plates all over the world.

*Dr. Matthai.*—Don't you think it is an advantage from the point of view of developing the market for wasters that you have a local tinplate industry?

*Sir Edgar.*—We have not found that. We cannot sell many wasters in England.

*Dr. Matthai.*—The point is this. These village people are not organized and they cannot get in touch with distant manufacturers like you, but if there was a local industry, they could establish connection more quickly.

*Sir Edgar.*—I cannot give you the exact figures but the astonishing fact is this that our market for wasters has always been in India, China, Japan and the Far East in the past. That is where we have always disposed of most of our wasters.

*President.*—The oil companies in order to induce the villager to buy kerosine put them in shiny tins, but in course of time the villager may realize that it is better to get his kerosine cheaper and have it in cheaper tins rather than having it in shiny tins. Each country must develop its own market according to its own special conditions, is it not so?

*Sir Edgar.*—You can be quite sure that the oil companies have worked out their distributing costs to bedrock.

*President.*—That is why they may have taken to wasters recently.

*Sir Edgar.*—Quite; that may be so.

*President.*—It is a way of advertising the oil in the villages.

*Sir Edgar.*—It is a wonderful distributing agent, this tin can, in every way.

*President.*—It does not necessarily follow that people in course of time will not begin to see things better and say "why should we pay so much more only for a better looking tin."

*Sir Edgar.*—In the meantime the manufacturer is ruining himself by giving away plates at a price which no works on a commercial basis can stand..

*President.*—We shall deal with that aspect of the case, I mean the question of commercial basis, when we come to it. You have got another advantage over the tinsplate manufacturers here and that is as regards a market for tin scruff.

#### *The Market for Scruff and Scrap.*

*Sir Edgar.*—I don't know much about that; that is a very small thing, so small that we have never taken it into account.

*Mr. Mather.*—People in the works do take it into account.

*Sir Edgar.*—I don't know that there was any question about that at all.

*President.*—Look at page 366 of our publication "*Less credit for scrap*" which should be scruff.

*Sir Edgar.*—I see. I was puzzling what that could be!

*President.*—About Rs. 20 a ton, that is about a rupee a box. That is not a small quantity.

*Sir Edgar.*—I did not know that there was any appreciable difference in practice between here and Wales.

*President.*—Can you give us any idea as to what credit you get there as a corresponding credit?

*Sir Edgar.*—I don't think we have ever taken that. We take the nett. We take tin nett, we don't bring that in.

*Mr. Mathias.*—The Welsh manufacturers are in a better position as regards that. The Indian company has to ship its scruff to England.

*Sir Edgar.*—Is that so? I did not know that.

*President.*—As regards the market for scrap, at present there is not much demand for scrap in this country because the steel industry itself is in its infancy. The ordinary price I suppose would be £2/15 to £3 for this sort of scrap?

*Sir Edgar.*—I notice there was a statement about this in their evidence before in which they said there was an arrangement in South Wales whereby the works gave us back 50 per cent. of the price of the steel scrap. I had the thing looked up and I may say that statement is incorrect. It is nearer 13 to 35 per cent. Here are the figures for 1924—

|                            | Bars.   | Shearings. |
|----------------------------|---------|------------|
|                            | £ s. d. | s. d.      |
| January to May . . . .     | 8 11 3  | 57 6       |
| June--July . . . .         | 8 5 3   | 57 6       |
| August . . . .             | 8 1 6   | 57 6       |
| September to December . .  | 8 5 0   | 57 6       |
| Average for the year . . . | 8 4 0   | 57 6       |

*President.*—If they are able to get anything like 57s., then the position is very much in their favour.

*Sir Edgar.*—As business men we say that this problem of the disposal of scrap and wasters at economical prices is a fundamental one.

*President.*—At the present moment we are enquiring into industries which propose to use scrap. If there is a market in this country this alone may give the tinsplate manufacturer Rs. 15 or Rs. 20 more for their scrap. You

are assuming more or less that this tinplate industry is going, if it gets protection, to be established, by itself. It can only be established as part of the Steel Industry. Assuming that a good Steel Industry is established which is able to absorb the scrap, then this difficulty may gradually disappear.

*Sir Edgar.*—I have no doubt, but of course it is very difficult to persuade British firms to proceed on assumptions like that.

*President.*—It is not quite an assumption. The Steel Industry to-day is in its infancy. I am assuming that the Steel Industry, if the scheme of protection succeed, will be established in the country, sooner or later. When that happens it will require more scrap. At present there is no market for this kind of scrap. Therefore the tinplate manufacturers are exporting it to Italy and other places. They really get about 12s. nett against your 37s. per ton.

*Mr. Mather.*—The evidence given by the Tinplate Company shows that this price for scrap is the nett price which the Tinplate Company received after paying for the cost of bundling and after paying freight to the purchaser. The purchaser of course pays very much more. The Tinplate Company can sell at prices comparable with the world prices, but the freight and the cost of bundling are all deducted and it leaves them that price.

*President.*—We will put it this way. In India a Steel Industry is established which eventually does without protection. In such a case steel will be sold in the country at more or less world prices. Then we must assume that scrap in course of time would more or less fetch the same prices.

*Sir Edgar.*—Our experience in Great Britain is that the heavy steel industry is not an absorber of scrap. It makes its own scrap.

*President.*—I am talking of the steel industry as a whole. There is the casting industry, for instance which has hardly come into existence. Other industries may also use scrap.

*Sir Edgar.*—Castings people would not like these bundles of shearings. They would prefer other forms of scrap.

*Mr. Mather.*—It depends on the process they are using.

*President.*—If the scrap is going cheap, then they can use it. If the tinplate manufacturers get anything like 57s., their works cost might come down by Rs. 7 per ton.

*Sir Edgar.*—Of course it is much more important for them than for us. Their wastage in percentage of shearings is enormous. I never thought that it was as big as that.

*President.*—Their explanation is that they use machines where you use men.

*Sir Edgar.*—It has been increasing. They say since the covenanted men have gone home, the wastage has been increasing and it has increased in the past three years.

*President.*—In that case the higher realized price of scrap would make a still greater difference.

*Sir Edgar.*—It is a very important factor whether business people would be willing to look so optimistically as others on the future of this particular question.

*President.*—That is one of the points of course we have got to consider in the best way we can.

*Dr. Matthai.*—There is one thing that you have got to remember. You are comparing an industry which is 2 years old with an industry which is 150 years old. You must make a lot of allowance for that.

*Sir Edgar.*—Yes. I am all the time simply taking the point of view could we make a success of this? They have spent £1½ millions in three years and that conditions this, that and the other. Taking these we say we would not be able to carry on for 10 years and therefore we assume that the other people can't.

*Mr. Mather.*—If you look exclusively at the drawbacks, that is quite true.

*Sir Edgar.*—I am making large allowance for them.

*The price of tinbar.*

*President.*—There is one factor in their favour to which I want to draw your attention. So far as they are concerned the price of tinbar is more or less stabilised.

*Sir Edgar.*—So is ours.

*President.*—Yours is not, in that sense. They have got a contract more or less by which they expect to get their tinbar at a stated price. The position, in this respect has very much changed, since we last enquired.

*Sir Edgar.*—We have always got the check of the cheaper bars from the Continent.

*President.* You may also have the disadvantage of the price going up.

*Sir Edgar.* Not much.

*Cost of plant and Machinery.*

*President.*—One of the most important things is the value of the plant and machinery. That is one of the things referred to us under the question of capitalisation. We have got to consider what the reasonable value of a plant like that ought to be. You have given us here some figures for a plant which you think can be put up in England, viz., £350,000 including working capital.

*Sir Edgar.*—The total cost is something under £200,000.

*President.*—You have revised that figure.

*Sir Edgar.*—We call it £200,000. There is £56,000 for stock. That brings it to £250,000. This was checked over by people who are building new works now and have thought that £250,000 would be rather a close margin. So I added £100,000 to be on the safe side.

*President.*—What do you make it now?

*Sir Edgar.*—£350,000 including working capital.

*President.*—Let us leave out the working capital. Shall we say £300,000 without it?

*Sir Edgar.*—Yes.

*Mr. Mather.*—You take the total £350,000 with a good margin. Of that £56,000 is working capital to finance stocks.

*Sir Edgar.*—There would be a little more, because in addition to stock, you want a little more money. Take it at £70,000.

*Mr. Mather.*—That leaves you £280,000 which you consider to be with a good margin.

*Sir Edgar.*—Yes.

*President.*—Is this an American plant or is it an English plant?

*Sir Edgar.*—We call it an American plant.

*President.*—Where is it going to be built?

*Sir Edgar.*—These are the prices of mills that have been put up in different works one here and one there during the last year or two.

*President.*—Is this a complete plant to start with?

*Sir Edgar.*—No.

*President.*—Are these mills so to say manufactured in England or are they imported from America?

*Sir Edgar.*—I am not sure about that. I never asked that question there. I was thinking about this this morning. My impression is they are actually



made in England, but the prices were obtained from America as well and it may be that some of the items are actually imported from America. I have not gone into that in detail.

*President.*—It is a very important point when you want to compare a plant which has not been built with a plant which has been working and which to all appearances has worked fairly successfully. You must make the two things as far as possible comparable by giving us a value of a plant which is comparable in essential particulars with the Golmuri plant.

*Sir Edgar.*—That is what we say here.

*President.*—It is not a complete plant.

*Sir Edgar.*—This is a complete plant as it stands, but it is not one actually built. The figures are all based on prices that we paid on various items. This is drawn up on the same basis for a complete plant of the same kind.

*President.*—Have you got any plans and specifications of this plant? You may be able to produce 30,000 tons of tinplate in a plant which may not at all be comparable. For that reason you cannot say whatever you paid for this plant ought to be the cost of the other plant. At least we must have some indication as to how the plant is going to be built; some specifications, something as to the names of the makers, something about patent processes, etc.

*Sir Edgar.*—I am afraid this is the best we can give you.

*President.*—We are very grateful for whatever information you have given us, but I am trying to point out that you are putting us in a very difficult position by not giving us full details.

*Sir Edgar.*—The only reason is that we have not built any works in recent years. We cannot give you figures for works which have not been built.

*President.*—Between the conditions in Wales and here there are two main differences—the same as in America. In the first place we have the labour difficulty. We cannot get the expert Welshman in those two countries except at a price. We have also got climatic difficulties. Here we have got a plant which is built expressly to meet those difficulties and you are asking us to compare that plant with a plant which is not yet erected and not designed to meet such difficulties.

*Sir Edgar.*—There is not much in that. If you look at our modern mills with a little bit of trimmings here and there, you will find that too big a song is made out of that.

*President.*—We have not seen your works. You yourself say that there has not been a completely new plant built in the Wales.

*Sir Edgar.*—Not during the last year or two, but just before the war.

*President.*—Before the war means more than 10 years ago.

*Sir Edgar.*—That was the last one we got. Even those did not compare so unfavourably as you are trying to make out.

*President.*—We have got here in existence a plant which has been at work and has worked fairly well. Do you expect us to ignore that factor altogether and accept your valuation based upon conditions which may be entirely different from ours and say that this plant can be built in India or in Wales for £250,000?

*Sir Edgar.*—We say we could do that in Wales for £250,000 definitely.

*President.*—Can you establish that it would be a plant exactly like this? You have not given us the details of your plant. We have got details of the plant here.

*Sir Edgar.*—We say this estimate so far as we are concerned is for an exactly comparable plant and that it would cost us so much. That is the best we can do. This has been done with the greatest thoroughness.

*President.*—May I know whether your expert or whoever drew up this estimate, has seen the works of the Tinplate Company of India at Golmuri?

*Sir Edgar.*—I have, but he has not.

*President.*—You did not prepare this estimate.

*Sir Edgar.*—We know the lay out of the Indian works.

*Mr. Mather.*—I take it that you are familiar with this description of the plant which was published two years ago.

*Sir Edgar.*—Yes.

*President.*—I should like to point out one point which I absolutely do not understand. Take your estimate for buildings. It is £41,000. Now take the plant of the Tinplate Company of India. The buildings are said to cover  $7\frac{1}{2}$  acres of land. I think Mr. Mather estimates the floor area at 300,000 square feet. Your estimate of £41,000 comes to about 2s. 8d. per square foot for the building. I do not know if you are able to do it for 2s. 8d. a square foot in Wales, but I should be very much surprised if, in this country, you got beyond the plinth level in the case of a building of the kind they have at Golmuri.

*Sir Edgar.*—All I can say is that we can put up a building quite satisfactorily to house all the plant at that price.

*President.*—This is a building which occupies 300,000 square feet. You must have a plant that is laid out in the way the Golmuri plant has been and if you say you can put up a building of that size for £41,000, I must say I am very much surprised. I am just trying to point out that these things are not comparable.

*Sir Edgar.*—We might not waste as much money as they have. What I say is we will put up quite a suitable building in Wales for the purpose of containing all these installations for this amount. We won't waste as much money as they have wasted at Golmuri. Probably we shan't.

*President.*—Why should you assume that their lay out is wasteful?

*Sir Edgar.*—By the price they must be terribly wasteful. It makes every manufacturer at home gasp.

*President.*—Having regard to the climatic and other conditions in this country, why should we prefer to be guided by the experience of Wales rather than by the experience of our own country or that of America?

*Sir Edgar.*—You can compare Alabama (America).

*President.*—We have not got the figures. We should be very glad if you could supply us. Here we have two difficulties, viz., climatic conditions and labour. In order to suit the climatic conditions the lay out of the plant requires modifications and you allow for no such modifications and say you can put up a building to house the plant and machinery for £41,000. It seems to me it must be in a very much smaller space to start with, because I don't think in Wales you can put up a building for 2s. 8d. per square foot if you are to have anything like the Tinplate Company works. It may be that for your conditions it is quite suitable, but how are we to be satisfied with regard to our conditions that it would be equally satisfactory. That is my difficulty.

*Sir Edgar.*—The only point that these figures go to substantiate is this that as far as we are concerned in Wales with the best modern plant for an equal output of tinplates of this kind, we would never expect as a commercial proposition standing on our own legs ever to be able to pay a penny as dividend on anything over £300,000. As far as India is concerned I cannot express an opinion.

*Mr. Mathias.*—You would agree that it is not unreasonable to charge an extra amount for the construction of buildings out in India.

*Sir Edgar.*—Yes.

*Mr. Mathias.*—For machinery, freight, duty, etc., it would be perfectly reasonable to allow a lump sum.

*Sir Edgar.*—Add another £100,000 to it—I have added £100,000—and call it £450,000. In Wales we would never be able to pay our way if we spent

£450,000 on a works producing 30,000 tons a year. We would not pay our way.

*President.*—You have no post-war plant. So, you don't know.

*Sir Edgar.*—We have 60 years' experience.

*President.*—You have just now told us that you have no completely new plant.

*Dr. Matthai.*—Have you any knowledge of the conditions in America?

*Sir Edgar.*—No. I have a lot of general knowledge, but not any knowledge to speak of.

*President.*—The difficulty arises in this way. You ask us to compare this plant with a plant that has not been erected.

*Sir Edgar.*—I am asking you to compare with our 60 years' experience and 68 works in existence.

*President.*—None of the works are comparable.

*Sir Edgar.*—Some of them are.

*President.*—Have you got any works which is comparable?

*Sir Edgar.*—King's Dock Works at Swansea. They are about the same size.

*Mr. Mather.*—They have about the same output.

*Sir Edgar.*—Yes.

*President.*—When I say that the two things should be comparable, I mean that they must be comparable first as regards the output and secondly as regards the equipment.

*Sir Edgar.*—We have plenty of works which are comparable as regards output and equipment.

*President.*—But they have been constructed before the war.

*Sir Edgar.*—Yes.

*President.*—Prices are quite different now.

*Sir Edgar.*—We have taken to-day's prices and adjusted.

*President.*—Your adjustments may not apply to a modern American plant. In America they have made improvements which you have not got in Wales.

*Sir Edgar.*—I am very glad that you have given me this opportunity because I must object to the constant slanders that are made by the Tinplate Company of India on this point of equipment. The truth about the Tinplate industry is this that America has never contributed anything towards the improvement of the industry. It has all been done by the Welsh people. It is the boot on the other foot.

*President.*—We don't mind your taking all the credit for doing everything towards the improvement of the industry so long as you use everything which they use, but you don't.

*Sir Edgar.*—They don't use anything which we don't which is of any serious consequence.

*President.*—Where, in some cases, in America they use machinery you depend on your skilled labour.

*Sir Edgar.*—No, it is quite untrue.

*Mr. Mather.*—That is generally true with regard to doubling.

*Sir Edgar.*—It is only just that doubling—a small thing. All through the evidence they talk about this machine which no Welsh works would put in because it wastes time. We can show America and others a real doubling machine that is working in one of our works. It is the only real doubling machine in the world. It has been installed during the past 12 months.

*Mr. Mather.*—The machines at Golmuri actually double 3,000 tons a month and yet you suggest that they are not real doubling machines.

*Sir Edgar.*—Look at the time wasted. The Welsh manufacturer does not see any advantage in that particular machine. But of course as regards the real doubling machine itself, we are the only people in the world who can show you that. We have got it going in the same works which produced the new tinning plant. It is the only contribution on the tinning side that has been made in the world. I am very much obliged to the Board for giving me this opportunity. On a little point like this I don't like allegations of that kind.

*President.*—I should have been glad if you had been able to tell us "Come to Wales and we shall show you a plant which is as good as the one at Golmuri".

*Sir Edgar.*—We would be delighted to take you round.

*President.*—But you say that you have not built any plant recently.

*Sir Edgar.*—The ones that we built before the war are quite as good as the one here. The proof of the pudding is in the eating.

*President.*—You ask us to assume that what has been tried by experience is not as good as you may be able to put up, because it is more expensive.

*Sir Edgar.*—I don't follow.

*President.*—Here we have got a plant that is actually working. Against that you say you can put up a plant which would be as good.

*Sir Edgar.*—We say that we have built a plant such as that built in India.

*President.*—It is the first time we hear that a plant which is comparable to this one.

*Sir Edgar.*—We have several works that are comparable.

*President.*—In this representation that we have received they say that there is no plant in Wales that is comparable to the plant of the Tinsplate Company of India.

*Sir Edgar.*—Not in all particulars, but as regards essential items which affect costs they are comparable.

*Mr. Mathias.*—And output?

*Sir Edgar.*—Yes.

*President.*—I don't dispute your statement as regards output. A skilful man may turn out the same amount of stuff out of a very old fashioned machine, but that does not necessarily prove that his machine is as good as a new machine.

*Sir Edgar.*—There is no difference in machinery. The only question is in the lay out of the building, I agree. The question how far people are entitled to spread themselves out in that way is another matter.

*President.*—What it comes to is that we should eliminate at present the building part and leave the plant at £240,000.

*Sir Edgar.*—That is what it comes to.

*President.*—You say you have no plans or specifications.

*Sir Edgar.*—No.

*President.*—Therefore it would be very difficult to compare the two things.

*Sir Edgar.*—Barring buildings, the rest makes no difference. Specifications do not affect the question.

*President.*—I think as regards the plant we shall investigate the points you have raised. The procedure that we propose to follow is somewhat this. We shall reduce the value of the plant more or less to what we consider to be its fair replacement value and see how far it differs from the estimate that you have given and we shall then try and make such adjustment as may be necessary. The main difference would be as regards the lay out of the

building and you admit that you cannot give us any data with regard to Indian conditions.

*Sir Edgar.*—Quite. But of course it is largely a matter of taste as to the sumptuousness in which you lay out your buildings.

*President.*—They have not got marble floors and things like that. Have you seen Dorman Long's new sheet mill?

*Sir Edgar.*—No.

*President.*—Mr. Mather tells us that their building would be more or less of the same type as far as size and height are concerned.

*Mr. Mather.*—It is on much the same scale.

*President.*—So that even in England there is a difference of opinion as to the kind of structure you may have for a modern plant. Of course as you know, in the sheet mill and in the tinplate works the conditions are very arduous and the workmen should work in a little more comfort there than in other works.

*Sir Edgar.*—That is true.

*President.*—Then as regards profit, you consider 10 per cent. a fair return.

*Sir Edgar.*—Yes.

*President.*—That is what the trade would look to under normal conditions.

*Sir Edgar.*—They would be satisfied if they had it.

*Dr. Matthai.*—Can you give us any figure as to the actual profit per box?

*Sir Edgar.*—We cannot get that. The best figure I can get is that they would all be satisfied if they got a shilling per box.

*Dr. Matthai.*—That is a sort of normal return you would expect.

*Sir Edgar.*—Yes, but it varies with different works. Some of the works even in bad times have been doing quite well. They have got some local facilities which help them out.

*President.*—As regards marketing you have got this big organisation which is intended to help in that direction.

*Sir Edgar.*—No. There is no organisation for the industry as a whole on the commercial side at all. This little organisation—that booklet is issued by—is rather for the purpose of persuading people who do not use tinplate at all to start using it.

*President.*—That is an aspect of marketing.

*Sir Edgar.*—That is one aspect, but not the bigger aspect. It does not touch prices, orders and things like that at all.

*President.*—It is to popularise the use of tinplate.

*Sir Edgar.*—In the main, yes. There is an Exhibition in London where samples of everything made out of tinplate can be seen and people who wish to market a particular thing can see whether tinplate would suit them.

*President.*—How is it that you have not directed your attention to this part of the world?

*Sir Edgar.*—This booklet of ours has been distributed from time to time to a considerable number of people in India.

*President.*—People don't read books very much out here.

*Sir Edgar.*—They usually read that one. It contains a lot of information at the back of it for anybody interested in sheets and plates.

*Dr. Matthai.*—The local Tinplate Industry would be a good propaganda agency for tinplate.

*Sir Edgar.*—We should welcome them very much. My complaint is at present they have not done a thing like that.

*Dr. Matthai.*—You have not waited long enough.

*Sir Edgar.*—Three years is a fairly long period. When a local work assists towards the expansion in the consumption of tinplates we would

welcome that very much because we would get our share, but merely to take the easy stuff and get it all and leave us behind with the remnants and then to put on top of that a prohibitive tariff—that is what we complain about.

*Mr. Mathias.*—Do you think that the tariff is very high?

*Sir Edgar.*—Yes. Undoubtedly it has restricted the other consumption very considerably. It has transferred 10,000 tons of our business to America. That is what we complain more than anything else.

### *The Representation of the Association.*

*President.*—In section A, you deal with the conditions governing the grant of protection. It is correct as far as it goes but there are one or two qualifications. For instance in paragraph 3 you quote us as follows:—“It follows that those kinds of steel which are not produced in India at present or are not likely to be produced in the near future, should, so far as possible, be left untouched”. That is true. But if any kind of steel which is not manufactured in India can be used as a substitute for any other kind of steel which is manufactured in India, we should not exclude that.

*Sir Edgar.*—We make a point that substitution is impossible.

*President.*—In the case of tinplate you may be able to substitute one gauge for another for certain uses.

*Sir Edgar.*—I deal with that subject in another section and what I say is subject to that qualification.

*President.*—Take the case of wrought iron for instance. We put a duty on wrought iron because we felt it might be substituted for protected steel.

*Sir Edgar.*—I follow what you mean.

*President.*—As regards section B it is rather difficult to follow. What is your exact point there? I think the gist of it is that manufacture of tinplate has failed in other parts of the world, and that therefore it is likely to fail in India. That is what I gather from your statement.

*Sir Edgar.*—The gist of the statement is quite clear. It is this, that in view of the difficulties to make a commercial success of tinplate in all these other countries—of course naturally one won't expect to be able to do it at once.

*President.*—That is what I say. In this paragraph I don't think you attach sufficient importance to the case of the United States. You can't say that it has failed there in that sense. You are arguing quite a different point. Whether in the United States it was the tariff which led to its establishment is a different proposition. What has actually led to the establishment of the tinplate industry, does not affect the question much but is it an exaggeration to say that the manufacture of tinplate in America has been a success?

*Sir Edgar.*—It has been a success.

*President.*—And therefore, in India if conditions were similar it might be expected to succeed?

*Dr. Matthai.*—As far as America is concerned, as you rightly point out, the duty was not the determining thing; the duty was a help because certain essential conditions were fulfilled in America. They had suitable raw material, tinplate bar became very cheap, and then they had a large expanding market. Therefore what you say about the United States is this, that a duty might help the industry if the other conditions were satisfied. If India had a suitable supply of raw material and also the possibility of an increasing market, in that case the duty might help India as it did in the case of the United States?

*Sir Edgar.*—Of course opinions differ very much whether the duty helped the United States. If you look at the facts it is quite clear. It might have helped a bit.

*President.*—It is always the old argument between free trade and protection. Free trade people say the protective duty never helped at all and the

industry would have established itself without it. The protectionists say it was really the result of the duty. The fact remains that in the United States under certain conditions the industry has been successfully established. That is the point with which we are concerned.

*Sir Edgar.*—In 40 years.

*President.*—40 years is not considered a long time in the United States to establish an industry.

*Sir Edgar.*—It was established before that.

*President.*—How long do you say it took them to establish it?

*Sir Edgar.*—I have given facts and figures in my statement later on.

*President.*—Then you give three reasons; first of all that it cannot be done on a proper commercial basis. You say that you have no objection to any country manufacturing tinplate if it was done on proper commercial basis, secondly, if it made various varieties of tinplate and thirdly, if it organized itself for an expanding business. By proper commercial basis what do you suggest? What we understand is that it should be on an economical basis, that it should be produced on a sufficiently large scale.

*Sir Edgar.*—What I say is that if you have to give away 15 per cent. of your production on a ruinous price, when you have an excess of scrap not giving a sufficient yield and no compensating advantage you have not got a commercial proposition.

*President.*—As I explained to you this morning we are not going into each individual detail, though we are going into them for purposes of comparison. But if on the whole we are satisfied that tinplate can be manufactured here as economically as in Wales or in other parts of the world eventually, then we see no objection to what may be happening in one particular direction which may increase the costs. As I was trying to point out this morning, when going into the spread in the two countries, India may have the advantage in one respect but may not have in another. We have to take the sum total, and having done that if we come to the conclusion that tinplate can be manufactured in this country, then these considerations do not arise.

*Sir Edgar.*—The point about the whole case is that while with certain reservations they say they brought the cost of production down to a figure approximating to ours, nevertheless their losses are enormous. I say therefore that it is not a commercial proposition because it is no use producing a thing if you have got to throw it away.

*Mr. Mathias.*—Is it not correct to say that this loss is incurred by most firms turning out tinplate now, not only by the Company in India?

*Sir Edgar.*—Not in that way. Our profits are not prejudiced by any abnormal difference in the proportion between the prices of primes and wasters.

*Mr. Mathias.*—Would you regard that as a passing phase?

*Sir Edgar.*—I don't think they would surmount these factors, not within a reasonable period of time, 10 or 15 years. That is my definite opinion.

*Mr. Mathias.*—Do you think 10 or 15 years an excessive time to establish an industry?

*Sir Edgar.*—I won't prophesy that.

*President.*—If in the end, in spite of all these disadvantages India can produce tinplate at the same price as the foreign tinplate should these considerations be any real objection? After all it is the ultimate result that matters.

*Sir Edgar.*—I agree that if they get on to a commercial basis, as I said before, then I do not say that we have got any cause to complain.

*Dr. Matthai.*—Do I understand you to mean by commercial basis, as soon as they are able to produce without protection?

*Sir Edgar.*—I say with reasonable protection as an independent concern functions, as a commercial concern functions and not as a tied house. It is not a commercial concern because it is not commercially founded.

*Dr. Matthai.*—You mean for the general use of consumers?

*Sir Edgar.*—Yes, function in all things as a commercial company would, as the Tata Iron and Steel Company has to function with regard to steel. They have inspectors to inspect their steel, the same as every other producer in other parts of the world. This concern is in a different position altogether and therefore I say it is not on a commercial basis. It is an appendage of a very big trust.

*Dr. Matthai.*—Let me put to you a hypothetical case. Supposing I am starting a tinplate business in India. I look about and I find there is a certain person who is a big consumer of tinplate in the country. I take my proposition to him and say "I want some financial assistance towards my capital expenditure and I want you to give me some guarantee to take part of my output" and I enter into an agreement with him, do you consider that uncommercial.

*Sir Edgar.*—You would then become a mere appendage of the financier.

*Dr. Matthai.*—From the point of view of business is that a sound proposition?

*Sir Edgar.*—A very sound proposition but it is not then a commercial concern.

*Mr. Mathias.*—I understand there is a considerable amount of interlocking of interest between large manufacturing companies. In Germany, for instance, there is a good deal of interlocking of interest between manufacturers.

*Sir Edgar.*—I don't know what the position is in Germany now, but they won't be tied up to any one concern. I don't know what the position there is now since the Stinnes concerns have all gone to pieces.

*Mr. Mathias.*—For instance, if a steel company or a tinplate company agrees to sell its products to some sort of a central union and also had an interest in the capital of that union, would you regard that as uncommercial.

*Sir Edgar.*—A good deal depends on the circumstances.

*President.*—You say they must make various varieties of tinplates. Now really is it a great advantage to make many varieties of tinplate? After all the manufacture must be confined to the kind of demand there is in the country. If we want two or three kinds of tinplate in the country why should we manufacture 45?

*Sir Edgar.*—You buy 30 or 40 different kinds.

*President.*—But there are only two or three kinds which form the bulk of the consumption.

*Sir Edgar.*—That is all oil, and everything else is sacrificed to oil.

*President.*—Why should you consider that as an objection in a country where you do not want varieties on a large scale. When the question arises of protecting a variety of tinplates this objection may be very relevant. But at present from the United States they import 10,000 to 12,000 tons oil plates, probably for the Standard Oil Company, then the Tinplate Company of India manufacture about 35,000 and the rest is all miscellaneous, about 15,000 tons or so. Why, because they are not able to produce 15,000 tons, should not they be allowed to manufacture the remaining 45,000 tons?

*Sir Edgar.*—Put it the other way—why should you put a tariff on these 15,000 tons if these people cannot manufacture these at all?

*President.*—That is a separate argument. You say unless an industry is able to manufacture a variety of products that industry is not carried on on a commercial basis.

*Sir Edgar.*—You are rather anticipating the other point, namely, that if you are going to protect these works with the purpose that all the tinplate



consumed in India should be bought in India then they must produce all the various commercial varieties. My point is that once they do that the cost of production would be so considerably increased that all their figures would have to be revised.

*President.*—That argument is quite different from this. You say this industry is not carried on on a commercial basis because it cannot manufacture so many varieties. I am trying to point out to you that it is rather uncommercial for anybody in this country to go in for the manufacture of a large variety of tinplates instead of confining himself to the varieties which have the biggest demand.

*Sir Edgar.*—I know they would be much better off the other way.

*Dr. Matthai.* On the other hand don't you think it is an advantage when you are starting a new industry that your market is confined to only a few standard varieties?

*Sir Edgar.*—I am thinking of the interest of the consumers as a whole.

*President.*—Why should not India eventually standardize in certain classes of tinplates?

*Sir Edgar.*—They tried that in America but it was quite hopeless. They have given it up. Tinplate is just like paper and you have to make it for the particular article you are going to wrap up. Standardization in a thing like that, I am afraid, is quite hopeless.

*President.*—Instead of producing 50 different varieties you may be able to do with 10 and the 40 other varieties may be purchased from Wales. Why should you say no country ought to go in for the manufacture of tinplate unless it can manufacture all the varieties that you manufacture in Wales?

*Sir Edgar.*—Because it is not fair to the other consumers. You confine yourself to supply the needs of one section and penalize the other with a tax that is not fair.

*Mr. Mathias.*—If the country desires to establish a tinplate industry it would naturally start on those particular kinds of tinplate which are most in demand?

*Sir Edgar.*—Certainly.

*Mr. Mathias.*—If in the course of 10 or 15 years the industry can be established so as to be able to do without protection in those particular kinds, is there any objection to starting manufacture even at a certain sacrifice to the consumer?

*Sir Edgar.*—My point is that even in 30 or 40 years they will not be able to achieve it.

*Mr. Mathias.*—Your argument here is that because the Indian Company can't manufacture 7 or 8 different kinds, Government should not protect the industry.

*Sir Edgar.*—Not unduly. Of course, when you give a reasonable protection, that is another matter. It is all a question of high protective tariff which is restricting the development of the other tinplate.

*Mr. Mathias.*—In effect it really comes to this. You say that you would have no objection to the protection of a Company producing two or three kinds of tinplate provided the burden on the consumer thereby imposed was reasonable and not excessive.

*Sir Edgar.*—Yes.

*President.*—Then you say that an industry before it can be established must organise itself for seeking and extending business. That argument can well apply to an old established industry like yours in Wales, but when a new industry in the country which has got all the market that it requires, why should it carry on any propaganda?

*Sir Edgar.*—It all comes back to the same point. These people have chosen to do only the oil plates, but in effect it might be difficult for us to carry on the rest of the business. That is my objection all the time.

*Mr. Mather.*—In all these you only have one substantial objection which is that a protective duty has been put on all the kinds of tinplate even if they are not manufactured in India at present.

*Sir Edgar.*—I have also got this objection that I am convinced on all the facts up to the present fortified by the one that I obtained yesterday that this concern unless unduly patronised by the State cannot get on to its own feet within a reasonable time and will have to break up, may be early or late and we will have to come back to trade here with a lot of mischief done and the whole tinplate trade disorganised in the meantime with a check put on expansion for 5 or 6 years.

*President.*—You are anticipating something that may not happen. One of the things about which we have got to satisfy ourselves is as to whether the industry will eventually be able to do without protection. If we are not so satisfied the application may be dismissed unless there are some very special reasons.

*Sir Edgar.*—My whole case is that they cannot within any reasonable period of time carry on without protection.

*President.*—You will have to give us more evidence on that point.

*Dr. Matthai.*—Let us assume that we have accepted the principle of protecting the tinplate industry. We have not made up our mind whether protection should be given in respect of each of these articles. There are some articles which they can go on to produce without installing further plant and therefore in the course of their normal development they would be able to produce these things. If we refused assistance at this stage it would mean we are preventing that industry from assuming a course of normal development. We don't want to prolong this period of protection. In order to shorten the period of protection it is necessary that the development should be hastened. From that point of view it is worth while helping the industry to produce these other things?

*Sir Edgar.*—But my point is that immediately they begin to produce other tinplates whether they do it this year or in ten years' time, there is nothing but sheer calamity. First of all, labour won't be able to do that in 10 years' time any more than to-day. You keep your labour going on for the next five years only rolling oil plates. At the end of 5 years there will be no more labour to turn to these gauges than there is at the present moment. All your costs go up, your yield goes down, your wasters increase, your failures increase. My point is that they have not proved at all their capacity within any reasonable time to turn over to take care of the general consumer in India. They have neither proved it as regards marketing.

*Mr. Mathias.*—You would hardly expect them to prove it. If they start more or less on a system of mass production, they are bound to concentrate on one or two kinds.

*Sir Edgar.*—I come back and say that they sacrifice everything to oil. That is what it comes to. If the Government is going to support that policy, sacrificing everybody and everything to oil, my other contention is that the oil people can do it themselves quite as well as anybody else.

*Mr. Mathias.*—I would suggest that you might on the same argument, say, that the rolled steel industry should not be protected, because the number of articles which Tatas turn out is comparatively limited.

*Sir Edgar.*—No, because Tatas are not the consumer as well as the manufacturer. The consumer is an independent person.

*Mr. Mathias.*—You are coming to another argument. Your argument was that they only manufactured two out of the many kinds of tinplate and that therefore they could not be established on a commercial basis, that they could not possibly work profitably if they produced a large variety of kinds of tinplate. The same argument I would suggest would prevent the protection being given to the rolled steel industry on the ground that at present Tatas only manufactured certain kinds of rolled steel and it has not been proved

that if they manufactured other kinds of steel, they would make a commercial success of them.

*Sir Edgar.*—I am not familiar with that. I think they had at one time or another made most ordinary heavier steel types. Of course, you have not got in the heavy steel industry all these varieties. I have got evidence. One of our works last year made 1,500 different varieties of tinplates.

*President.*—You talk about the effect on agriculture. Surely you don't mean to say that the Indian agriculturist is a great consumer of Welsh tinplate for canning his vegetables or other produce.

*Sir Edgar.*—At present no. My point is that there ought to be. This policy of protection is checking that development.

*President.*—Why should it check it?

*Sir Edgar.*—It would make the tinplate dearer to the Indian consumer.

*President.*—You have had a sort of free innings for 150 years. If you have not been able to do it in 150 years, how do you expect a young industry to do it in two years?

*Sir Edgar.*—It has nothing to do with us. It is the agricultural community to blame.

*President.*—You say they have not done anything or they are not likely to do it.

*Sir Edgar.*—We have been at it all the time.

*President.*—Where are the results?

*Sir Edgar.*—We have sent evidence to the Royal Commission on Agriculture. You will see when the Royal Commission comes out. We are all stimulating that development.

*President.*—Do you seriously contend that the Indian agriculturist is using any large quantities of tinplate for canning vegetables at present?

*Sir Edgar.*—Not at present, but he ought to.

*Dr. Matthai.*—What are the sort of agricultural products in which you see the possibility of canning in India?

*Sir Edgar.*—You can grow peaches up in the north.

*President.*—At very large distances from the markets.

*Sir Edgar.*—Then you start with a canning factory in Madras. It ought to grow into substantial proportions as it is a main industry of Portugal to-day, and I have consulted a lot of people and they suggest that the new Royal Commission should go into this question.

*Dr. Matthai.*—The Royal Commission on Agriculture might produce its report in about two years from now. Let us assume that they accept your suggestion and make recommendations for the development of canning. I don't assume that as things move in India, we are likely to see the recommendations taking effect within 7 or 10 years. Supposing we have a scheme of protection for tinplate in this country which is limited to a period not exceeding 10 years, that would not really prevent the development of canning.

*Sir Edgar.*—The history of any country that I know of is when once you started protection you never get it off.

*Dr. Matthai.*—No country has adopted a policy of discriminating protection.

*Sir Edgar.*—India does not intend that protection should be permanent as it has become in other countries of the world. I think that was the principle laid down.

*Dr. Matthai.*—Supposing we are able to restrict it to a limited period, then your argument about canning in India would not apply.

*Sir Edgar.*—I agree. Except for the present, there is a check. If there is cheap tinplate it stimulates some people to go on. If you make it dear, to that extent you restrict.

*Dr. Matthai.*—As the President pointed out you have been importing tinsplate for so many years into this country and there has been no development of canning.

*Sir Edgar.*—It is not our fault. It is the fault of the Indian Agriculture.

*Dr. Matthai.*—That fault may still remain.

*President.*—You allege that the Tinsplate Company have made no effort to do it and you say that is a ground for refusing protection. You say: "During the past three years the Tinsplate Company of India has practically confined itself to the class of tinsplates required by the Burmah Oil Company. It has not conducted a commercial campaign for educating Indian traders. . . . ." So far as the Indian market is concerned, has the Welsh Tinsplate manufacturer done very much more in 100 years or more?

*Sir Edgar.*—There has been a steady increase. What India knows about tinsplates we have taught India.

*Mr. Mather.*—How long has this propaganda organisation been in existence?

*Sir Edgar.*—4 or 5 years.

*Mr. Mathias.*—With reference to this question of canning to which you refer, have you any information that the canneries in Madras have been seriously handicapped by the rise in price of tinsplate as a result of protection?

*Sir Edgar.*—I don't know about it at all.

*Mr. Mathias.*—We have not received any application from them.

*Sir Edgar.*—Every time you make the tinsplate dear. The container has got to be cheap. There is a check on the development of canning.

*Mr. Mathias.*—The point remains that the Board has not received any application from any canneries of Madras in this respect.

*Mr. Mather.*—To what extent has the consumption been restricted or checked?

*Sir Edgar.*—It is very difficult to say. It does not seem to have increased in the last three years. What I complain of more than anything else is 10,000 tons shipped from America.

*Mr. Mather.*—Protection can hardly produce that effect.

*Sir Edgar.*—I don't see any other reason except the protective tariff.

*Mr. Mather.*—Let us keep for the moment to this question of restriction, find that the average consumption of tinsplates in India for the three years prior to the war 1912, 1913, 1914 was 30,000 tons. The average consumption for the last 3 calendar years 1923, 1924 and 1925 was 56,400 tons including the Indian production. That does not look like very serious restriction. The total consumption in 1925 was the highest on record.

*Sir Edgar.*—They are mainly oil plates.

*Mr. Mather.*—It may be. It does not look as though there has been a set back in the consumption. There has been an increase in the consumption of tinsplate in spite of the duty.

*Sir Edgar.*—Of course the Burmah Oil Company doesn't pay the duty.

*Mr. Mather.*—It pays the duty to the Tinsplate Company.

*Sir Edgar.*—Paying from one pocket to another. That makes a big difference.

*President.*—In paragraph 11 you say that you have been able to reduce the price of tinsplates from 23s. 6d. in 1925 to 19s. 6d. at present, and you add that that was a general achievement in reducing costs of production in which India could have benefited like other countries. I think this morning we went into that question. It is not really a reduction in the cost of production, but it is a reduction in the selling price chiefly which has been brought about by conditions of the trade.

*Sir Edgar.*—If you put it that way, yes.

*President.*—You say “that was a general achievement in reducing costs of production.” It means you produce your tinplate 4s. cheaper. You don’t produce a box 4s. cheaper in 1926 than you did in 1925.

*Sir Edgar.*—We could say we have reduced the cost to the consumer anyhow.

*President.*—Then you say: “Normal and permanent world prices have been improved for the benefit of the consumer.” Is it for the benefit of the consumer that this has been done? Surely you don’t mean that! You mean simply that you have been compelled to do it.

*Sir Edgar.*—The consumer gets the benefit of it.

*President.*—It doesn’t mean that you have gone out of your way to benefit the consumer.

*Sir Edgar.*—I don’t mean that.

*Dr. Matthai.*—Can you tell me roughly the total Welsh output?

*Sir Edgar.*—About 878,000 tons last year?

*Mr. Mather.*—Tinplate alone.

*Sir Edgar.*—Yes.

*Dr. Matthai.*—How much of it was exported?

*Sir Edgar.*—About 4ths. Last year the exports were about 586,000 tons.

*Dr. Matthai.*—You don’t have a practice in the Tinplate trade of different prices for internal consumption as against export.

*Sir Edgar.*—It would be quite impossible.

*President.*—Paragraph 13 deals with the same thing.

*Sir Edgar.*—It shows the kinds of orders that we get for all these varieties. The point of the paragraph is that we have to manufacture according to customers’ requirements and not for stock.

*President.*—That is a disadvantage for an industry.

*Sir Edgar.*—It is a disadvantage to the manufacturer’s pocket, but it is an advantage to the consumer because he gets what he wants.

*President.*—These people are not affected by that.

*Sir Edgar.*—Sugar and jam for them I agree all along the line.

*President.*—In paragraph 14 you say “There is nothing remarkable in that. Suitable labour, anywhere, could be intensively trained on modern machinery by constant repetition to reproduce two fixed sizes and one gauge of sheet and to always coat with about the same quantity of tin.” Do you consider that a disadvantage that labour could be trained for repetition work easily?

*Sir Edgar.*—I am rather dealing with the point which the Tinplate Company of India have put in that somebody has alleged that nobody but the Welshman knows anything about tinplates and that they have proved the contrary. I have not heard anybody say that. Nobody has said it. It has not been said in writing and yet we find that stupid statement repeated from these reports in high quarters. Of course we have never said that nobody but the Welshmen can make tinplates because there are 14 countries in the world making tinplates at the moment. What we do say is that the Welsh workman because of his skill and general training is able to deal with any variety of orders on a commercial basis at a commercial price and there is nothing surprising at all in the intensive training of Indian labour. We can train Chinese labour, if we set to it. I am rather answering the point that they keep putting it against us as having said that nobody can make tinplates except the Welshmen.

*President.*—It comes back to the same argument really. If you say that it is essential that the country which pretends to manufacture tinplates should manufacture 50 different varieties, I think that the argument may be conceded at once that India cannot do it at present if that is of any importance to you.

*Sir Edgar.*—My point is that she won't be able to do inside 20 years.

*President.*—The answer is that India may not require these varieties on any large scale.

*Sir Edgar.*—She is bound to require them.

*President.*—In the last 100 years she does not appear to have required them.

*Sir Edgar.*—This canning movement is of recent growth. Take the case of Singapore. They had done a little bit of business in pine apple before. During the war, it was all stopped. They started soon after the war and last year they shipped to England alone 1 million cases of pine apple. It is a colossal business— all in a few years without machinery. Now they are putting up proper machinery and they are going to have a huge industry which is going to be more profitable than the tin industry in a year or two. That is the sort of point I am trying to make.

*Mr. Mathias.*—That is in Malaya?

*Sir Edgar.*—Yes. The same thing can be done here if they set to it. It is all new. Of course the movement has started about 10 years ago.

*President.*—As regards paragraph 16, I really find it difficult to follow it. You say: "It seems to be generally agreed that of the present consumption of new tinplates in India only about 12,000 tons per annum are imported for general purposes. Two questions are involved in this. (a) There is a large universally distributed use of the 'oil plates' second-hand."

*Sir Edgar.*—There I am pointing out that if the small industries in India knew about it they would know that they could get prime plates as cheap as second-hand oil plates.

*Dr. Matthai.*—Is your point this? At present supposing a second-hand kerosine tin can be had for 8 annas, the village tinsmith gets it and cuts it to the size that he wants. The cutting up or the wastage comes to about two annas and on the whole it comes to 10 annas. Supposing he went to an importer of tinplates, he could get the right sort of plate for 10 annas?

*Sir Edgar.*—He would get it for 8 annas.

*Dr. Matthai.*—Less than what it really costs him now.

*Sir Edgar.*—Yes.

*Mr. Mathias.*—Even with the present duty?

*Sir Edgar.*—Not, if you keep the present high duty.

*Mr. Mathias.*—With the revenue duty?

*Sir Edgar.*—It was true then. Take the case of a man who wants to make some household articles. It would be cheaper to make out of brand new plates rather than to make out of second-hand cans.

*Mr. Mathias.*—So that even now if the price of wasters was Rs. 40 below the price of primes it would pay the agriculturists to buy the wasters and make those articles out of them.

*Sir Edgar.*—If the waster is suitable.

*Mr. Mathias.*—I should like to know whether you consider it would be practicable for the Tinsplate Company of India to undertake an advertisement campaign for the use of wasters in villages for the purposes for which second-hand tins are now used and thereby improve the sale of wasters.

*Sir Edgar.*—It would help them a great deal.

*President.*—In paragraph 16 you say that two questions are involved in this. I find (a) There is a large universally distributed use of the "oil plates" second-hand. Where is the other?

*Sir Edgar.*—I am afraid it has been cut out by the printer.

*President.*—As regards section C, you say that even if protection was confined to the manufacture of tinplate for oil tins, it would involve a permanent burden on the community and you give two reasons for it. The first is

that their labour cost alone would be on an average higher than that in South Wales. Those figures are no longer applicable, as I pointed out this morning.

*Sir Edgar.*—It would be at least as high.

*President.*—If their anticipations are realised, their costs would come down by at least another Rs. 10 in the near future.

*Sir Edgar.*—Assuming, of course, that they can maintain the present low wages that they pay their workmen.

*President.*—That is understood.

*Dr. Matthai.*—You make a statement about the fluidity of Indian labour. That is purely a temporary thing. If an industry make sufficient provision for housing, it would entirely solve that question and as far as one knows the Indian Tinplate Company has made satisfactory provision for housing.

*Sir Edgar.*—Yes.

*President.*—You say in paragraph 18 “The general unreality of the labour question in the Indian works, with about 2,500 workmen can be appreciated from the fact that the total number of employees for the output of 30,000 tons per annum in South Wales works would be 720, including women and boys.” It is not a very bad proportion so far as the conditions of Indian labour go. Your Welsh labourer gets better wages. He is physically much stronger. He gives a return for the money he gets. So does the Indian labourer.

*Sir Edgar.*—The Indian workman is doing quite as much work as the Welshman.

*President.*—If he did that, they would not require so many men.

*Mr. Mathias.*—Any sort of extreme specialisation would mean probably an increase in the number of workmen. I understand that in Wales an expert Welsh tinplater would do one or two or perhaps three or four operations which in India would be performed by three separate men. That would in itself raise the number.

*President.*—They have divided the manufacture into more processes than the case in Wales.

*Sir Edgar.*—There is not much in that. Of course, we have got some works who have adopted that plan now. I don't think there is anything much in that.

*President.*—They say that in some of the Welsh Works the processes may be combined and one man may be doing two or three processes. That cannot be done here because the machines are so arranged that each machine represents a separate process.

*Sir Edgar.*—It is not a question of machine. It is only a different way of passing the plate. It is an American way of doing it. There is nothing in that.

*President.*—If you have got more points at which men have to work.....

*Sir Edgar.*—If you compare the total output, it all squares out.

*President.*—It is possible for a man to attend to two or three processes if you turn out a smaller output but when you are having production on a larger scale, it would be more economical to have 4 men carrying out 4 different processes. That is the American method anyhow and that is what they claim.

*Sir Edgar.*—For a works of this kind we would only require 720.

*President.*—If you had a plant of the same kind probably you would want more men.

*Sir Edgar.*—Less than 720 would run that style of plant. If we get rid of women and boys, it would make very much difference. It would be a few less.

*President.*—They claim that they employ two Indians to one Welshman on an average.

*Sir Edgar.*—It is 3 to 1.

*President.*—Yes, on these figures. But if you work on the same method as they work, then you would require more men.

*Sir Edgar.*—It would not mean more men for us per unit of output.

*Mr. Mathias.*—Supposing your men are not very highly trained and you put one man on each process instead of one man for two or three processes then you would naturally require more.

*Sir Edgar.*—It is always a very difficult question to answer. My only point is that the prices are so extraordinarily different. We have specialized labour who have been 30 years on the job.

*Mr. Mathias.*—The fact is that the industry has been in existence in India for only about three years. If you said that it takes the Welsh labour some years to learn the work; and you would naturally expect in a young industry where the labour is not really fully trained that the number of men employed would be very much higher than in old established works where many of the men have been employed for periods of 30 years, or even more.

*Sir Edgar.*—Yes.

*President.*—You say “The materials costs are insuperable and permanent.” This figure of Rs. 1-8 per basis box that you have given is from a previous statement made by the Tinsplate Company, but if you refer to their more recent statement on page 377 of our publication you will find that they have come down considerably.

*Sir Edgar.*—Even with the reduced prices it looks as if they are 50 per cent. higher.

*President.*—If you add freight and various other charges to their cost then you must add freight and other charges to the cost of your finished article. Either you must bring your tin-plate down to this country or take their materials costs. You talk of their materials being more expensive; their answer is, “that is true, but on the other hand we are better off than they because we don't have to pay so much freight on our finished article.”

*Sir Edgar.*—I am not making any point there.

*Mr. Mathias.*—You don't draw any conclusion at all from that?

*Sir Edgar.*—No.

*Mr. Mathias.*—I notice you say that Welsh manufacturers would be quite pleased if they can make an average profit of one shilling a box. I am not quite sure as to whether you draw any conclusion from the extra cost of materials.

*Sir Edgar.*—What I am trying to see is, what the prospects from our point of view as manufacturers are. First I start with labour. They have got no advantage in labour costs. Then I say so far as material is concerned they are costing them more. Then I say that being the case there comes the question of wasters.

*Mr. Mathias.*—You don't write on the other side of the balance sheet, so to say, the freight of imported tinplate?

*Sir Edgar.*—That always goes into the cost of tinplate.

*President.*—When you are talking of their disadvantages you must take into account your disadvantages also. You take then one or two points which are against them but you do not take into account those factors which are against yourself. You get an advantage in the matter of exchange of Rs. 34 on the finished product, which you do not take sufficient account of.

*Sir Edgar.*—Don't you think that the question of exchange is accounted for a good deal by the lower price?

*President.*—Even so there is a substantial advantage in your favour as far as we can see. Unless all the factors are taken into account you don't establish your point. That is what I was trying to point out. It is no use making these two points against the Indian industry.



*Sir Edgar.*—I am simply summarizing the whole of the points. First of all I say labour is equal instead of being much cheaper, secondly material is all dearer then I get on to the selling and the difficulty is with wasters which we have dealt with in paragraph 21, and I sum it up in paragraph 23 "Dear Labour, extra cost of essential materials and the calamitous factor of wasters". As I say, those factors taken together are fatal and irremovable.

*President.*—But you don't take into account these other factors that I have mentioned just now, the factor of exchange and the fact that you have got to pay freight on your tinplate to come to India. When you draw up a balance sheet the advantages and disadvantages must be taken into account.

Then you say "They have started in India too precipitately and too soon" When do you think India ought to start?

*Sir Edgar.*—When they have got a big general market, which they won't if they get protection.

*Mr. Mathias.*—I gather from your representation that in America they started with protection long before there was any big market.

*Sir Edgar.*—But that never did any good.

*Dr. Matthai.*—As a matter of fact the two things go together—The establishment of a local industry and the development of the market. They really go hand in hand.

*Sir Edgar.*—Now we are on the question of price. My answer is the market is much better under free trade conditions than under the other.

*President.*—In paragraph 24 you say "Of the materials necessary for the manufacture of tinplate about half (the steel bar and coal) are Indian production. The other half have to be imported". The amount of material required is not a big percentage of the total costs.

*Sir Edgar.*—It would be half.

*President.*—Hardly. They have got the steel bar and the coal.

*Sir Edgar.*—Bar is a third, coal is little more and labour is about a quarter and the rest of course is imported material.

*President.*—I don't think it would be much more than a quarter. Tin alone is 20 per cent.

*Sir Edgar.*—That is imported.

*President.*—You import it too.

*Sir Edgar.*—I don't make any distinction. All I am saying is that the only thing this company purchases in India is steel bar and coal which is half the cost of manufacture.

*President.*—A quarter has to be imported in any case of which tin is about 25 per cent.

*Sir Edgar.*—Tin is a sixth of the total cost.

*President.*—Labour is about a quarter, so the imported material would come to about 30 per cent. at the most, not half of the total cost.

*Sir Edgar.*—I agree.

*President.*—Of course some of the things they have got to import now they may not have to import later on. We can only hope that if the steel industry is established in this country some of these things will be manufactured here.

*Sir Edgar.*—Some of them, for instance sulphuric acid, are very undesirable for anybody to hanker after at all!

*President.*—Sulphuric acid is being manufactured in the country.

*Mr. Mathias.*—With regard to steel bar don't you consider it an advantage for the tinplate industry to be established in the country so as to be able to provide a market for the steel manufactured by the Tata Iron and Steel Company?

*Sir Edgar.*—I think Tatas would be glad to get out of their old contract. It would not help the steel industry a bit.

*Mr. Mathias.*—In any case you would agree that it is desirable to establish a market in which Tatas could sell their steel?

*Sir Edgar.*—I am dealing with facts when I say that for 20 years this company is going to be a hindrance rather than a help to the steel industry in India.

*Mr. Mathias.*—What makes you think so?

*Sir Edgar.*—The existence of the agreement.

*President.*—They are now drawing up a new agreement by which they would get the tin bar at a price in the neighbourhood of Rs. 83 a ton.

*Mr. Mathias.*—In any case it is only a question of profits to Tatas. If this tinplate factory were to close down where would they find a market for the tin bars which they are producing?

*Sir Edgar.*—They can make money in other directions.

*President.*—As regards the comparison of average wages per head per month, your contention is that the imported labour here is being paid very high wages. That is what it comes to.

*Sir Edgar.*—It looks very excessive.

*President.*—Will your countrymen leave Wales unless they get a good price. The conditions of work are entirely different for Welshmen out here.

*Sir Edgar.*—My point is simply to show that it does not look as though the labour position can improve very much.

*President.*—So far as the number is concerned, you would see that already the figures had come down.

*Sir Edgar.*—That has already led to breakages and other disadvantages.

*President.*—That has already gone into the works cost. You know you are comparing wages in Wales with wages in India in paragraph 26.

*Sir Edgar.*—Subject to the comment that I make.

*Mr. Mather.*—What is the comment you make?

*Sir Edgar.*—They say that two Indians at the rolls have developed the necessary skill and have displaced the imported workman. Why should those two Indians be only paid Rs. 36 per month?

*Mr. Mather.*—There is a discrepancy in the basis on which you calculated these figures. You have got here in the first column the wages paid to the Welshmen at the Tinplate Works in India who are to all intents and purposes foremen. Firstly you have compared them with the average wages for all kinds of men, women and boys who have been employed in the corresponding department in Wales.

*Sir Edgar.*—There are no boys in the hot mills.

*Mr. Mather.*—There are in other departments. Then in the third column you put the average Indian wages per head, which do not include anybody who is paid at the rates which would have to be paid to the foremen.

*Sir Edgar.*—I have simply taken these from their own tables.

*Mr. Mather.*—The figures themselves may be arithmetically accurate, but they are not comparable. I don't think your comment takes proper account of that difference.

*Sir Edgar.*—It does as regards mill men. The Welshman was actually rolling at the hot mills and he was displaced by two Indians. The Welshman was getting Rs. 1,222, whereas the two Indians who were alleged to be rolling the same quantity with equal success were getting only Rs. 72.

*Mr. Mather.*—You are still subject to this discrepancy. You have not given the figure that the two Indian rollers are actually getting, but you have got the average for all the Indians employed in the department, many of whom of course cannot possibly be rollers.

*Sir Edgar.*—I took it from the statement that no Indian was paid more than Rs. 3 a day.

*Mr. Mather.*—Even on that basis for two men together you would get Rs. 132 and not Rs. 72.

*Sir Edgar.*—My point is as Welsh manufacturers we would not like to risk our money on that, because inevitably those wages have got to be altered. Once Indians realise that they are doing skilled work equal to Europeans, they are not going to remain on the same basis. My point is that the whole thing with regard to 10 or 12 years is unstable. We as men of business recognise that this is so which is inevitable. These wages have got to be considerably increased.

*Mr. Mathias.*—When they do make a success, their wages will go up.

*Sir Edgar.*—Quite.

*Mr. Mather.*—You might as well argue that the Indian railwayman must get the same wages as the English railwayman, but the railways in India have been in existence for nearly 70 years and that has not happened.

*Sir Edgar.*—I only say that the wages have got to be considerably increased. They are much too low.

*Dr. Matthai.*—You are pointing out the disparity is far too wide.

*Sir Edgar.*—Yes and therefore it is inevitable in course of time the industry being what it is, whether in India or anywhere else, there has got to be a little closing up of the gap. The wages of the Indian labourers must be increased. They are too low.

*Dr. Matthai.*—This question of the disparity between the scales of remuneration is a general problem which we have got to consider in regard to every industry. I think you are quite right in pointing that out to us.

*Mr. Mathias.*—The whole question is complicated by the fact that labour in India is constantly shifting from manufacture back to agriculture.

*Sir Edgar.*—That is right.

*President.*—We may tell you generally that in all enquiries that we have conducted, we have paid particular attention to the conditions of labour, *i.e.*, the conditions under which it worked, its housing and general welfare and we are glad that you have drawn our attention to it. I simply point out to you that it is a point which has never been lost sight of by us.

*Sir Edgar.*—I am only putting it from the same point of view. We are fortified all along that as business people we can't make a business as things are at present. We are frightened that the condition of labour is unreal.

*President.*—That condition presumes that labour has become efficient.

*Sir Edgar.*—It is alleged to be.

*President.*—When the labour has become efficient, it must earn higher wages. There can be no doubt about it.

*Sir Edgar.*—Quite.

*President.*—But when labour earns high wages, it does not necessarily follow that costs go up. That is the point. It may be that we may have to pay higher wages and it would be in the interests of everybody to pay higher wages, if labour becomes more efficient. From that your argument that the costs would go up does not necessarily follow.

*Sir Edgar.*—Not necessarily, but the presumption is that it would.

*President.*—Highly paid labour is not necessarily expensive. Is not that so?

*Sir Edgar.*—My point is that this labour is producing the maximum that can be expected on the present wages.

*President.*—In the next paragraph 28 you deal with the point that it has not become an industry in the accepted commercial sense of the term. You say it is not an industry because the Burmah Oil Company is one of the manufacturers and also the principal consumer. That is what it comes to.

*Sir Edgar.*—Both consumer and manufacturer.

*President.*—Have you examined the Burmah Oil Company's agreement with this Company?

*Sir Edgar.*—I don't think it has been published.

*President.*—I think the substance of it has been published. We should be very glad if you would enlighten us as to how the Burmah Oil Company benefits by this. The Burmah Oil Company pays to the Tinsplate Company exactly the price that it would pay if the tinsplate was imported. As far as we can see from the agreement, it gets no benefit. If it was the case that the Burmah Oil Company got its tinsplate cheaper in some way and it made a big profit out of this business, then your argument would be a sound one. If it is not shown that the Burmah Oil Company derives any benefit from getting its tinsplate from the Tinsplate Company, it is difficult to follow your point?

*Sir Edgar.*—If their expectations come off, they will get a lot of benefit. The whole point is the expectations with which the Burmah Oil Company went into this venture didn't come off.

*President.*—If you refer to page 126 of our first report, this is what we have said.

"The Burmah Oil Company receives no concession in the matter of price, but pays exactly what it would pay for imported tinsplate". It gets no benefit whatsoever by purchasing tinsplate from the Tinsplate Company.

*Sir Edgar.*—What I say is:—"The main point of submission on this head, however, is that in no country can a precedent be found where a firm in a monopolistic position like the Burmah Oil Company, having chosen to control works to manufacture for its own purposes, has been able to penalise its business competitors by the aid of the State through the imposition of tariff duties on the manufacturers carried on in that works". As a matter of fact the Burmah Oil Company had lost a tremendous lot of money on this venture, but my point is that it is not an industry in the sense that it is a separate and independent concern free and open to everybody. It is simply an appendage of the Burmah Oil Company.

*President.*—But as the position stands with reference to the market without the Burmah Oil Company the industry could hardly have been started, because it happens to be the principal consumer. How can you get away from that factor? If the Burmah Oil Company had not been the principal consumer and then if the Burmah Oil Company had started the works, that would have been for its own profit.

*Sir Edgar.*—I quite appreciate those arguments. You can call it anything you like. It is not an independent industry, but it is a tied concern.

*President.*—It would be a tied concern in this way. If it did not get the market price and if the Burmah Oil Company took the profits as well as the tinsplate at a price which was not really the import price, then in that case the Burmah Oil Company would have a distinct advantage. Here if it pays the price as it would pay you, what benefit does it derive?

*Sir Edgar.*—Not when they are making a loss, but if their expectations had come off . . . .

*President.*—Which way?

*Sir Edgar.*—They would control all the other firms in India and would force their competitors to reveal the ups and downs of their trade.

*Dr. Matthai.*—If I agree to sell 80 per cent. of my output to a single consumer, do I become a tied house?

*Sir Edgar.*—Not unless he controls you. The management of the works is in his hands and if you are simply sitting on the fence, you are a tied house.

*Dr. Matthai.*—Supposing I get financial assistance from the biggest consumer, does it make me a tied house?

*Sir Edgar.*—All depends on the extent of the capital and the amount of control that goes with it.

*Dr. Matthai.*—Supposing the output of the Tinplate Company is increased to 60,000 and half of them is sold under the agreement to the Burmah Oil Company and half is sold to the general public.

*Sir Edgar.*—That would alter the position a good deal.

*Dr. Matthai.*—There is a possibility of the industry reaching a position where it would be selling 50 per cent. of the products in the general market.

*Sir Edgar.*—My whole point is that it cannot.

*Dr. Matthai.*—If we grant that it can, this argument falls through.

*Sir Edgar.*—Quite, but we consider that it is bound to fail. If a case is not proved, it is not proved.

*Mr. Mathias.*—Is it your contention that this arrangement by which the Burmah Oil Company and the Tata Iron and Steel Company own the whole of the capital in this concern is a singular arrangement which is not reproduced in any other country?

*Sir Edgar.*—My point is I can challenge anybody to produce a case from any country in the world where a concern that wishes to produce for its own purposes practically entirely has been allowed to get protection from the State.

*Sir Edgar.*—I don't think that there is a single precedent in the history of any country. That is the point I am making.

*President.*—As Dr. Matthai pointed out just now, protection presupposes that eventually the protected industry would be able to stand on its own legs and that it would meet the total demand of the country. If that happened to the Tinplate Industry, then the Burmah Oil Company would, say, take 50 per cent. production and the other 50 per cent. would be sold in the country.

*Sir Edgar.*—The Burmah Oil Company would control the Company, would control its management and would take the profits.

*President.*—What difference would it make?

*Mr. Mathias.*—There must be examples in which a one or more large companies floated a subsidiary company.

*Sir Edgar.*—I don't think there is an example in which one firm has been put on a monopolistic position in the matter of tinplate over everybody else in the country with the assistance of Government.

*Dr. Matthai.*—May I suggest that this word 'control' is misleading? If the Burmah Oil Company decide to take the stuff at a price determined by world conditions, where is the control?

*Sir Edgar.*—They control the management.

*Dr. Matthai.*—How does it materialise? How does it touch the financial position of the industry? The whole point is this. If you are going to suggest that the Burmah Oil Company by controlling this industry is manipulating prices at the expense of other consumers . . . . .

*Sir Edgar.*—I don't say they are doing it.

*Dr. Matthai.*—Under the contract they only pay such prices as are determined by conditions in the general market. Therefore the extent of the control that they exercise is a very different thing from what your suggestion would imply.

*Sir Edgar.*—The argument is not with reference to the present position but with regard to the future.

*President.*—Take the present position. You say that they penalise other consumers of tinplate.

*Sir Edgar.*—Not at present. That argument applies to the position in case they get to the position suggested by Dr. Matthai.

*President.*—What would happen then?

*Sir Edgar.*—They would control the whole market. They would get to the position where they could squeeze out all the importations and the whole of India would be at their mercy. There would be one firm in a monopolistic position for tinplate as they are more or less for oil at the present time.

*Mr. Mathias.*—That is to say, you assume that there will be a prohibitive duty.

*Sir Edgar.*—Yes.

*Mr. Mathias.*—You are not referring to the present conditions at all.

*Sir Edgar.*—No.

*Mr. Mather.*—You are leaving out of account the possibility that the duty may possibly be reduced or ultimately removed because protection may not be found necessary.

*Sir Edgar.*—That alters the position altogether. My position is that the Burmah Oil Company is strong enough to carry out its purpose that it has embarked upon on its own without protection from the State, and that under the peculiar circumstances that is the proper thing that should be done.

*President.*—I will put it to you this way. Your contention is that the Burmah Oil Company can get its tinplate cheaper without protection.

*Sir Edgar.*—They can continue their works in India because they are in a position to pass on the cost of tinplate to their consumers.

*President.*—Look at the position from the country's point of view. Assume for the sake of argument that the country is anxious that tinplate should be manufactured here. The conditions are such that it cannot be manufactured without protection, that is to say, if it is to be produced it can be produced only at a loss. You say that the Burmah Oil Company can very well manufacture and sustain the loss itself. Why should the Burmah Oil Company sustain the loss for the benefit of the country? It might be cheaper in that case, from the point of view of that Company to close down the works and buy its requirements from abroad.

*Sir Edgar.*—Not at all. If the reasons which the Burmah Oil Company gave for embarking upon this venture were sincere and genuine, they would carry on.

*President.*—You might have given five years ago very moral and high sounding reasons. When you find that your pockets are hit, you may find it much more convenient to give up the reasons. I am here explaining the case from the country's point of view. Why should you assume that the Burmah Oil Company will continue to manufacture tinplate if it does not pay it?

*Sir Edgar.*—Because it is in a position to pass it on to the consumer.

*President.*—You must regard the Burmah Oil Company as a business concern. Why should it throw away its money now because it said five years ago that it would be a good thing to have its own tinplate works?

*Sir Edgar.*—That was its own venture.

*President.*—If the business can only be carried on at a loss and if the country finds that the industry should be established in the country, what is the country to do?

*Sir Edgar.*—My point is that the Burmah Oil Company are the owners of the works. They put them up for their own purpose to produce oil containers. They can carry on this purpose without the assistance of the State. Their position as distributors of oil is a monopolistic one. They can spread their costs over the price of oil and they don't want any assistance from Government to carry on that policy of making tinplates for distributing their oil by means of these containers. Then it would be free for other people to consider the question of coming into India to put up a tinplate works probably on a more moderate scale such as ours are with one or two mills which may be economical and will be the proper nucleus of an industry and not of a monopolistic appendage of a monopoly.

*Dr. Matthai.*—The Burmah Oil Company might have two motives in starting their tinplate works. The first is that they might have the expectation of getting tinplate at a better price than if they imported it or they might have the expectation that by this means they would have a secure supply of tinplate in the country, independently of any question of price. As far as price is concerned, they could buy it quite as cheaply from outside the country. They don't get any benefit in respect of price, because they pay the c.i.f. price. The other therefore is the motive that has really operated, *viz.*, they want a secure supply of tinplate in the country. The advantage to the Company also happens to be an advantage to the country. It is an advantage to the country as it is an advantage to the Burmah Oil Company to have the Tinplate Industry in India.

*Sir Edgar.*—As regards the disadvantage to India from the non-renewal of protection—I have got a special paragraph on that.

*Mr. Mathias.* You say that the Burmah Oil Company may pass it on to the consumer because it has an entire monopoly and there is no competitor whatever.

*Sir Edgar.*—I cannot trace any serious competitor in India.

*Mr. Mathias.*—Take the case of the Standard Oil Company.

*Sir Edgar.*—It has a different type of oil.

*Mr. Mathias.*—Still they are competing. There are several Oil Companies in the country.

*Sir Edgar.*—I don't think the position of the Burmah Oil Company has been seriously challenged by any one. You can call it a monopoly.

*Mr. Mathias.*—Even on the supposition that it is a monopoly, probably it would be a disadvantage for them to push the price up.

*Sir Edgar.*—All that I say is that it simply means that they would not reduce their price quite as soon as they would otherwise. I don't think at the present time they could put the price up.

*Mr. Mathias.*—You say that the shares of the Tata Iron and Steel Company, Ltd., appear to have no value, and are to all intents and purposes wiped out. Could you give us your ground for that?

*Sir Edgar.*—The figures are there. I take it for granted that by the time the capital is readjusted and written down, there would be nothing to show as preference shares. You can take them as good as dead.

*President.*—You have not followed the evidence that we have taken recently. I may explain to you that they are contemplating the reconstruction of the Company in which the losses would be taken *pro rata* between the debentures and the ordinary shares. So there is no question of ordinary shares being wiped out.

*Sir Edgar.*—If it was taken *pro rata*, there would be very few left.

*President.*—If they wrote down the capital by half, they would lose half.

*Sir Edgar.*—In relation to the rest, that would be a small proportion.

*President.*—The proportion will remain the same.

*Mr. Mather.*—In paragraph 30 you make something of a point of your contention that your future development of the Tinplate Company will enable the Burmah Oil Company to learn the ups and downs of their competitors' trade and yet in paragraph 28 you tell us that through trade understandings and agreements the Burmah Oil Company occupies a monopolistic position. If there are such trade understandings do you think that the Burmah Oil Company would find out much by selling tinplates which it would not get to know in other ways?

*Sir Edgar.*—The Burmah Oil Company know what their competitors have done and are doing but not what they are going to do.

## Continued on the 4th August, 1926.

### *The Representation of the Association.*

*President.*—I just want to revert for a moment to the question of labour. I don't wish to go much into the details but I would like to know whether you have examined the labour conditions at Jamshedpur and Golmuri in any detail? What knowledge have you of that? Did you visit Golmuri?

*Sir Edgar.* Yes.

*President.*—How long were you there?

*Sir Edgar.*—One afternoon.

*President.*—Did you go into the labour conditions there?

*Sir Edgar.*—Do you mean as to the social amenities and things of that sort?

*President.*—Yes.

*Sir Edgar.*—They are excellent. Housing arrangement is excellent.

*President.*—Did you look into the sanitation?

*Sir Edgar.*—I did not go into that.

*President.*—Did you go into the question of hospitals and schools and things like that?

*Sir Edgar.*—No, but I understand they are very good.

*President.*—Therefore so far as conditions of labour go you have nothing to say against them?

*Sir Edgar.*—Certainly not. My question of course is a commercial question. But on the social side no criticisms can be made against them and I think they call for a good deal of commendation. So far as you can arrange for the men's comforts in a steel works I don't think anything is omitted.

*President.* As regards wages have you studied the general scale of wages in this country?

*Sir Edgar.*—No, because that is not relevant to my case at all.

*President.*—The question is of some importance. It has been claimed by the works at Jamshedpur both by the Tata Iron and Steel Company and I think to some extent by the Tinplate Company—that they pay better wages for the same class of labour.

*Sir Edgar.*—It may be so.

*President.*—You have not studied that question?

*Sir Edgar.*—No. I have not.

*Mr. Mather.* You will agree that it will be of some importance in deciding whether the rate of wages is likely to be stable. It is at any rate important to consider how they compare with the other wages rates in India.

*Sir Edgar.* Yes, to some extent.

*President.*—As regards paragraph 28 this statement that you have, namely "The situation as to capital, dealt with elsewhere, is such that the original shares of the Tata Iron and Steel Company, Limited, appear to have no value, and are to all intents and purposes wiped out. What do you mean?

*Sir Edgar.*—That note has been amended since then.

*President.*—You don't lay any stress on this statement you have made here?

*Sir Edgar.*—No.

*President.*—Then you make the statement that "the Burma Oil Company by securing high protective duties on tinplates do not pay any of those duties on the 30,000 to 36,000 tons of tinplates they are making for themselves." What is your suggestion?



*Sir Edgar.*—As they are producers and consumers it only goes from one pocket to the other whereas an importer has to pay this duty on the landed price which of course passes out of his hand.

*President.*—In that respect I must explain to you that our scheme of protection is not intended to enable any industry to get more than a fair return on the capital. That being so the Burmah Oil Company is not likely to make anything more than that. You are assuming a thing which is not in our scheme. I am trying to explain the principle on which the scheme works. Assuming that the scheme of protection in every case provides for a reasonable return on the capital then in what respect does the Burmah Oil Company benefit by being both producer and consumer?

*Sir Edgar.* If I understand your question it is assumed that if you follow that principle what is the importance of this objection.

*Dr. Matthai.*—What is the bearing of this argument of yours that they do not pay any duty. They do pay a duty on the stuff they buy.

*Sir Edgar.*—They do not pay any duty on the tinsplate which is not imported into the country.

*Dr. Matthai.*—It is in the price.

*Sir Edgar.*—Here is the right hand and here is the left; it is only a transfer.

*Mr. Mathias.*—There is an intermediate pocket, the company's pocket in which the Tata Iron and Steel Company has a share.

*Sir Edgar.*—Up to the present Tatas have to pay under the agreement because there has been loss all along.

*Mr. Mather.*—So far the Tinsplate Company have not received an ordinary rate of profit on the money that they have expended. Until at any rate that happens you cannot say that the additional amount that they are making goes into their pocket. If the result of the working of the Tinsplate Company is a loss the extra amount the Tinsplate Company has received from the Burmah Oil Company goes to meet their expenses, it does not go into the pocket of the Burmah Oil Company.

*Sir Edgar.*—I say they do not pay the duty.

*President.*—That is included in their price.

*Sir Edgar.* Let me put it this way—they do not pay to any outside body.

*President.*—There is no question of their not paying the duty; they are paying the duty. They are not taking anything into the other pocket because what they are intended to get is just enough to give a fair return on capital.

*Sir Edgar.* So far as the Tariff Board and Government are concerned I quite agree. I am not making any suggestion that the Burmah Oil Company is getting anything more than that. My point is to illustrate the fact and to show that you cannot call it an industry in any commercial sense.

*President.*—You may call it by any name you like, but so long as the consumer pays a commercial price for the article he buys, it is a matter of little importance comparatively as to who the consumer is. If he got any favourable terms that I can understand.

*Sir Edgar.*—I mean from the point of view of control and not from the financial point of view. I quite agree there is no financial benefit to the Burmah Oil Company.

*President.* Your statement implied that there was. You say "It seems a reasonable guess to make that in this intricate business the Burmah Oil Company arranges that what it loses on the swings it gains on the roundabouts." That is not a correct statement.

*Sir Edgar.* I quite agree. It does not mean that in the nett result they will have a gain.

*President.*—There is one point which is of importance from the point of view of the Welsh Tinsplate manufacturer. I may put it to you this way. Supposing the Burmah Oil Company had not started these works, but somebody else had, you would not have had this sort of objection?

*Sir Edgar.*—Not so much.

*President.*—Have you tried to ascertain what the effect of that would have been on the scheme of protection?

*Sir Edgar.*—No.

*President.*—Supposing the country had decided to give protection it might have gone up by a considerable figure.

*Sir Edgar.*—I have had to deal with protection in about 16 countries and I do not think India would be more unreasonable than other countries.

*President.*—If somebody else had started and the country had said this industry was to be established then the cost to the country might have been much greater than the cost now.

*Sir Edgar.*—From our point of view even that would have been fairer than to start monopoly arrangements like this.

*President.*—Your objection is that it is the Burmah Oil Company which has started the industry?

*Sir Edgar.*—My contention is that they have not started the industry but have started arrangements for private purposes for which the State is the foster parent.

*President.*—So far as protection is concerned, assuming that the country decided to establish the industry it might perhaps have been on a higher scale.

*Sir Edgar.*—As you raise that, perhaps I am entitled to put this point against it. From time to time, particularly since the war, the Welsh manufacturers had been pressed hard by three countries to establish their works in those countries with the inducement that if we did that they would give us protection for a period of years to put the industry on its feet, but the Government of India never approached Wales in that spirit at all.

*President.*—The Government of India never approached anybody in that spirit.

*Sir Edgar.*—I simply put that against the point about the people of India deciding that this industry must be established. Obviously the best way in which this can be done is that in which it has been done in other countries, and that is to go to the people already in the business and not to a consumer who knows nothing about the business but who wants it for his own private purposes.

*Mr. Mather.*—These three countries that you mention have taken these steps since the war?

*Sir Edgar.*—It was during the war.

*Dr. Matthai.*—In how many countries have the Welsh tinplate works started now?

*Sir Edgar.*—In one country, Canada. We lost a lot of money over that. Our people spent a million of money in the country trying to get the works going, but they could not get the labour.

*Dr. Matthai.*—When was it?

*Sir Edgar.*—Somewhere about 1920-21.

*Dr. Matthai.*—Supposing the people of India asked you to start a works here, in the light of your experience in other countries would you have refused?

*Sir Edgar.*—We would have gone into it.

*Dr. Matthai.*—Why didn't you start then?

*Sir Edgar.*—It is too soon for the reasons that I have given. It cannot succeed without a great penalty on the consumer.

*Dr. Matthai.*—If it is too soon for the Indian Tinplate Company to start works, it is too soon for a Welsh tinplate company to start in India?

*Sir Edgar.*—These arguments are based on the expenditure and the figures and the results in the works at Golmuri. If we could investigate on our own that is a separate proposition. Considering the kind of expenditure

and the kind of work that we would put up it might have been a workable proposition. My point is that this thing has been killed by extravagance in the beginning.

*Dr. Matthai.*—Can you tell me how many representations you have had to start works in other countries?

*Sir Edgar.*—Three. We started one and we are considering one now. There are difficulties there whether we can rely on the supply of steel at a reasonable price and as to whether we can rely on the labour. It is a country where there are frequent strikes, and we have to consider whether the wages will remain unchanged. We have worked out all these considerations as prudent businessmen.

*President.*—I think the same sort of arguments were put forward in America by the Welsh tinsplate people at the time America started the tinsplate industry. The same sort of criticism was started there.

*Sir Edgar.*—The Welsh people started the industry in America.

*President.*—They thought that the Americans would not be able to manufacture tinsplates.

*Sir Edgar.*—I don't quite follow that.

*President.*—You say the Welsh people started tinsplate works in America. The reason was that the Welsh people thought that tinsplate could not be manufactured except by Welsh people.

*Sir Edgar.*—No. They took a certain percentage of Welsh workmen and in time added Americans.

*Dr. Matthai.*—On the whole I understand your position to be this, if in a new country a tinsplate works is to be started the reasonable thing to do is to ask Welsh people to come and start.

*Sir Edgar.*—We have never said that. But the Tinsplate Company of India keeps on saying things for which they cannot produce any evidence.

*President.*—Supposing the Board and the Government of India decided that tinsplate should be protected in this country, because it could be manufactured successfully and economically, do you think that would have any effect in other countries? Would it lead to the establishment of similar works in other countries?

*Sir Edgar.* Every other country has tried and will keep on trying irrespective of what India does.

*President.*—That is not my question. That was before India tried it as a practical proposition. Supposing in the result India could manufacture tinsplate successfully and economically, might not that have the effect of inducing other countries to try and make tinsplate?

*Sir Edgar.*—I don't think so. There are 14 other countries making tinsplates now. I noticed a very frequent conception that tinsplates are only made in Wales and America. Of course it is ridiculous. There is an output of 300,000 tons a year in various other countries.

*Dr. Matthai.*—On any considerable scale, it is only made in the United States and in Great Britain.

*Sir Edgar.*—300,000 tons is for all countries. You take the case in point. In Germany they made last year 70,000 to 80,000 tons, I think.

*Mr. Mather.*—Not sufficient to meet all their requirements.

*Sir Edgar.*—No.

*Mr. Mather.*—All these countries have still to import.

*Sir Edgar.*—Yes, from us. The tinsplate must be of a good quality for packing food stuffs. They can't make tinsplates good enough for themselves at a commercial price. But they could make tinsplates for oil cans and domestic utensils.

*Mr. Mathias.*—Their position seems to be much like that of India only producing a certain number of coarser kinds of tinsplate.

*Sir Edgar.*—I can give you the whole of the production figures if you like to have them. (Handed in).

*President.*—At the end of paragraph 30 you say:—"Suppose the figure of this protection were raised so high as to force all users of tinplate to purchase from the local Indian works. Then competing oil distributors would be forced to reveal the ups and downs of their trade by revealing their barometer of sales (the tinplates) to their rivals, the Burmah Oil Company." This is obviously undesirable." What is the implication? Is it that the Burmah Oil Company would know how much tinplate the Standard Oil Company was using?

*Sir Edgar.*—Much more serious than that. How much they were probably going to distribute 12 months hence, because the orders for 12 months have always to be put forward.

*President.*—Do you imagine that the Burmah Oil Company is not in possession of that sort of information?

*Sir Edgar.*—I take it that they don't know.

*President.*—I should be very much surprised if the Burmah Oil Company didn't know what its rivals were doing.

*Sir Edgar.*—They may know what they are doing, but my point is they go one stage further and they will know what they intend to do.

*President.*—From what I know of the Burmah Oil Company it is very unlikely that it does not know anything about its own business that is worth knowing.

*Sir Edgar.*—I think you are right. I don't quarrel with that statement.

*Mr. Mathias.*—In any case this postulates a prohibitive tariff, does it not?

*Sir Edgar.*—Yes, tariff so high that these people would be bound to buy from them, otherwise they would be too dear.

*President.*—As regards that point even before these people got protection, there was a revenue duty of 10 per cent, which was the equivalent of Rs. 40. What have you got to say to that?

*Sir Edgar.*—We quite recognise that it was a reasonable duty.

*President.*—Rs. 40 a ton.

*Sir Edgar.*—We never raised any objection to that in the old days. We never came to India nor represented to Government.

*President.*—There was no occasion for it. If you had come, the Finance Member would have probably said that he wanted the money.

*Mr. Mather.*—You don't think that Rs. 40 per ton is the amount of duty that would cripple the expansion of the industry to any substantial extent?

*Sir Edgar.*—Not to a great extent. It is always better to be without a duty. There is one point that I might put in at this juncture. I understand and I quite agree that it is desirable that whatever settlement is come to now about this protection for steadying purposes in trade, it should be for a reasonable period of years. In that case it is rather important that the Board should consider another question and it is this. In every country in the world the packers of goods for export are given a full rebate of any tinplate duties so as to encourage them to develop the packing of commodities and increasing the export trade. In America from the very beginning down to the present day they have a very huge world business in canned goods—the whole of those tinplates are free of duty, i.e., they get a rebate on export. Now of course it might be said that at the present moment that is not very important in India, but assuming that the production of various products will take place in India and canning will come into effect in five or seven years time, it would be a great encouragement to the growth of agriculture and such industries for an export trade, if they could be given the same terms as every other country in the world, that is a rebate on the container in which they were going to pack their goods and selling in competition with other countries.

*Dr. Matthai.*—That is an issue that may be considered when the problem arises. It is not an immediate issue.

*Sir Edgar.*—My point is if you are now going to make an arrangement for a period of 7 or 10 years, it would be advisable to have this proviso.

*Dr. Matthai.*—There is nothing to prevent the question of rebate being considered during the period for which protection lasts.

*Sir Edgar.*—That would mean a fresh consideration. I was contemplating that you would finish the job for a fixed period. Assuming somebody is encouraged one of these days to expend a lot of capital in the north somewhere with the object of laying out peach orchards to get into the business or somebody following the example of Chinese in Singapore with pine apple in South India, it would be of great incentive to those people to know now that if they proceed to spend capital, they will have a rebate on their container as in every other country.

*President.*—I may tell you that the Government of India deals with those questions rather in a different way. When an industry is handicapped, we will put it that way—by the tariff, then that industry applies in the ordinary way to the Government of India asking that the duty should be removed or some rebate should be granted or some other assistance should be given. Then the Government of India deals with that application on its own merits. Either it is referred to us or if the Government of India chooses, it can pass orders in its executive department, so that ordinarily we do not go into that question until we know that some particular industry is definitely affected by the tariff. I am just trying to explain the procedure of the Government of India.

*Sir Edgar.*—It is obvious that at present any export industry of that kind would be affected.

*President.*—So far there is no such industry on any big scale. Supposing it was started, it would be for that industry to approach the Government of India and point out how it was put at a disadvantage compared with foreign exporters. Such a case would be dealt with on its own merits. That is not a point that we can deal with now.

*Sir Edgar.*—I only mentioned it.

*Mr. Mather.*—There is one aspect that I should like to be clear about. Take a particular country, for example the United States of America. This rebate is not granted to the American exporter on canned goods even if the container that he uses is made from American tinplates?

*Sir Edgar.*—No.

*Mr. Mather.*—Only when the containers are made from imported tinplates?

*Sir Edgar.*—Only where the import duty has been paid is a rebate of the import duty granted afterwards. It is because of that arrangement the canneries of America are always able to get tinplates cheaper than other people from the American suppliers.

#### *National Aspect of the Tinplate Industry.*

*President.*—The point raised by you in paragraph 32 is somewhat different from the point we have to consider. The Fiscal Commission laid down certain conditions subject to which protection was to be granted to industries generally. They made an exception in favour of any industry which was considered to be of importance from the point of view of national defence and expressed the view that even if those conditions were not fulfilled and if other conditions were favourable, protection might be given to such an industry. The whole question is as to whether the manufacture of tinplate is an industry of that description. That was the point.

*Sir Edgar.*—My contention is that it is not.

*President.*—The Fiscal Commission said:—"In the first place there is the steel and iron industry. There can be no question of its importance for purposes of national defence, and there appear to be no natural obstacles

to its development in India " and tinplate, regarded as part of the steel industry, comes under that category to a certain extent.

*Sir Edgar.*—My point is for the reasons stated since the war started out you will have like every country in the world your supplies.

*President.*—So could we get steel? It would apply to everything.

*Sir Edgar.*—You can make steel. You have got the necessary material within your borders.

*President.*—There is a considerable amount of imported material used even in the case of steel. Rolls for instance were imported before. Now some are being manufactured here.

*Sir Edgar.*—They had to push the Steel industry to carry on.

*President.*—You are only thinking of a war like the last one. It is quite a different proposition. That was an exceptional circumstance. Supposing for its own defence in these parts India required war material, would it not be more convenient for it to get it on the spot than to get from Wales?

*Sir Edgar.*—You won't have it.

*President.*—Why not? Supposing there was a war in which Europe was not interested, and India had to engage in a war for its own defence?

*Sir Edgar.*—All these essential materials would have to come by sea. They would be cut off.

*Mr. Mathias.*—You are arguing on the last war. There was no difficulty then in importing such materials. You say if there was another war with the same combinations, there would be difficulty. I don't follow why there should be difficulty. I quite agree if there was no British navy, it would be difficult.

*Sir Edgar.*—There I am dealing with a proposition that India can look after herself and India does not want the help of Great Britain.

*President.*—In the case of a European war your supply of tin may be cut off, because it comes from the Straits. Then you would not be better off than these people.

*Sir Edgar.*—Yours would be cut off too.

*President.*—Why should it be? In the case of a European war it would be much easier for India to get tin from the Straits than for Wales.

*Sir Edgar.*—No, if the British navy cannot keep the way open to India.

*President.*—Leave alone a European war. In the case of India requiring war material for her own defence, is it not more convenient for the military authorities to be able to get this material on the spot?

*Sir Edgar.*—Assuming that it is there.

*President.*—We are not concerned in this discussion with any European wars. We are concerned with our own national defence.

*Sir Edgar.*—What caused me to make this comment, a big stress was laid in the first early evidence on the last war as an excuse.

*Dr. Matthai.*—Let us leave out this big question of wars. Now you are having this coal strike. We are being inconvenienced a lot as far as imports are concerned.

*Sir Edgar.*—Not at present. Up to the present South Wales are shipping.

*President.*—Supposing the strike continues for another 6 months.

*Sir Edgar.*—You get more strikes in India than we do in England.

*President.*—Each country must deal with its own strikes. Why should we be burdened with other people's troubles?

*Sir Edgar.*—You need not put the question of strike against us. It will never interfere with the supply of tinplates.

*Mr. Mather.*—Can you tell me what production of June was?

*Sir Edgar.*—I don't know what it was. It was considerable.

*Mr. Mather.*—It might be considerable, but less than the normal production. The prices were considerably higher.

*Sir Edgar.*—Wait till we finish the year, and look at the statement of production for the year and you will probably then say what difference the strike has made.

*President.*—Just now the price has gone up.

*Sir Edgar.*—Yes.

*President.*—How are we better off by having to depend on Wales? You say you can always supply tinsplate to this country and that it would not matter to India if tinsplate was not manufactured. Supposing your strike continues for 6 months, how should we be better off?

*Sir Edgar.*—It is always an advantage to have an alternative place of production.

*President.*—You say that it would not matter.

*Sir Edgar.*—Not seriously.

*President.*—It may be very serious, supposing there was no tinsplate and your strike continued for 6 months.

*Sir Edgar.*—They always carry 9 to 10 months stock.

*President.*—Why should they?

*Sir Edgar.*—They all do.

*Dr. Matthai.*—As a matter of fact we have some evidence there are a number of small consumers who have during the past few weeks been seriously inconvenienced.

*Sir Edgar.*—I don't believe it.

*Dr. Matthai.*—It is more recent information than you apparently have.

*Sir Edgar.*—I say it is not true.

*Dr. Matthai.*—Have you had any information about the position in India during the past 3 weeks?

*Sir Edgar.*—I should like to know that, because we have been shipping regularly throughout. Our shipments have not been stopped.

*Mr. Mather.*—I take it you have been shipping from large stocks.

*Sir Edgar.*—Most of the tinsplate trade is a forward business. All our business is ordered 3, 6, 9 months delivery forward.

*President.*—I may tell you the Military Authorities consider tinsplate a war material.

*Sir Edgar.*—It is much more important for feeding the army. I quite agree that it is a war material. The last war was fought on tinsplate entirely.

*Mr. Mather.*—Entirely?

*Sir Edgar.*—It could not have gone on without it. All the ammunition boxes, all the powder were distributed in tinsplate. It was because of the tinsplate the history of the war was free of disease. Everything kept safe from contamination.

*Dr. Matthai.*—Tinsplate is too important a thing to be left altogether to Wales.

*Sir Edgar.*—I have never suggested that you should. I only suggest that we should do it under reasonable and fair conditions. Suppose you drive us out and you bring about an entire cessation of all the connections and then assume a failure as I contemplate of these works in India and then on top of that an immediate crisis, you will then be in serious difficulties, because I don't know how you are going to get the tinsplates in a hurry with all the organisation gone. That is the point. I don't think it will be in the interests of India you may get to a position where you will not be safe.

*Dr. Matthai.*—When you mentioned that, it reminded me of the arguments used by Welsh Manufacturers during the time of the McKinley Tariff. They raised precisely the same kind of objection. The point is this. The development of the Tinsplate industry in America in spite of the objections raised

at the time has really been a help to you in Wales. Supposing the development of the Tinsplate industry in India is going to open up a market for tinsplates in India, there will not be really any reduction ultimately in the imports that we get from you. The trade connections will continue.

*Sir Edgar.*—I quite agree. That is what is emphasised here.

*Dr. Matthai.*—Supposing protection is not going to do harm to you.

*Sir Edgar.*—I am not objecting to that principle.

*Dr. Matthai.*—The protection of the Tinsplate Industry in India will not have any more serious consequence on the Tinsplate industry of Wales than the American tariff had. It won't hurt you in the least ultimately.

*Sir Edgar.*—When you do it on a commercial basis. That is my contention throughout.

#### *Samplers.*

*President.*—We went into the question yesterday and I am not really convinced by this argument of yours that this additional organisation is necessary in this country, at any rate, at present. If they manufacture only two kinds of plates chiefly for oil, the question hardly arises.

*Sir Edgar.*—My point is that for general purchasers it is a vital and essential point, those purchasing second hand cans being excepted.

*President.*—The general purchaser purchases his tinsplate through his own sampler. Why should it be impossible for him to safeguard himself in that way?

*Sir Edgar.*—It would be very expensive.

*President.*—Why?

*Sir Edgar.*—Because he would have to be a person specially employed.

*President.*—Who do you suggest should be the sampler?

*Sir Edgar.*—He should be an independent person like the Government Metallurgical Inspector at Jamshedpur.

*Mr. Mather.*—If any purchaser wishes, he could have his purchases inspected by him.

*President.*—So far as inspection is concerned Government has everything that it purchases inspected. Moreover, if any purchaser wants a particular thing inspected, he goes to the Inspector and gets it inspected. What more do you want?

*Sir Edgar.*—I quite agree if there is a qualified person like that.

*President.*—It is a matter for the purchaser. Why do you say that the Company should provide a sampler?

*Sir Edgar.*—I don't say that the Company should do it. I say that the condition of protection should be some arrangement whereby the purchaser can have his plates independently inspected.

*President.*—There are plenty of people to test the plates or any other thing that requires testing in the country. Why should that be an objection against the Company?

*Sir Edgar.*—I have not urged it as an objection. All I say is that it should be provided.

*President.*—By whom?

*Sir Edgar.*—By somebody or other. You are creating a new situation. Government comes in to foster an industry by means of protection which the consumer has to pay. Therefore the consumer is entitled to ask "Give me the same kind of protection as regards the quality of tinsplates."

*President.*—When the purchaser does not himself complain?

*Sir Edgar.*—The purchaser and maker being the same, it does not apply.

*President.*—Whatever may be the reason, when the purchaser does not complain why should there be any special authority appointed for the fun of it, that is what I wish to know?



*Sir Edgar.*—The only other implication that arises out of this is that the figures given in these returns as regards the wasters are of course to be accepted, subject to the qualification that they have not been independently inspected.

*Dr. Matthai.*—Supposing for the purposes of this enquiry we are satisfied by such means as we have that the proportion of wasters given by them is correct. You don't necessarily want the Burmah Oil Company to employ an independent sampler. Your whole point is that we must assure ourselves that the proportion of wasters is right.

*Sir Edgar.*—My only point is to call attention to the fact that you should have some sampler of the commercial kind—you should have to get him so that you can see yourselves, if you want to, that the proportion of wasters either from England or from America—who knows the practice in this matter, is right. I am simply calling your attention to the fact that it is entirely omitted in India.

*Mr. Mather.*—Are you satisfied with the fact that there is a Government Metallurgical Inspector in Jamshedpur who has a large staff and is accustomed to the inspection of many kinds of steel and that office is available to any purchaser who wishes to get anything independently inspected?

*Sir Edgar.*—Provided there is somebody in the office who knows something about tinplates.

*President.*—Mr. Mather was the head of that office at one time.

*Sir Edgar.*—That would be all right in that case.

*Dr. Matthai.*—May I know who these professional samplers are and what sort of training and qualifications they have?

*Sir Edgar.*—They are all brought up in the business entirely.

*Dr. Matthai.*—What is the training they get?

*Sir Edgar.*—They begin as boys in the business.

*Dr. Matthai.*—In the Tinplate Works?

*Sir Edgar.*—In Samplers' Works. In the Samplers' offices they are trained. It is an old organisation. Since the beginning of the tinplate trade, it is an entirely separate profession and it is so strong that we are absolutely in their hands. If they choose for any reason to reject your consignment, you are finished. There is no appeal.

*President.*—Is it not better for the industry itself to establish its reputation for supplying the quality that is required by the purchaser than to have an officer to guarantee that quality?

*Sir Edgar.*—That is an ideal that we should never see on this side of the millennium. I don't suppose that you will achieve it in India any more than anywhere else. You cannot avoid wasters in tinplates. With the best will in the world, the sorter who has to work for hours will miss detecting the spots, and things of that kind. Therefore the consumer has, in this particular trade, to protect himself by employing additional samplers. It is unavoidable. It is not a case of dishonesty at all.

#### *Exemption of certain varieties from the protective duties.*

*President.*—As regards paragraph 84, we should require more information than it contains. First of all as regards the quality of coke plates and charcoal plates, would it be easy for the Customs authorities to differentiate them?

*Sir Edgar.*—The price is always substantially more. If there is any doubt about it, the invoice will show him that people are not getting coke plates instead of charcoal.

*President.*—If a man can afford it, would he be able to use charcoal quality instead of coke quality?

*Sir Edgar.*—The charcoal prices are considerably more.

*President.*—Apart from the question of price?

*Sir Edgar.*—Yes, apart from the question of price.

*President.*—In that case supposing charcoal plate is exempted and the duty is sufficiently high on coke plate, would it not be an inducement for him to substitute more charcoal for coke plate?

*Sir Edgar.*—I think you will always find extra price on charcoal.

*President.*—What is the difference?

*Sir Edgar.*—I cannot give you the actual figure at the moment. For charcoal, there is no fixed price in the industry. Each works charges a special price for each order because this is what is called a specification order. It is not what you call stock order, and the price for one man's charcoal would be considerably dearer than another man's charcoal and so on.

*President.*—If the price is the only indication to the Customs authorities, it may be a difficult matter to administer.

*Sir Edgar.*—A person can easily see the difference between a charcoal plate and a coke plate.

*President.*—First of all I want to know the comparative prices.

*Sir Edgar.*—I could let you have those.

*Mr. Mather.*—The charcoal plate is essentially a plate with more tin on than the coke plate. Therefore it would be possible to detect the difference by chemical analysis showing the extra percentage of tin.

*Sir Edgar.*—That would be very difficult for the Customs authorities to do.

*Mr. Mather.*—They have Chemical Laboratories.

*Sir Edgar.*—In case of dispute it could be done. In a coke plate there is  $1\frac{1}{2}$  lb. of tin; in a charcoal plate we have 3 lbs. as a rule but there may be 4 or 5 lbs. Some of our charcoal plates have as much as 6 lbs. of tin to a box.

*Mr. Mather.*—In that case so far as practicability is concerned it can be done by an analysis of the plate?

*Sir Edgar.*—Yes, and after a time the customs authorities can say by looking at it.

*Mr. Mathias.*—Can you tell me whether charcoal plates are used for any particular trade or business in which coke could not be used?

*Sir Edgar.*—As a general rule you would use charcoal plates for packing lobsters and crabs; salmon and others would be packed in coke plates. We have given you a list of the most suitable kind of plates for different purposes. Charcoal plates are also used for packing meats.

*Mr. Mathias.*—Supposing this proposal was accepted regarding charcoal plates and they came in free of duty or only with the revenue duty, would that cover the case of the canning industry to which you refer?

*Sir Edgar.*—No. They use coke plate mainly.

*Mr. Mathias.*—What about the fish canning industry?

*Sir Edgar.*—Sardines would be coke plate.

*Mr. Mathias.*—And all fruits are coke?

*Sir Edgar.*—Yes. I don't know of any fruit people who use charcoal. I don't know whether much charcoal plate is being imported into India. If a man wanted to make a particularly good kettle or pan he might use charcoal plate to get good quality. I don't know of any special subject in India for which charcoal plate would be used. If it is the case that a very small quantity has been bought for general purposes here, it is a pity to hamper a small thing like that by putting a duty on it. It is a matter of very little consequence to us.

*President.*—We are always prepared to consider any proposal to exclude anything that is not manufactured in the country provided that it cannot be used as a substitute for the protected article.

*Sir Edgar.*—I think the customs people can protect you against that.

*President.*—I think taggers can be distinguished very easily because they are very thin?

*Sir Edgar.*—Yes.

*Mr. Mathias.*—Can you give us any idea of the amount of taggers imported into India?

*Sir Edgar.*—I don't know.

*Mr. Mathias.*—In any case it is not a very big trade. The cigarette and biscuit trade might use these?

*Sir Edgar.*—I should think so at present, but it might grow.

#### *Imperial Preference.*

*President.*—As regards paragraph 35 in which you raise the question of Imperial Preference, as a general policy it does not come within the scope of our enquiry. We can deal with it only if it arises from the economic point of view. What sort of preference do you suggest?

*Sir Edgar.*—Other British Dominions give 33½ per cent. of the duty. My complaint is that for some peculiar reason ever since the duty has been put on there has been a big transference of our trade to America.

*President.*—There is no preference in their favour. They pay the same duty as you do.

*Sir Edgar.*—With America at present we find all over the East there are special arrangements, and special prices are quoted which have no relation at all to the British price, prices on the basis of special freight arrangements and special shipping arrangements. In order to keep a footing at all costs in India and the far eastern countries this is what has taken place. It is a designed policy partly wrapped up with the idea of keeping the American maritime fleet on the seas, and this business has passed out of our hands to America during this period by various preferential agencies of that kind. We say that gives us a reasonable excuse to put it that way and to ask that you should follow suit in the case of tinplate to counteract that and put us on a fair level.

*President.*—If the proposition is put like that, I may tell you that the American manufacturer pays the same duty as you do, and unless you give some evidence that by reason of that duty the American manufacturer was getting some preference, we do not see how we can say anything. There is no preference in favour of America.

*Sir Edgar.*—It would be purely an act of grace. I cannot put this forward at all.

*President.*—Even act of grace may require to be supported by reasons.

*Sir Edgar.*—My point is this. Up to the war America had never done anything in tinplate in India. For 40 years we have fairly served the consumers in India. Now a new régime has been created whereby the bulk of that trade is cut off. Since America for the first time, by various manipulations, is coming into that market, you might as an act of grace give us some preference as other dominions are doing. If you say that those reasons are not sufficient there ends the matter.

*President.*—If this industry is protected, it is expected that it would displace the America imports also in course of time.

*Sir Edgar.*—It has not done that.

*President.*—Quite true because the domestic manufacturer has not yet caught up the demand, but supposing the policy of protection succeeds the first class of foreign imports that would be attacked is the very class that comes from the United States.

*Sir Edgar.*—My answer to that would be this, that first of all you will entirely kill us out and you won't kill the American. They will stay here at all costs because for political and other purposes they can and do pursue a policy in America of dumping in a country far below the American price

which we can never do. We know as a fact to-day that America is selling plates to the East at a basis price at Pittsburg more than dollar a box below what it is at Pittsburg.

*President.*—One thing has to be recollected in this country and that is that if this country adopts a policy of protection it must be assumed that the policy will be made effective. Now if America did anything to defeat it, it might be necessary for this country to take such steps as may be adequate to meet such a situation, say, by an anti-dumping duty.

*Sir Edgar.*—I was dealing rather with your question as to the elimination that may be necessary. If you pursue that policy it is the tinplate from England that will be first eliminated before you can eliminate the tinplate from America. They will still be here inspite of your protection policy.

*Dr. Matthai.*—The bulk of the imports of tinplate now come from Wales. Supposing we allow the continuance of protection to the Indian tinplate industry, it has got to be at a rate which would protect the local industry against an effective competitor. Therefore, if we find that Rs. 85 is somewhere about the protection that the Indian industry would require in order to meet the competition from Wales, the only way of granting you preference would be by putting higher duties on American tinplate. Suppose we ultimately arrived at this arrangement—85 rupees on Welsh tinplate and, say, Rs. 105 on American plate, do you think there is a possibility that oil might come from America in tanks and the tinning be done here and all that demand that is now satisfied from the United States would be satisfied not by you but by the Tinplate Company of India. If there is a higher duty on the American tinplate it will benefit not the Welsh tinplate industry but the Indian industry.

*Sir Edgar.*—I would put it this way. If the effect of your scheme of protection is that American oil will in future be distributed in India with Indian tinplate containers, we have no serious reason for complaint because they would be put on the same basis as other oil companies. But so long as your scheme means that orders that we always supplied right up to recent years go out of our hand, the effectiveness of your scheme as can be seen from this is to transfer some business from us to American tinplate firms.

*Dr. Matthai.*—It is not worth while to give you preference simply as a demonstration of affection. It must really assist you.

*Sir Edgar.*—It will assist us against America.

*Mr. Mather.*—You have given figures for 1914, 1923, 1924 and 1925. These are not calendar years. These are figures for the financial years ending March 31st each year. If you examine the more recent figures you will find that the proportion of American imports has gone down, although it is still quite substantial. The figures for the calendar year 1925 show the total importation from the United Kingdom as 20,800 tons and United States 7,470; that is a bigger proportion for Wales (about 21 to 7½) than is shown in your figures. The same thing is borne out by the figures for the first three months of the current financial year. Since the further increase in the duty this year the proportion of American tinplate import to the total import is much lower than the figure you have given. There is no indication therefore that the mere imposition of the duty has had the effect of increasing the American imports.

*Sir Edgar.* 2½ to 1 roughly.

*Mr. Mather.* It weakens the supposition that the imposition of protective duties would by itself alter the ratio.

*President.*—Can you give us figures as to the different kinds of tinplate that are exported from the United Kingdom to India?

*Sir Edgar.*—No, we would not be able to get that because our business in India is done by multitudinous agencies of all sorts. We really don't know the kind of consumers that use these tinplates. I have tried to find out and I have had officials in India as well as at Home for the last three years

and they kept on seeing where on earth this tinplate goes to, but they cannot find out. It is impossible to discover where they go to. Apparently they are distributed in small parcels all over the country.

*President.*—Don't you collect statistics for the kind of tinplates that are distributed in each country?

*Sir Edgar.*—We don't know as manufacturers where our tinplates are going. When he sends his plates from his works he does not know what plates are going to India.

*President.*—It shows that you cannot be in very intimate touch with your markets when you don't know what sort of stuff they require.

*Sir Edgar.*—Nobody is. Most of the business, as I explained, is done by merchants.

*President.*—You sell largely to merchants in London.

*Sir Edgar.*—Yes.

*President.*—I am afraid I find it difficult to understand your business methods. I should ordinarily expect the manufacturer to try and get into touch with his market to find out what would sell. Apparently the Welsh manufacturers don't make any attempt to do that.

*Sir Edgar.*—We don't miss much.

*President.*—Each country has got its own peculiarities, and how do you meet them?

*Sir Edgar.*—You have got here in Calcutta and in Bombay great houses who handle all kinds of different products and they are the people who handle amongst other things tinplates. It would be very difficult for a new comer to go into Calcutta and do better business than these large established firms here in the general trade.

*President.*—There may be a way of doing it.

*Sir Edgar.*—Probably they are doing a better business for us than we would be able to do ourselves. Of course I may say that this has been an acute matter of controversy at home, because an attempt was made by one merchant organisation for the whole trade. We had a long fight over that, but of course it all broke down.

*President.* I find it rather difficult to grasp a suggestion like that where the manufacturer is not at all in direct touch with his market.

*Sir Edgar.*—Our market is the merchants.

*President.*—That is quite true, but the ultimate consumer is the person who constitutes the market.

*Sir Edgar.*—We meet these merchants all the time. Different manufacturers meet different merchants. We don't miss much.

*President.*—It is impossible for us to find out who the consumer is.

*Sir Edgar.*—I have not been able to find out. You may have resources in India to do it. I have failed to find out from England.

*President.*—In our enquiries we have to ascertain the burden on the consumer. We don't know who the consumer of tinplate is from what you say.

*Sir Edgar.*—I don't know the individual consumers. I suppose they are mostly native Indians.

*President.*—That does not give us any information. We don't know what sort of tinplates are imported from Wales and who uses them.

*Sir Edgar.*—That is the position.

#### *Capitalization.*

*President.*—As regards capitalization, paragraph 36, where do you get this figure of Rs. 1,54,00,000 for debentures.

*Sir Edgar.*—It is set out in one of your reports.

*President.*—You have added the loans and the debentures.

*Sir Edgar.*—Yes.

*President.*—The debenture issue alone does not amount to Rs. 154 lakhs.

*Sir Edgar.*—Yes.

*President.*—You say:—"In the reports of 1924 and 1925 this capital was admitted for the purpose of establishing the deficiency in revenue, and protection was granted therefore to enable the Company to pay interest at 10 per cent. on Rs. 68 lakhs of working capital, and the Tinplate Company of India hoped to meet a further 10 per cent. on Rs. 86 lakhs and 6 per cent. on Rs. 75 lakhs." Now I don't think we made any recommendation which would enable them to get any such return. What we said was this:—"As the outturn expected is 6,22,000 boxes annually the total sum available is from Rs. 6½ to Rs. 9½ lakhs. If the whole of the authorised debentures are actually required, interest at 10 per cent. would amount to Rs. 8·5 lakhs." We were told that there was this debenture capital on which interest had to be paid, and we said if that was so interest at 10 per cent. would amount to 8·5 lakhs, if the whole of the authorized debentures were actually required.

*Sir Edgar.*—That was allowed after you had allowed them to include this interest in the cost of production.

*President.*—But this 6½ lakhs to Rs. 9½ lakhs, if they earned it, was the return on the whole of the fixed capital.

*Sir Edgar.*—My point is that it was included in the cost of production. (See Statement I.)

*Mr. Mather.*—It is clearly set out in that Statement I, that interest on working capital entering into the calculation was 10 per cent. on Rs. 40 lakhs and not on Rs. 68 lakhs. Even then the protection was not as high as would be required by those calculations. The addition to the then existing duty was only about half of what those calculations might justify.

*Sir Edgar.*—It is very difficult for anybody to make out what it means.

*President.*—You make a definite statement against the Board and the Board is entitled to know on what you base that statement.

*Sir Edgar.*—It is based on that table.

*President.*—It does not follow from that table.

*Sir Edgar.*—Some adjustment may have been made in 1925.

*President.*—In 1925, so far as I recollect, we made no adjustment. I don't think we went into that question.

*Sir Edgar.*—The question at the moment is between Rs. 40 and Rs. 68 lakhs.

*President.*—The scheme of protection did not contemplate a full return or on the whole capital.

*Sir Edgar.*—I am sorry I misunderstood it.

*President.*—In Statement II, we took the cost of production calculated in accordance with the contract as Rs. 2,510. That included all the interest charges shown in Statement I.

*Sir Edgar.*—That includes Rs. 85 lakhs and Rs. 75 lakhs.

*President.*—On that basis the cost of production would have been Rs. 2,510 per 100 boxes. The import price including the duty of Rs. 3 per box which we were proposing was only Rs. 2,400. This would have left them a Rs. 110 per 100 boxes to the bad on that calculation. The duty did not therefore aim at covering fully all the interest charges and profit on the capital as it stood even on that date. If we took the import price as it stood in August 1923, the deficit remaining to the Company would have been still greater, for it would have increased to Rs. 217 per ton.

*Sir Edgar.*—I would look through it again for my purpose. If these figures were not exactly correct, I would have those few lines struck out.

*President.*—I think you are under a misapprehension as to the principle we actually applied. In that enquiry there was no serious attempt at all

made to apply any particular principle. It is quite obvious that as the industry had been working only for a few months there was no question of valuing the plant to find out what ought to be a reasonable capitalization. If you refer to our main report on the steel industry, you would find that we had laid down certain principles. We estimated the amount of capital the new-comer would have to come in with, and the amount of reasonable return, he would expect upon it after allowing for depreciation and other overhead charges. If it was an industry to which no new-comer was likely to be attracted what we had to consider was whether the capitalization was reasonable with reference to the output, and what reasonable return it should get on such capitalization.

*Sir Edgar.*—You are going to guarantee that return.

*President.*—No return is guaranteed. But it is taken into account as part of the measure of protection.

*Sir Edgar.*—You are going to protect him so that he may make a profit.

*President.*—The profit means a fair return on capital.

*Sir Edgar.*—All the firms in England would be glad if they could induce the British Government to do that.

*President.*—That is your business.

*Sir Edgar.*—We have to bear our own losses and if we want to make any profit, we have to fight it out on our own. But the thing that amazed me is Statement V, page 368. By any commercial man in England this would be regarded as an absolute scream.

*President.*—What makes it such a 'scream'?

*Sir Edgar.*—In order to arrive at the fair selling price they put in a tremendous sum of depreciation, huge interest on working capital, very excessive head office charges and manufacturers profit beyond the dreams of the most optimistic man that ever entered the Steel Industry.

*President.*—You are talking in general terms. We should like to understand what you consider a fair percentage as regards depreciation.

*Sir Edgar.*—We have given you our depreciation.

*President.*—That depreciation according to our calculations works out at 2½ per cent. That we don't consider adequate. For any industry, run as a commercial proposition, that is not a proper depreciation. Any steel industry that is not able to earn more than 2½ per cent. would be considered an industry badly run.

*Sir Edgar.*—Not in England. In India they take generous views. Leaving out the question of depreciation, there is the big interest on working capital.

*President.*—We must go by the rate that is current and is considered reasonable in our country. We cannot take the rate at which you can borrow money in your country. The amount of working capital that the applicants want is based on 3 months' turnover. Do you consider that excessive?

*Sir Edgar.*—We do it on actual practice.

*President.*—You have got everything at hand.

*Sir Edgar.*—But the thing that I don't understand is the inclusion of the big manufacturer's profit on top of these things, viz., in 1924, Rs. 59.42, in 1925 Rs. 30.75 and in 1926 Rs. 25.64. As I have said our dream is to make a shilling per box and to include these when coming to the State to help them out, after all it seems to me to be not a fair selling price but a fairly selling price.

*President.*—It is no use talking in general terms. You told us that you considered 10 per cent. a reasonable return on capital.

*Sir Edgar.*—Yes.

*President.*—It is calculated on that basis in Statement V.

*Sir Edgar.*—That is in the other column—No. 4.

*President.*—We treat the interest on working capital as separate. As a matter of fact you claim the same rate of interest on working capital as you do on your other capital. They claim less.

*Sir Edgar.*—Most of the debentures with us are 4 per cent.

*President.*—We are talking of the Tinplate Industry. They provide their working capital separately.

*Sir Edgar.*—But most of the debentures in our industry were raised at 3 and 4 per cent. I think somebody went as far as 7, but that was not for very much—for a short term loan.

*President.*—We have not fully examined how the applicants have worked out the figures in Statement V. Under the new reorganization scheme they claim 6 per cent. on debentures. Do you consider that excessive in this country?

*Sir Edgar.*—No, provided the debentures are written down to a reasonable figure.

*President.*—They expect 10 per cent. on their ordinary capital. I am not suggesting what the Board might do. But I understood that was what you claimed on your investment.

*Sir Edgar.*—We would never claim that. If we were to ask our Government to help us like that, we would never get it.

*President.*—What you regard as reasonable is a 10 per cent. return on capital.

*Sir Edgar.*—Yes, if we could get it.

*President.*—That is what they are claiming on ordinary share capital.

*Dr. Matthai.*—In normal times in Wales 10 per cent. on fixed capital would be a fair thing. It won't be excessive.

*Sir Edgar.*—Not if we had been backed up by Government.

*Dr. Matthai.*—Leave alone the question of Government. If somebody starting the industry expects 10 per cent. on his fixed capital, he is not expecting anything excessive.

*Sir Edgar.*—That will be his good average.

*President.*—You find that they claim Rs. 59.42 in 1924 because their production was small. When the production reached nearly 30,000 tons, the incidence came down.

*Sir Edgar.*—It is still heavy. It is Rs. 25.64 for 1926 January to March. Even with full production it is an extraordinary figure.

*President.*—We are talking of the rates just now. I was asking you a little while ago about depreciation. If you say 2½ per cent. is reasonable for depreciation, I can tell you that I shall never accept that figure. It is not a commercial rate any way.

*Sir Edgar.*—That is what we can do.

*President.*—That is because you cannot afford anything more.

*Mr. Mathias.*—That is for lean years. Supposing you had 'fat' years, would you not lay aside a good deal more than 2½ per cent.?

*Sir Edgar.*—Yes, if it were a new works. But you must remember that this has been going on for years.

*Mr. Mathias.*—And you have written down your plant.

*Sir Edgar.*—Yes.

*President.*—Supposing you had not written down your depreciation before, supposing you were starting a new works and supposing you got your profit guaranteed by the British Government, supposing all that happened what would you consider a reasonable percentage for depreciation?

*Sir Edgar.*—2½ per cent. would be too low in that case. The first year's depreciation must be a little more.



*President.*—We look at it this way. If the State has got to assist the industry, the State intends that the industry should be put on a safe basis as regards the future, and that it should for that purpose earn sufficient depreciation, so that the plant may be kept up to date. If this is not done, the industry is in the same position when the plant is worn out.

*Sir Edgar.*—I have no comment to make on that. I am more concerned with the manufacturer's profit.

*President.*—I will come to that presently. In our past enquiries we allowed in the case of every industry 6½ per cent. for depreciation. Do you consider that excessive?

*Sir Edgar.*—No.

*President.*—As regards the manufacturer's profit, we do it this way. Ordinarily of course the assets would be equal to the capital, when you first start the company, but sometimes it may happen that you may write down your capital say by 100 per cent., but the assets may have come down only by 50 per cent. It may not be right to give a return on the written down value of the capital because it would not give a fair return on the money that is actually invested which is represented by the assets. Therefore ordinarily we should give a return on reasonable capitalization. If the replacement value of the plant is £500,000 we say that that is the amount of capital which is entitled to earn, though they may have spent £5 millions.

*Sir Edgar.*—I have no objection to that.

*President.*—In the case of the Steel Industry, last time we fixed an average return of 8 per cent. In the main Steel Industry, we took into account the rate at which they had actually raised the money. As regards the ordinary capital we allowed 10 per cent. In this case supposing their debentures carry 6 per cent. is 6 per cent. excessive?

*Sir Edgar.*—No. My only point is that India is much more generous to manufacturers than England because no Government at home if they were considering the question of protection would take into account any return whatever on capital. We had a number of Safeguarding Industries enquiries and if any man went to the Safeguarding Committee for hosiery, gloves or anything that he wanted 4 per cent. on his debentures or anything like that, he would have been laughed out of the room.

*President.*—That is beside the question. Your policy is different from ours. We must have in view the establishment of the industry. If our proposals are not adequate for that purpose, we might as well not make them.

*Sir Edgar.*—I still fail to see why you should try and give to them a guarantee of profits.

*President.*—The idea of protection is that the industry should be established and in order that the industry should be established more capital should be attracted to the industry. Who is going to put in any money in any new industry in this country if he does not expect any return from it? That is, in substance, the idea of protection. It may be that people in your country may act differently.

*Sir Edgar.*—If that is the policy of the Indian Government I have nothing to say.

*President.*—That is the policy of protection in every country.

*Sir Edgar.*—They never bring in the question of profit.

*Dr. Matthai.*—You simply safeguard, while we want to develop the industry.

*Sir Edgar.*—All right, put it that way.

*President.*—In that Statement V, what the Tinplate Company of India are trying to make out is that in spite of protection they have lost so much money. They are trying to make out that the scheme of protection had not proved effective.

*Sir Edgar.*—All I can say is that any applicant who went to a Tariff Committee in England with a proposal of that kind would be turned out of the room.

*President.*—There is no Tariff Committee in England to grant protection.

*Sir Edgar.*—We have got a dozen of them.

*Mr. Mathias.*—You have not got discriminating protection in England.

*Sir Edgar.*—How do you mean?

*Mr. Mathias.*—You have got a Safeguarding of Industries Act, which is to preserve industries but not to expand them.

*Sir Edgar.*—It is the same thing. The whole purpose of that is to recover the industries that have gone out of business.

*Mr. Mathias.*—They won't be started unless there is a chance of making profit.

*Sir Edgar.*—The State does not take that into account when giving protection.

*President.*—As regards capitalization, I think we went into the question to some extent yesterday. Your idea is that you cannot expect a return on £1,700,000 or even £500,000. That is your argument.

*Sir Edgar.*—Yes.

*President.*—In your opinion £350,000 is all that is necessary.

*Sir Edgar.*—Yes.

*President.*—We have to satisfy ourselves on that point. Unfortunately you have no plant erected in Wales since before the war. What we wanted to know was the difference between the cost of a plant erected in 1921-22 and a plant erected now—that is the sort of evidence that we required.

*Sir Edgar.*—It is not possible to get figures in that form. Still apart from buildings and erection costs, the facts as to the machinery are indisputable. They can be checked at any time. It is only a question of buildings and lay out. If instead of £40,000 for buildings you gave £140,000, you would still be within the figure of £350,000.

*President.*—A factory building in this country means more cost than it does in Wales. For one thing, the Tinsplate Company have cooling appliances which cost money. That is only one item. Then you would require a more commodious buildings here than in Wales.

*Sir Edgar.*—I assume that even if you multiply three times you would still be within this figure.

*President.*—The Tinsplate Company provide accommodation for labour in this country which you don't have to do?

*Sir Edgar.*—We would do it if we started a new works.

*President.*—Then your capital won't suffice.

*Sir Edgar.*—We never bring in housing of workers in the accounts of the works. It is a separate account altogether.

*President.*—But the conditions of work here are different. There you pay higher wages to your workmen because you do not give them houses. Here they give them houses and fix a lower wage.

*Sir Edgar.*—In England there are thousands of cases where they give the men houses and deduct the rent from their wages.

*President.*—Then you would be charging a commercial rent. If you don't, the loss would go into your costs. Supposing they incur a loss, where is it to come from? It is a charge on labour.

*Sir Edgar.*—We can make them up ourselves.

*President.*—If you had to establish a works in a place where there were no houses or roads, you will have to build them, you will have to finance their cost and that will have to be put down somewhere. Somebody has got to pay for it. Either labour pays, in which case, labour wages go up;

if you pay your cost goes up. The money the Tinsplate Company have spent on the town is a charge to be taken into account.

*Mr. Mather.*—It is a necessary charge on the industry.

*President.*—You say lots of firms have written down their capital. What is your own position in the Welsh tinsplate industry? How much capital have they written down? Can you give us instances of firms which have written down their capital?

*Sir Edgar.*—Unfortunately I have not got the names of the firms I can give you the figures but they do not give the names of the firms. It gives the ratio and the market value to the nominal value of the shares, but it simply gives the iron and steel engineering in bulk. Here is an instance. Take 1919; right through to April 30th, 1926, the ratio of the market value to the nominal value will be 100; coal and other companies 188·2, to-day it is down to 116·6; coal, iron and steel companies 127; to-day it is 121·43; iron and steel engineering companies 77, to-day it is 71·3. No allowance in this has been made for capital.

*President.*—That does not prove that their capital has been written down. The companies have made no profits and therefore the value of their shares has dropped.

*Mr. Mather.*—I take it you are acquainted with most of these tinsplate firms shown in your Association's list. Can you tell us whether any of these firms had to write down their capital?

*Sir Edgar.*—I don't know.

*Mr. Mather.*—You do not know of any tinsplate company which has actually written down its capital?

*Sir Edgar.*—I don't know.

*President.*—It is a pity you cannot give us information on that point.

*Sir Edgar.*—My reference there was mainly to Dunlops and Armstrong Whitworth. As regards the statement about misleading historical statements I was going to suggest that neither of these items are really worth going into, but in the reply I received from your Secretary there was an indication that you would like the information. That is why we put it in.

*President.*—The only thing we want to be satisfied about is the statement as to the confusion in the calculations.

*Sir Edgar.*—My only point was that the method of trying to equate the thing down appeared to lead to a lot of confusion.

*President.*—A statement like that against the Board has to be made with some care. You must satisfy yourself whether the Board was right or wrong, whether there was any confusion in the minds of the Board, before making it.

*Sir Edgar.*—So far as I understand it I certainly think there was some confusion.

*President.*—I am afraid I cannot agree with you there because as far as we are concerned there was no confusion and we made no such mistakes as you attribute to us. It is your business to try to satisfy yourself before making such allegations.

*Dr. Matthai.*—What do you mean by confusion. Is it that things are a bit obscure to the reader?

*Sir Edgar.*—As I read the tables and calculations some of the figures seemed to be inconsistent. For instance this point of the imported price. The first report did not take into account the question of tin lining.

*President.*—That was set right in the next report. In the first report there was no attempt whatsoever made to go into any detailed costs because the Board had in mind one single fact, that this industry was a promising industry and that it looked as if it might be able to do well provided it was given time to reach a substantial output.

*Sir Edgar.*—My only point is that the tables as they stood were wrong.

*President.*—We do not admit that the tables are wrong.

*Sir Edgar.*—It is admitted. For instance that I was referring to just now there has been omission to take into account tin lining.

*President.*—That was corrected in the second report. What is the good of referring to a mistake now which we had rectified before this representation was submitted.

*Sir Edgar.*—It was rectified two years later.

*President.*—Why don't you admit that the mistake had been rectified before you wrote your representation in 1926? I do not see the point of it.

*Sir Edgar.*—Except that your basis was wrong. That is all I can say.

*President.*—As regards the calculations of import prices, we have always taken the basis box at 108 lbs. in our calculations.

*Sir Edgar.*—But the applications have not.

*President.*—They have always.

*Sir Edgar.*—This method of lumping wasters with scrap and then taking a certain percentage makes a *prima facie* case that it leads to great confusion. However I have nothing more to say as I say in my original letter. As you have got the full facts it is not worth while going into it at all.

*Dr. Matthai.*—You agreed a little while ago that protection of tins in America did not do you any harm at all, on the other hand it has done you good.

*Sir Edgar.*—Yes, because protection in America was useless for this reason that until recently a great bulk of the tins.

*Dr. Matthai.*—There is a further point. Supposing they tried to abolish the whole protective duty now in America on tins would it not do you harm in Wales?

*Sir Edgar.*—The point I was just going to make was that until recently the great bulk of tins were consumed by canners who were repaid by rebate. All this shows that the statement that it was protection that created the industry in America is not substantiated.

*Dr. Matthai.*—I want you to consider my point of view. Probably you are taking a short-sighted view. Ultimately you will find that the prosperity of the tin industry in India would mean your prosperity too.

*Sir Edgar.*—That is a different thing from their continuing in a form that will permit of expansion of other industries in India.